



Maintaining a Resilient Defence Industrial Supply Base

Defence Industry Leadership Program Research Project 2024

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Maintain a resilient Defence industrial supply base

“Considering the Defence Strategic Review (DSR), the National Defence Strategy (NDS), the Surface Combatant Fleet Review (SCFR), the Defence Industry Development Strategy (DIDS) and Integrated Investment Program (IIP), what is the significance of Small to Medium Enterprises (SMEs) within the evolving Defence industrial framework? Furthermore, what strategies can SMEs adopt to maintain a lasting and impactful presence in the sector, and what measures are necessary to safeguard the integrity and resilience of our industrial base amidst evolving Defence priorities?”

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EXECUTIVE SUMMARY

This paper considers the role of SMEs within the Australian Defence industrial base, and the impact on their resilience from the strategic changes flowing from the DSR, NDS, SFCR, DIDS and the IIP.

Following a detailed literature review focusing on five target research areas (value proposition, opportunities, barriers and challenges, effectiveness of initiatives and business resilience state), we interviewed over 20 stakeholders, representing leaders across all sectors and domains of Defence.

We found that Defence is united on the criticality of SMEs' contribution to achieving sovereign capability. While perception of SMEs' value proposition varied, as key themes, SMEs were recognised for their agility, innovation and capacity to support Defence.

SMEs are, however, navigating a disruptive period as Australia embarks on ambitious targets to re-position the Australian Defence Force to meet emerging threats.

We found that record forecast spend on Defence is not translating into optimism within SMEs, or the industry more generally.

The barriers faced by SMEs, including costs of compliance, skilled workforce shortages, and impacts of program cancellations and changes, are greater than ever. Existing initiatives aimed at combating this problem are extensive; however, the issue is so great that these initiatives are not preventing losses within the industry.

As with any change in strategic direction, there will be winners and losers. SMEs that have the agility to align their offerings with the new strategic direction or are located within the geographic regions targeted for Defence hubs will be primed for longevity, and for contributing to a stronger and more resilient economy and Defence force overall.

Success, however, does not need to be left to chance. SMEs that focus on building resilience will have the best prospects. We identified three key recommendations for SMEs achieve this, namely, SMEs should:

- ensure their organisation has an effective diversification strategy
- explore opportunities to increase collaboration and teaming
- prioritise enhancing their business maturity

Further detail on the benefits of these recommendations, and implementation strategies, are included in Chapter 5. In addition, we identified a range of measures for further investigation to continue efforts to safeguard the integrity of the Defence industrial base.

Overall, it is inevitable that Defence priorities will continue to evolve. We found that all parts of Defence have a role to play in supporting SMEs to improve their resilience, and to protect the overall resilience of the Australian supply base, to best prepare the nation for the future. Collaboration will be key to supporting Australia to achieve its strategic objectives for sovereign capability.

CHAPTER 1: PROBLEM STATEMENT

Australia's Rapidly Changing Geo-Political Environment

From the mid-1970s to 2020, Australia enjoyed a relatively stable Defence strategic period. Throughout this time, Defence strategy focused on the provision of a generalist, also known as a 'balanced', Defence force; namely an Australian Defence Force (ADF) capable of delivering a broad range of functions.¹

Recently, however, the strategic landscape has dramatically changed. In 2024, Defence Minister the Hon Richard Marles MP observed that:

“[Australia is facing] the most complex strategic circumstances since World War II...”²

In the political sphere, uncertainty and tension continues to grow globally, be it from escalating, competitive tensions between the United States and China, large scale war between Ukraine and Russia, as well as ongoing conflict in the Middle East.³

Closer to home, China is embarking on a military build-up described as the “fastest military expansion since WWII”.⁴ In 2021, the Pentagon estimated that China's Navy consistent of 355 ships.⁵ Not satisfied with being the World's largest maritime force, by 2025 the People's Liberation Army Navy is projected to grow to 420 ships by 2025, reaching 460 ships by 2030.⁶

The threat of war is not the only security danger Australia has encountered. Five years ago, Australia faced unprecedented disruption to the global supply chain brought about by the COVID-19 pandemic. Effects of COVID-19 caused disruption to Australia's security on both a macro and micro level.

¹ R Marles (Deputy Prime Minister, Minister for Defence), Launch of the National Defence Strategy and Integrated Investment Program, media release, 17 April 2024 <<https://www.minister.Defence.gov.au/speeches/2024-04-17/launch-national-Defence-strategy-and-integrated-investment-program>> (accessed 1 October 2024)

² Marles, 2024

³ Marles, 2024

⁴ R Newsham, 'China's military buildup enough to win a war with US,' Asia Times, 30 November 2023 <<https://www.asiatimes.com/2023/11/chinas-military-buildup-enough-to-win-a-war-with-us>> (accessed 1 October 2024)

⁵ M Shelbourne, 'China Has World's Largest Navy With 355 Ships and Counting, Says Pentagon', US Naval Institute News, 03 November 2021 <<https://news.usni.org/2021/11/03/china-has-worlds-largest-navy-with-355-ships-and-counting-says-pentagon>> (accessed 29 September 2024)

⁶ Shelbourne, 2021

The Inquiry into the Implications of the COVID-19 Pandemic for Australia’s Foreign Affairs, Defence and Trade identified that the key lessons from the pandemic relate to not to the virus itself, but “concerns about the vulnerability of critical national systems to external risk factors.”⁷ The pandemic highlighted the extent to which international trade is underpinned by trust and norms, with the breakdown of international institutions and behaviour of state actors creating friction in trading relationships and increasing scepticism about the global rules-based order.⁸

More locally, the impacts of COVID-19 saw some Defence partners disappear without resurfacing. As one example, South Australian Defence SME Ascension, which delivered 100% sovereign capability as an electronic components, sensor and systems provider, closed in 2024, citing:

“...multiple external factors such as COVID-19 supply chain delays and changes to Defence procurement patterns due to multiple Defence reviews, [which has] hindered our ability to commercialise the technology and generate adequate cash flows to maintain the business.”⁹

Resilience requires those affected by adversity recover quickly – and not everyone did.

A Re-Focused National Defence Strategy

The Australian Government responded decisively to the growing geo-political threats, driving a shift in Defence policy and strategy.

This began with the cancellation of the SEA1000 Future Submarine Program in September 2021 and, in its place, an announcement of intent to procure a nuclear-powered submarine capability. The cancellation of a major acquisition program of that size sent shockwaves through the Australian Defence industry and destabilised confidence in Commonwealth procurement processes. At the same, the declaration of a new, enhanced trilateral security partnership between the United States, United Kingdom and Australia, known as AUKUS, revealed new opportunities in cyber capabilities, Artificial Intelligence (AI), quantum technologies and undersea capabilities.¹⁰

⁷ Joint Standing Committee on Foreign Affairs, Defence and Trade 2020, 'Inquiry into the implication of the COVID-19 pandemic for Australia’s foreign affairs, Defence and trade', Canberra, December 2020
<https://www.aph.gov.au/Parliamentary_Business/Committees/Joint/Foreign_Affairs_Defence_and_Trade/FADTandglobalpandemic/Report> (accessed 02 November 2024)

⁸ Joint Standing Committee on Foreign Affairs, Defence and Trade, 2020

⁹ R Dougherty, 'SA's Ascension closes in abrupt blow to domestic Defence industry', Defence Connect, 08 March 2024
<<https://www.Defenceconnect.com.au/industry/13746-sas-ascension-closes-in-abrupt-blow-to-domestic-Defence-industry>> (accessed 10 November 2024)

¹⁰ S Morrison (Prime Minister) et al, Joint media statement: Australia to pursue nuclear-powered submarines through new trilateral enhanced security partnership, media release, 16 September 2021
<<https://www.minister.Defence.gov.au/statements/2021-09-16/joint-media-statement-australia-pursue-nuclear-powered-submarines-through-new-trilateral-enhanced-security-partnership>> (accessed 01 October 2024)

AUKUS represented just the start of a re-imagining of Australia's Defence Strategy, with the announcement in August 2022 of the Defence Strategic Review (DSR), an independent review led by former Minister for Defence, Professor the Hon Stephen Smith MP and former Chief of the Defence Force, Air Chief Marshal Sir Angus Houston AK AFC (Ret'd).

The aim of the DSR was to investigate the ADF's force posture, structure and capabilities, with a goal of ensuring the ADF is positioned to meet the nation's future security challenges, through the best possible strategic assessments.¹¹

The DSR was released following an 18-month assessment period and was immediately heralded as marking a transformation for Australia's military into a "new age of warfare".¹² The DSR highlighted the urgency facing military preparedness as it challenged the idea that Australia would have 10 years to prepare for conflict.¹³ It also highlighted vulnerabilities in the supply chain, by recognising that military threats and coercion can be applied without a bullet being fired, by instead targeting trade and supply routes.¹⁴

Overall, the DSR marked a re-calibration of the ADF's focus, recommending a strategy of Deterrence by Denial, and affirming the need for nuclear submarine, littoral manoeuvring, and guided weapons capabilities.

Further consideration of the capability requirements of the Royal Australian Navy followed in the release of the Independent Analysis into the Navy's Surface Combatant Fleet in February 2023. This review doubled down on the Commonwealth's commitment to preparedness, laying the groundwork for a larger surface combatant fleet with enhanced lethality.¹⁵

These changes present unique challenges to Small and Medium Enterprises (SMEs) who support Defence in delivering the required capabilities. Resilience of SMEs is a key factor in determining whether these changes will have destabilising effect on the SMEs in the Defence Industry, or if instead they present opportunities.

A Targeted Approach to Investment in Sovereign Capability

The importance of Australia's Defence industry in supporting the delivery of Australia's security objectives cannot be underestimated. The Defence Strategic Review reinforced the need to grow and retain a highly skilled Defence workforce, and recognised the critical role of Australian industry in improving capacity to rapidly translate disruptive technologies into ADF capability.¹⁶ With the strategic direction set through the DSR and Surface Fleet Review, work has continued in translating these objectives into action.

The National Defence Strategy (NDS), published in 2024, continued to commit to the objectives set by the DSR, and identified that:

¹¹ A Albanese (Prime Minister of Australia) et al, Joint Statement – Defence Strategic Review, media release, 03 August 2022 <<https://www.minister.Defence.gov.au/statements/2022-08-03/joint-statement-Defence-strategic-review>> (accessed 01 October 2024)

¹² J Evans, 'The Defence Strategic Review has triggered one of the greatest shifts in Australia's military since WWII. Here's what will change', ABC News, 24 April 2023 <<https://www.abc.net.au/news/2023-04-24/Defence-strategic-review-key-takeaways/102260364>> (accessed 29 September 2024)

¹³ Evans, 2023

¹⁴ Evans, 2023

¹⁵ Department of Defence, Independent Analysis into Navy's Surface Combatant Fleet ('*Surface Fleet Combatant Review*'), Commonwealth of Australia, 2024

¹⁶ Evans, 2023

“A sovereign Defence industrial base is vital for developing higher levels of military preparedness and self-reliance. It also accelerates innovation and capability delivery.”¹⁷

The NDS further acknowledged that Australia’s Defence industrial base must be capable, resilient, competitive and innovative.¹⁸ Australia’s appetite to foster the growth of sovereign capability is targeted, and SMEs that fail to align their own business strategies to Australia’s priorities will likely struggle to succeed in the Australian Defence industry.

The Challenge to Define and Achieve Resilience in the SME Industrial Base

AI Group noted that both traditional and strategic supply chain risks are rapidly increasing.¹⁹ The need for a resilient Defence industrial supply base and reliable supply base to overcome current and future instability is critical to Australia navigating future uncertainty and to mitigate the risk of strategic miscalculation.

In its 2022 report *Securing Australia’s Defence Supply Chains*, AI Group observed that:

“There is now a widely recognised need to invest in improving Defence supply chain resilience...”

With the importance of the Defence supply chain clearly articulated, two key questions remain – namely, what role do SMEs have to play in supporting the delivery of these objectives, and what can be done to improve the resilience of SMEs? This research paper considers both questions.

¹⁷ Department of Defence, *National Defence Strategy*, Commonwealth of Australia, 2024, p. 57

¹⁸ *National Defence Strategy*, 2024, p. 57

¹⁹ AI Group, ‘Securing Australia’s Defence Supply Chains’, 2022

<<https://www.aigroup.com.au/globalassets/news/reports/2022/Defence-supply-chain-report-280822.pdf>> (accessed on 29 September 2024), p. 7

CHAPTER 2: SCOPE AND RESEARCH METHODOLOGY

Scope

This research paper considers three core questions:

1. Considering the DSR, NDS, SCFR, DIDS and IIP, what is the significance of SMEs within the evolving Defence industrial framework?
2. What strategies can SMEs adopt to maintain a lasting and impactful presence in the sector?
3. What measures are necessary to safeguard the integrity and resilience of our industrial base amidst evolving Defence priorities?

What is an SME?

This paper adopts the meaning of SME used by the Australian Bureau of Statistics (ABS). The ABS defines a small enterprise to be one with 19 or fewer employees, while a medium enterprise has 199 or fewer.²⁰ Large businesses are defined as businesses with 200 or more employees.²¹ Small and medium businesses are collectively referred to as SMEs.

It is worth noting that the Australian Taxation Office (ATO) applies additional criteria by incorporating turnover; however, this has not been considered for the purpose of this research due to limitations in available data.

From 1 July 2024, the Commonwealth refined its criteria for SMEs, by requiring the inclusion of employees of associated entities when calculating an organisation's employees base.²² While the impact of this change remains to be seen, this development is a positive step forward in ensuring that SMEs are supported, and that international conglomerates or larger entities do not take advantage of the support structures in place for SMEs in Australia, where their Australian presence otherwise meets the SME definition.²³

What is supply chain resilience?

Underlining this paper's objectives is the recognition of the need to achieve resilience within Australia's Defence industrial base. This then begs the question, what does supply chain resilience mean?

The Oxford English Dictionary defines resilience to mean, "the quality or face of being able to recover quickly or easily from, or resist being affected by, a misfortune, short, illness, etc.; robustness."²⁴

²⁰ Australian Bureau of Statistics, Small Business in Australia, 2008, Canberra, <[https://www.finance.gov.au/government/procurement/statistics-australian-government-procurement-contracts->](https://www.finance.gov.au/government/procurement/statistics-australian-government-procurement-contracts-) (accessed 01 September 2024)

²¹ Australian Bureau of Statistics, 2008

²² Department of Finance, 'Statistics on Australian Government Procurement Contracts', 2024, Canberra <[https://www.finance.gov.au/government/procurement/statistics-australian-government-procurement-contracts->](https://www.finance.gov.au/government/procurement/statistics-australian-government-procurement-contracts-) (accessed 14 November 2024)

²³ Department of Finance, 2024

²⁴ 'Resilience' in Oxford English Dictionary, Oxford University Press, 2010, <https://www.oed.com/dictionary/resilience_n?tl=true> (accessed 12 November 2024)

Deloitte highlighted the challenge in achieving resilience within an industrial base, namely that today’s supply chains are a “mosaic of interdependent actors that require complex analysis to figure out.”²⁵ Moreover, threats to supply chain may arise from multiple different sources, from logistics and commercial availability, to politically-induced strategic threats such as disruption to fuel reserves and cyber threats.²⁶ Many aspects must be considered holistically to fully realise resilience in the Defence industrial base – this research focuses specifically on resilience in the context of policy changes resulting from the DSR, SCFR, NDS, DIDS and IIP.

What is a sovereign industrial base?

The DIDS defines the sovereign industrial base as “businesses with an Australian-based capability and an Australian Business Number (ABN), providing products or services in, or which can be adapted to be used in, the Australian Department of Defence (DoD) supply chain and/or an international Defence force supply chain” with Australian ownership only critical to sovereignty in limited circumstances.²⁷

Methodology

The research methodology is based on three foundational elements driving to a series of recommendations, described in Figure 1.

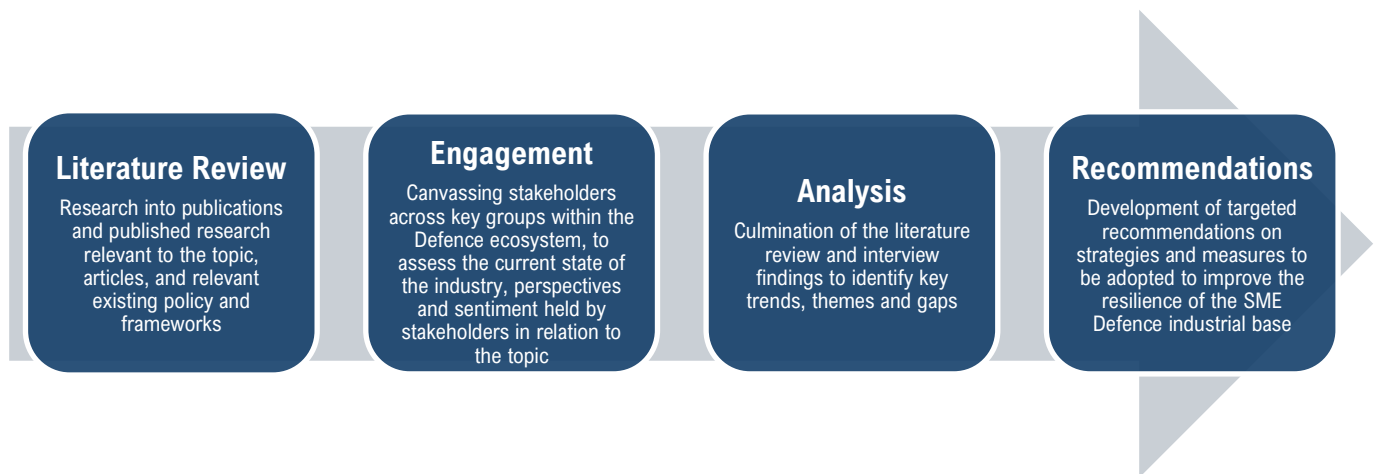


FIGURE 1: RESEARCH METHODOLOGY

Target Research Areas

The analysis of the research area and problem scope, and the results of the literature review, led to the identification of five target research areas outlined in Table 1.

²⁵ Worrall et al, ‘Australian Sovereign Capability and Supply Chain Resilience: Perspectives and Options’, August 2021 <https://researchnow-admin.flinders.edu.au/ws/portalfiles/portal/48141864/Australian_sovereign_capability_and_supply_chain_resilience_perspectives_and_options_AITI_2021_.pdf> (accessed 29 September 2024)

²⁶ AI Group, 2022

²⁷ Department of Defence, *Defence Industry Development Strategy*, Commonwealth of Australia, 2024, p. 13

TABLE 1: TARGET RESEARCH AREAS

Target Research Area	Outline
Value Proposition of SMEs	Investigation of the unique value that SMEs offer in the Australian Defence market that differentiates them from larger companies, highlighting the criticality of safeguarding SMEs involvement and resilience in the sector
Growth and Opportunity	Research into opportunities for SMEs in the contemporary and evolving Defence landscape, based on the direction set in policy for future capability and strategic priorities
Barriers and Challenges	Analysis of the barriers SMEs experience in entering the Defence market, working with the Defence customer, and challenges that SMEs face in terms of building and exercising resilience in response to changing priorities
Effectiveness of Existing Initiatives	Assessment of the existing initiatives (grants, policy, frameworks and education) that exist to assist in SME entry to market and resilience - determining whether the initiatives are accessible, effective, and whether SMEs are aware of them
Business Resilience State	Research into the factors required for businesses to demonstrate resilience when exposed to vulnerabilities or risk, and SMEs' assessment of their ability to withstand and respond to change

Engagement

Interviews focused on open questions, allowing participants freedom to express their insights. For consistency and to assist with analysis, all interview participants were asked five core questions to guide discussion, as shown in Table 2.

TABLE 2: INTERVIEW ENGAGEMENT QUESTIONS

Target Research Area	Question
Value Proposition of SMEs	What do you consider to be the value proposition of SMEs in the Defence environment?
Growth and Opportunity	How do you believe the current Defence direction and strategy (DSR, IIP etc) impacts SME growth and opportunities? Are these factored into SME business strategies?
Barriers and Challenges	What are the biggest barriers and challenges that may impact an SME's ability to maintain a lasting and impactful presence in the Defence sector?
Effectiveness of Existing Initiatives	What existing initiatives (grants, programs) are you aware of that are available to SMEs and how effective do you consider them to be in supporting their contribution to Defence Industry?
Business Resilience State	What can SMEs do to maintain resilience in the face of shifting priorities, and how well prepared are they to do so?

To assist with candour in interview responses, interviewees have not been named in this research paper, nor quotes attributed except with express permission.

A total of 20 representatives were interviewed across four stakeholder groups, as summarised in Table 3.

TABLE 3: OVERVIEW OF STAKEHOLDER PERSPECTIVES

Stakeholder Group – Perspective Offered	Number of Stakeholders Interviewed
SMEs	4
Primes and Larges	6
Government and Defence	9
Industry Bodies	1
<i>Total</i>	20

It is a limitation of this research that greater breadth of SME engagement was not achieved, despite best efforts. At the same time, this highlights two of the takeaways of this research paper, namely that:

1. Notwithstanding the numerous initiatives designed to support SMEs' participation in the Defence industry, SMEs remain under considerable strain; and
2. As a result of this strain and other barriers and challenges faced, SMEs struggle to find the capacity and capability to engage in broader business strategic initiatives.

These points will be discussed in further detail below.

CHAPTER 3: LITERATURE REVIEW

This section outlines the outcome of a review of literature addressing supply chain resilience of SMEs in the Australian Defence industry from three perspectives, namely:

1. Australian policy and frameworks as set out in the DSR, NDS, SCFR, DIDS and IIP; and
2. Existing initiatives designed to develop resilience in Australia’s Defence SME supply chain base; and
3. Existing research considering the role of SMEs in achieving Defence sovereign capability, and recommendations to safeguard the Australia’s industrial base.

Australian Policy and Strategy Frameworks

The criticality of sovereign capability in Defence has been long understood. For example, in 2016, the Commonwealth expressed the basis for the policy position as follows:

There are some capabilities that are so important to Australian Defence missions that they must be developed or supported by Australian industry because overseas sources do not provide the required security or assurances we need.²⁸

For the purposes of this research, only the current policy framework, set out in the DSR, NDS, SFCR, DIDS, and IIP are considered.

An overview of how these frameworks fit together is included in Figure 2.



FIGURE 2: OVERVIEW OF INTERACTION BETWEEN AUSTRALIAN STRATEGY AND POLICY FRAMEWORKS

Key takeaways from each of these policy frameworks is summarised below. Further analysis on the significance of these documents in the context of strengthening the SME Defence industrial base is captured in the research analysis.

²⁸ Worrall, 2021, p. 20

Defence Strategic Review

The DSR presented a recommended roadmap for Defence reform required to strengthen Australia's strategic position and force posture. In relation to industrial resilience, and particularly SMEs, the DSR highlighted themes and key priorities including the concept of an Integrated Force, capability acceleration, and identification of critical capabilities. However, many SMEs and Defence suppliers were faced with confusion with another re-frame of strategy, following the previously issued 2016 Defence White Paper.

A longstanding and well-known challenge, and frustration, within the Defence industry was highlighted throughout the DSR – the difficulty in achieving speed to capability. The modern strategic landscape demands the end of a 10-year strategic warning time and necessitates unobstructed paths to acquisition and capability – concepts that Defence has historically struggled with. The DSR calls for reprioritisation to “enable new and accelerated capability acquisitions” in the pursuit of *Accelerated Preparedness*. At the same time, the DSR emphasises the need to develop self-reliance and sovereign supply chains, which may not necessarily be compatible with the concept of capability acceleration, as sovereign capability and technology takes time to develop.

Surface Fleet Combatant Review

The SCFR assessed the state and future needs of Australia's surface fleet, in consideration with the revised ADF operational priorities (as defined in the DSR), and with deference to the capabilities of a nuclear-powered submarine force. The SCFR establishes recommendations for the future Surface Fleet composition, including types and quantities of vessels required to deliver the required operational effect. It does not explicitly comment on the roles of delivery or sustainment organisations, including SMEs.

The SCFR notes that the need for enhanced lethality was balanced with factors including the “workforce, cost, schedule and risks, and continuous Australian naval shipbuilding potential of each option”²⁹. Consistent with the DSR, the need for immediate implementation of recommendations is noted, to manage risk.

National Defence Strategy

The NDS was released at the start of 2024, providing the strategic context in which Australia finds itself³⁰, and clarifying the short and long-term direction for the ADF.

The key elements of the strategy include:

1. **Strategy of Denial**³¹: the NDS emphasises a shift to a proactive denial approach, seeking to deter conflict before it begins.
2. **Integration of Force**³²: the NDS triggered a phased transition of ADF structure from a balanced force to an integrated force. The revised force structure will also emphasise a capability focused approach, as opposed to the current domain-centric design.

²⁹ *Surface Fleet Combatant Review*, 2024, p. 5

³⁰ *National Defence Strategy*, 2024, p. 11

³¹ *National Defence Strategy*, 2024, p. 22

³² *National Defence Strategy*, 2024, p. 38

3. **Acquisition strategy reset**³³: the NDS resets Defence capability acquisition plans, including rebuilding the IIP. The strategy emphasises the concepts of Minimum Viable Capability (MVC) underpinned by Minimum Viable Product (MVP), introduced previously under the DSR. The NDS identifies the key strategic area of acquisition and investment, which include the acquisition of nuclear-powered submarines, and establishment of a long-range precision strike capability (Guided Weapons and Explosive Ordnance (GWEO)).
4. **Acquisition methodology reset**: The NDS commits to reforming the acquisition process and industry approach methodologies, including reduction of unnecessary steps and duplication, and introduction of flexible contracting approaches to support agile and developmental projects³⁴. The strategy provides allowances for Defence intervention in the market to achieve strategic objectives, in the context of overarching needs to rapidly acquire urgent capabilities³⁵.
5. **Sovereign Capability**: the NDS provides a definition of a sovereign industrial base as one that is underpinned by resident Australian capability that can leverage international industry to deliver the required capabilities³⁶. This represents a shift from a pure Australian Industry Content (AIC) approach, and instead emphasises the local ability to conduct procurement, import, integration, and Australianisation of mature solutions, in conjunction with Australian-developed technologies.
6. **Increased Defence spending**³⁷: The NDS commits to both an increased spend, reaching over a \$100b annually by FY33/34, as well as a commitment to strategic partnerships to provide long-term opportunities and greater certainty, to promote investment and growth from the industrial base. The NDS also commits to significant investment in the Advanced Strategic Capabilities Accelerator (ASCA) initiative, to establish asymmetric advantage through innovation. This is expected to interface with the AUKUS Pillar II agreement, offering opportunities for advanced technology transfer between partners.

In addition to the key elements identified, the NDS commits to a biennial review of both the NDS, as well as the Defence Industry Development Plan, offering the opportunity for a regular re-alignment and communication of Defence goals and priorities.

Defence Industry Development Strategy

The DIDS, published in 2024, highlights the Government's vision for Defence industry supporting national security through the development, delivery and sustainment of Defence capabilities. Specifically, it pursues a vision of a transition from a balanced joint force to an integrated and focused one.

The DIDS is designed to directly support the delivery of the DSR and highlights the importance of the sovereign Defence industrial base in what is believed to be a deteriorating strategic environment, whilst tempering with objective with the acknowledgement that Australian will never be fully self-reliant.³⁸

Development of the sovereign supply base will be focused on seven Sovereign Defence Industrial Priorities (SDIPs), outlined in Figure 3.

³³ *National Defence Strategy, 2024, p. 55*

³⁴ *National Defence Strategy, 2024, p. 55*

³⁵ *National Defence Strategy, 2024, p. 55*

³⁶ *National Defence Strategy, 2024, p. 57*

³⁷ *National Defence Strategy, 2024, p. 67*

³⁸ *Defence Industry Development Strategy, 2024, p. 15*

These priorities are not static; they will continue to be refined and further articulated through biennial review and update of the DIDS.

The strategy highlights the Defence Industry Development Grant, which is tailored to grow industrial capabilities in areas of strategic priority. Defence is looking to build strategic partnerships with incentives and improvements in processes hoped to encourage greater participation by industry. In doing so, they hope to analyse and map the sovereign Defence industrial base and supply chains.

This process is intended to strengthen the approach to understanding and measuring capacity and identify businesses critical to the supply chain.

Australia's Sovereign Defence Industrial Priorities

1. Maintenance, repair, overhaul and upgrade of ADF aircraft
2. Continuous naval shipbuilding and sustainment
3. Sustainment and enhancement of the combined-arms land system
4. Domestic manufacture of guided weapons, explosive ordnance and munitions
5. Development and integration of autonomous systems
6. Integration and enhancement of battlespace awareness and management systems
7. Test and evaluation, certification and systems assurance

FIGURE 3: SOVEREIGN DEFENCE INDUSTRIAL PRIORITIES

Integrated Investment Program

The IIP translates the capability objectives set in the NDS into a specific short- and long-term investment strategies, with SDIPs embedded within its initiatives.³⁹ It is specifically published publicly to assist Defence industry, including SMEs, to plan – by providing information on Defence capability goals and requirements.⁴⁰ Aligning business strategy to national strategic priorities is essential for SMEs to maximise resilience and relevance within the Australian Defence industry.

A range of capabilities have been specifically targeted for investment, as set out in Figure 4.⁴¹

³⁹ Department of Defence, *Integrated Investment Program*, Commonwealth of Australia, 2024, p. 9, 96

⁴⁰ *Integrated Investment Program*, p. 6

⁴¹ *Integrated Investment Program*, p. 7

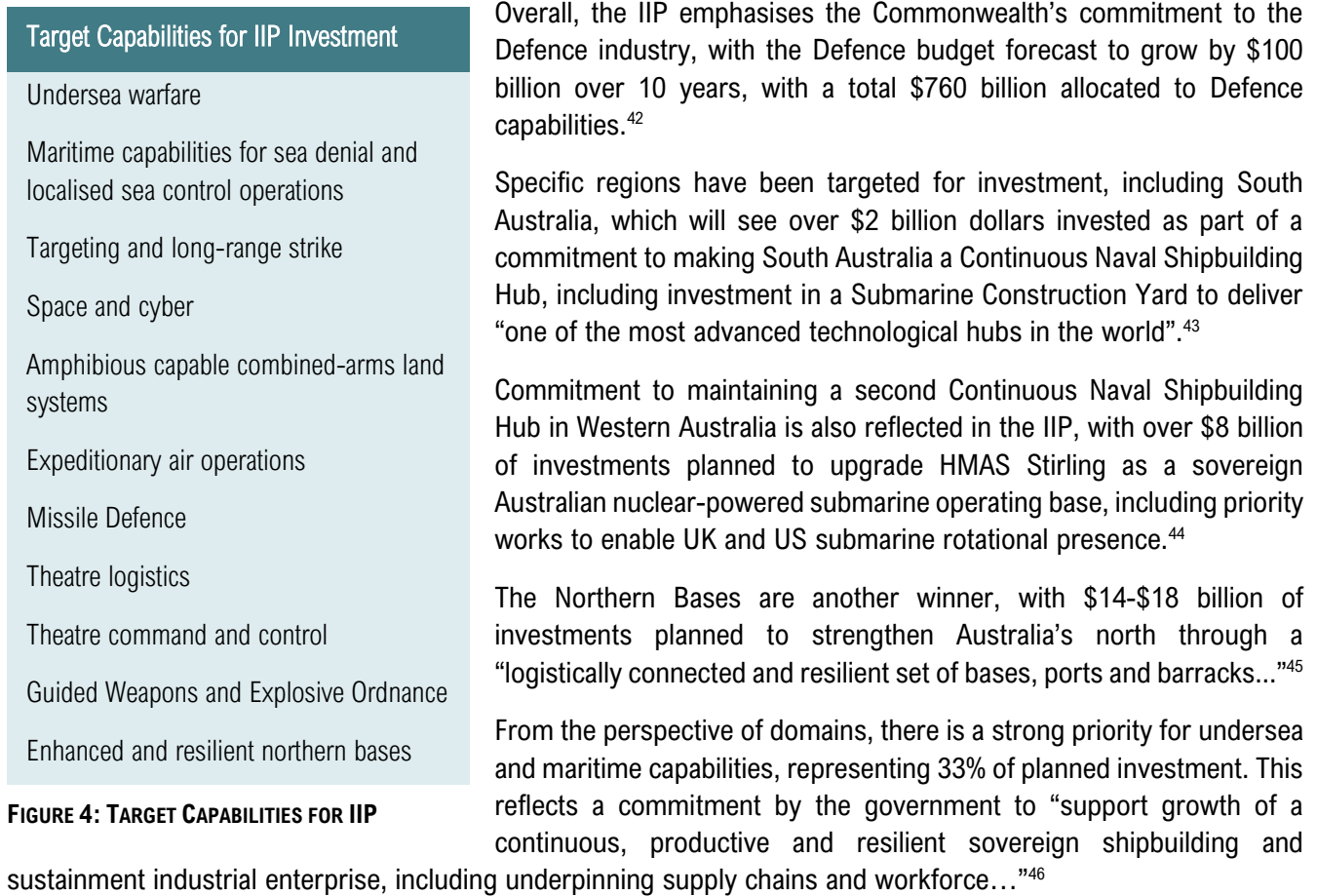


FIGURE 4: TARGET CAPABILITIES FOR IIP

Naval Shipbuilding and Sustainment Plan

For completeness, the Naval Shipbuilding and Sustainment Plan, paired with a Shipbuilding Forecast, is forecast for release in 2024, though had not yet been released at the time of publication of this research.

While the content of this plan remains to be seen, the IIP noted that the intent of publishing this plan is “for industry and the public to build confidence in Australia’s shipbuilding industry”, further highlighting the Commonwealth’s commitment to providing surety to Defence industry and support long term planning.⁴⁷

⁴² R Marles (Deputy Prime Minister, Minister for Defence) et al, ‘A generational investment in Australia’s Defence’, media release, 14 May 2024 < <https://www.minister.Defence.gov.au/media-releases/2024-05-14/generational-investment-australias-Defence>> (accessed 1 November 2024)

⁴³ *Integrated Investment Program*, p. 25

⁴⁴ *Integrated Investment Program*, p. 25

⁴⁵ *Integrated Investment Program*, p. 25

⁴⁶ *Integrated Investment Program*, p. 39

⁴⁷ *Integrated Investment Program*, p. 41

Existing Initiatives to Support Australian Defence SMEs

A snapshot of existing initiatives is included at Appendix 2. Various initiatives and programs have been launched by governments, industry groups and Defence primes to support the integration of SME into Defence industry. Aimed at overcoming entry barriers, facilitating innovation or enable rapid and concentrated collaboration, existing initiatives achieve this through establishing policy frameworks or providing access to funding, training and networking opportunities.

Existing Research into the Resilience of the SME Industrial Base

The challenge of improving supply chain resilience is a burning question globally, particularly since supply chain vulnerabilities were highlighted to new levels during COVID-19. A review of existing research identified extensive research on supply chain resilience generally. Unsurprisingly, given the recency of the DSR and supporting frameworks, published research specifically addressing improving the SME Defence industrial base, in light of recent policy changes, is limited. As such, this research paper considered recent Australian research of the Defence industrial base more generally and the extent to which issues identified prior to the release of the policy changes have been addressed.

Worrall *et al* of the Australian Industrial Transformation Institute at Flinders University of South Australia considered the Australian sovereign capability across multiple industries in their August 2021 paper, *Australian Sovereign Capability and Supply Chain Resilience – Perspectives and Options*. They assessed the state of sovereign capability across five key sectors, namely: health; Defence; energy resources & infrastructure; science, communications, and technology and advanced manufacturing.

Specifically in relation to Defence, Worrall *et al* concluded that:

1. Compared to other sectors, consideration of sovereign capability at an industrial policy and strategy level is most mature in Defence, albeit objectives are still frequently “imprecise and elusive”;⁴⁸
2. Defence has medium-high levels of operational capability (representing the second highest capability, behind health) and low-medium levels of industrial capability (representing the highest level across the five domains);⁴⁹ and
3. The sovereign capability achieved is not cause for complacency; near complete independence of Supply Chain is essential in Defence.⁵⁰

In its August 2022 paper *Securing Australia’s Defence Supply Chains*, AI Group likewise recognised the ongoing efforts to reduce vulnerabilities in the Defence supply chain⁵¹; however, they identified that:

1. Limited visibility of the full structure of the Defence industrial base was impacting the government’s ability to identify all supply chain threats and develop targeted mitigation strategies;⁵²

⁴⁸ Worrall, 2021, p 5

⁴⁹ Worrall, 2021

⁵⁰ Worrall, 2021, p. 2

⁵¹ AI Group, 2022, p. 5

⁵² AI Group, 2022, p. 5

2. Against the background of increasing strategic risks to supply chain, stronger governance structures and policy frameworks, including risk assessment frameworks (achieved through greater resourcing in this space), are needed to improve resilience⁵³; and
3. To achieve supply chain security, greater collaboration with Defence industry is needed.⁵⁴

Dr Collette Langos of the University of Adelaide considered the challenges faced by Defence SMEs in an article published in September 2024 in Defence Business titled *Survey Results Are In: Challenges Defence Industry SMEs Face Navigating Defence Procurement and Contracting Frameworks*. Through empirical research, Dr Langos captured perspectives of SMEs to better identify pain points when navigating Defence procurement and contracting frameworks, finding that⁵⁵:

1. Notwithstanding that the Commonwealth recognises that the existing approach to capability acquisition is not fit for purpose, the Commonwealth continues to demonstrate inflexibility and resistance to shifting risk from suppliers, which is impairing the ability of the parties to develop true strategic partnerships that support innovation;
2. The ASDEFCON contracting suite and tendering process is overly complex for SMEs to navigate, and SMEs lack negotiating power to be able to agree to more favourable terms; and
3. Empirical data supports the view that while it is widely recognised that SMEs play a critical role in providing capability to the ADF, their capability is not being fully exploited.

⁵³ AI Group, 2022, p. 7

⁵⁴ AI Group, 2022, p. 5

⁵⁵ C Langos, 'New Defence Industry Research Release', Defence Business, September 2024
<<https://dtc.org.au/files/documents/Def-Bus-Issue-Sep-2024-WEB-F-1.pdf>> (accessed 29 October 2024)

CHAPTER 4: RESEARCH FINDINGS

Value Proposition

**SMEs can do it better –
But Large [companies] write
it better.** *Interviewee*

What benefits do SMEs offer Defence, and its strategic priorities, which set them apart from larger companies? Uncovering the unique offerings of SMEs, and their value proposition to the industry, leads to a deeper understanding of their ability to achieve a **lasting** and **impactful** presence in the sector.

The DSR reveals a tension between the need for Australian supply and economic resilience, and the need for speed to capability, acknowledging that “Australian industry content and domestic production must be balanced against timely acquisition”⁵⁶.

Likewise, Biddell et al observes that “most Defence industry SMEs have something unique to offer Defence.”⁵⁷

The policy position on retention and resilience of Australian businesses in the Defence sector is unanimous. The DSR and NDS particularly emphasize the importance of sovereign capability and protection of economic resilience, and the need to decrease reliance on international partners – Australia cannot afford to become (or rather, remain) passive consumers of overseas technologies.

As the Hon. Andrew Hastie MP, Shadow Minister of Defence and Defence Industry, stated in the Contested Ground Podcast episode recorded during LandForces 2024, “if we don’t have a strong industrial base here, we are at serious risk.”⁵⁸ He also highlights that “we have to start thinking about what life looks like with a US that’s less active in our region”, and that there is a risk that the US imposes tariffs in the near future –

“we’ve got to learn to be more resilient, self-reliant – we need to revive our industrial base.”⁵⁹

This position is thematic in the DSR, and there is bipartisan consensus that, where possible, Australia should seek to reduce its reliance on others.

⁵⁶ Department of Defence, *National Defence: Defence Strategic Review*, Commonwealth of Australia, 2023

⁵⁷ Biddell et al, ‘Countering Adversarial Narratives’, 06 December 2021 < <https://dtc.org.au/files/documents/DILP-Research-Papers/Countering-Adversarial-Narratives.pdf> >

⁵⁸ Garman, L and Tarrant, P, Contested Ground Podcast, Momentum Media, 13 September 2024

⁵⁹ Garman, and Tarrant, 2024

What value do SMEs add to Australia’s Defence industrial base?

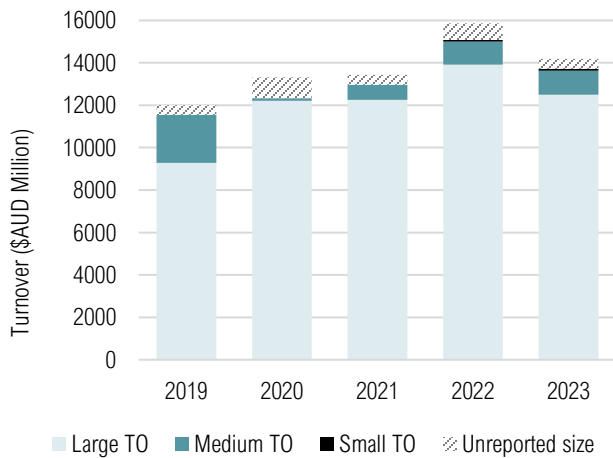
Small businesses play the lead role in the Australian economy. In 2024, they accounted for 97.2% of registered Australian businesses, with medium sized companies occupying 2.6% of the market, shown in Table 4.⁶⁰

[SMEs] are essential for innovation and can provide unique capabilities that larger firms may not offer
Interviewee

TABLE 4: BUSINESS SIZE MEASURED BY EMPLOYMENT (JUNE 2024)

Size	Number of businesses	% of total businesses
Small (0 – 19 employees)	2,589,595	97.2 %
Medium (20 – 199 employees)	68,214	2.6 %
Large (200+ employees)	5,189	0.2 %
Total	2,662,998	100.0 %

SMEs employ approximately 70% of the Australian workforce, and “generate \$500 billion of economic activity, constituting one-third of Australia’s Gross Domestic Product (GDP)”.⁶¹



The total turnover (TO) across the Top 40 Defence contractors, as reported by Australian Defence Magazine (ADM), for the years of 2019⁶², 2020⁶³, 2021⁶⁴, 2022⁶⁵ and 2023⁶⁶, is shown in Figure 5. A significant downturn in SME engagement was seen between 2019 (19% of total Top 40 turnover) and 2020 (less than 1% of total Top 40 TO), likely due to the COVID-19 pandemic; however, SME presence (particularly medium sized companies) has shown promise, and the data indicates an increasing number of medium sized companies being among the top industry earners. The 2023 figures show that SMEs currently represent 8.6% of total TO in this segment of the market.

FIGURE 5: TURNOVER OF CONTRACTORS BY SIZE, PER ADM

⁶⁰ ABS, Counts of Australian Business, Table 13a, August 2024 and ASBFEO calculations

⁶¹ Nalinee, ‘Statistics on Small and Medium Enterprises (SMEs): A 2024 Overview’, Invoice Interchange, 16 February 2024 <<https://www.invoiceinterchange.com.au/statistics-on-small-and-medium-enterprises-smes-a-2024-overview/>> (accessed 2 November 2024)

⁶² K Zeising, ‘ADM’s Top 40 Defence Contractors 2019’, ADM, 07 January 2020

⁶³ K Zeising, ‘ADM’s Top 40 Defence Contractors 2020’, ADM, 13 January 2021

⁶⁴ E Levick et al, ‘ADM’s Top 40 Defence Contractors 2021’, ADM, 04 January 2022

⁶⁵ E Levick et al, ‘ADM’s Top 40 Defence Contractors 2022’, ADM, 5 January 2023

⁶⁶ K Leonard et al, ‘ADM’s Top 40 Defence Contractors 2023’, ADM, 21 December 2023

The steady emergence and growth of SMEs in the Top 40 list over recent years indicates that they are occupying a valuable space in Defence spending and priorities, that recovery from the supply chain impacts of COVID-19 is promising, and that the benefits of engaging SMEs in the sector are being recognised by Defence and upstream Prime integrators.

The value that SMEs offer extends beyond their financial contribution to the economy. The interview results indicate that there is no clear consensus across stakeholder groups on the SME value offering, nor on what exactly sets them apart from large businesses and Prime contractors – other than that they are **important** in the Australian industrial supply base: 25% of respondents overall acknowledged their *critical* or *crucial* role in the supply chain, with four of the six permanent ADF stakeholders interviewed specifically highlighting their significance.

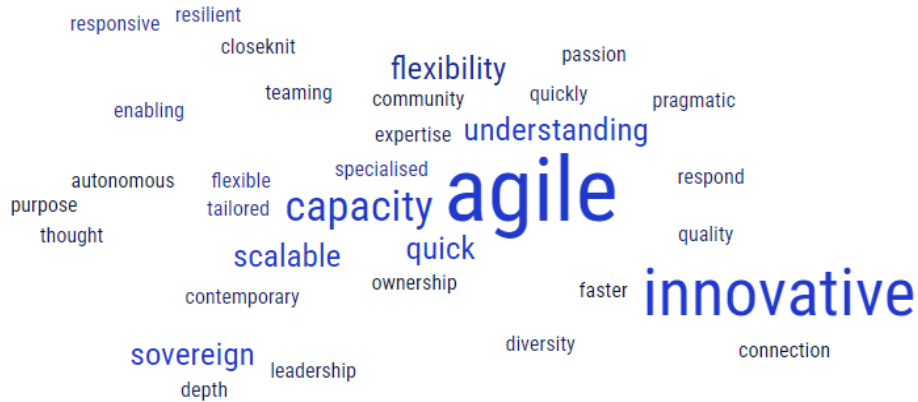


FIGURE 6: PERCEPTION OF VALUE OFFERED BY SMEs, ACCORDING TO INTERVIEWEES

Figure 6 presents the relative proportion of key word responses from interview participants when asked for their perception of the value proposition offered by SMEs. Common themes across participants include agility (45% of participants), innovation (45% of participants – Including **100% of the permanent ADF stakeholders interviewed**), and capacity.

Respondents also mentioned *speed* or the ability to *deliver quickly*, while also acknowledging that speed is often hindered by Defence procurement behaviours; SMEs can deliver quickly, they often lack the *opportunity* to do so, due to the rigour and barriers imposed by the customer (discussed further below).

Although stakeholders did not appear to indicate clear consensus on the SME value proposition, there is a harmony between many of the strengths identified by interview participants. Interviews conducted offered a mixed perspective of SMEs that included innovation, agility, and speed – and a combination of all three qualities are required to achieve speed to capability, which is a core focus of the DSR and NDS.

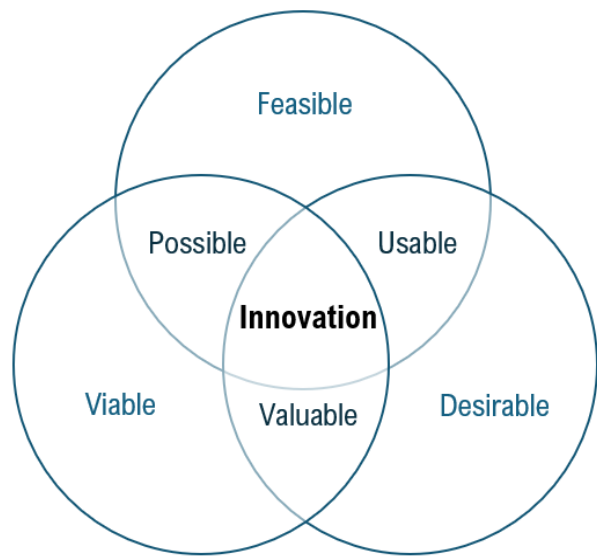


FIGURE 7: DESIGN THINKING MODEL

Given the recognition that Australia is at risk of lagging in terms of military force, recognising SMEs' unique blend of these strengths is critical to successfully achieving the vision set by the DSR and NDS. Responding with agility to change is a critical factor in achieving **innovation**, which highlights the interplay between resilience and innovation. SME capacity for innovation was mentioned in 45% of interviews, including 100% of ADF stakeholder interviews. Similarly, SMEs' ability to deliver quickly, and to rapidly develop new technology and capability (when unhindered), was mentioned in 50% of interviews.

The Design Thinking model illustrates an interaction between three elements to achieve design innovation: feasibility (technology requirements), desirability (human requirements), and viability (business requirements) (shown in Figure 7).⁶⁷

Feasibility

SME Strength

- the technological requirements and fitness for purpose. SMEs are seen as experts and have specialised skills in niche areas that offer technical value to the Defence customer and user
- SMEs may have more appetite to engage in Research and Development (R&D) endeavours
- understanding technical feasibility is a tangible strength of Defence SMEs.

Desirability

“SMEs genuinely want to understand what Defence wants.” Interviewee

- relates to human needs, and addresses whether the offering meets the requirements of the customer to make it a desirable product or service
- SMEs are adaptable, and their willingness to negotiate and find common understanding is an invaluable strength of theirs
- they can meet this need by working in close alignment with the Defence customer, and an intimate understanding of the Australian context allows them to anticipate customer needs

Viability

“SMEs need [to] run a healthy business - they need more than just good tech” Interviewee

- relates to business requirements, and whether an offering is viable from a business perspective
- this requires an in-depth appreciation for business impacts and risks in development, and strong business acumen
- this is a potential area of weakness for SMEs who may lack business continuity or resilience skills and knowledge
- building strength in this area can truly harness the technical expertise, and the understanding of the customer, that SMEs offer.

How do SMEs contribute to developing a sovereign industrial base?

The government advocates for the industrial capabilities required to support a higher level of self-reliance.⁶⁸ The need for domestic characteristics in support of these outcomes is required to mitigate the risk of not being prepared in a crisis. Supply chain resilience is not only required for a strong national economy and protection of sovereign decision making – it is a **necessity** during times of conflict. Foreign procurement of military materiel supports initial engagement, but as conflict progresses (beyond the one-two week mark), Australia would require its own supply base to rely on for resupply of expendable assets (e.g. munitions and weapons).

⁶⁷ T Brown, 'Design Thinking Defined', IDEO Design Thinking < <https://designthinking.ideo.com/> > (accessed 02 November 2024)

⁶⁸ R Marles, *National Defence Statement*, Commonwealth of Australia, 2023

To truly prepare for the worst outcome – engagement in conflict – Australia must have its own supply base, its own manufacturing capability, and its own technology, to ensure that the nation can endure beyond initial engagement.

SMEs that are Australian (noting the recent call to re-define “Australian” as companies wholly owned and operated in Australia⁶⁹) can add value to overall economic resilience and reduce the dependence on global supply, and it also means their business decisions and offerings can be more tailored to the customer’s needs, as product and service lines are not being driven by international or foreign investments and priorities.

Australian SMEs are not at the mercy of international parent companies, whose global performance could affect their Australian presence. For example, in October 2024, the Boeing Company issued a direction to reduce its workforce by 10% internationally.⁷⁰ No exception was made for their Australian workforce, which is primarily represented in the Defence sector by Boeing Defence Australia. This direction was made independent of the company’s Australian performance and is largely driven by the difficulties faced in commercial performance and worker action in the United States. In a time when retaining talent and growing an industrial workforce to deliver new capabilities is paramount, Australia cannot afford to fall victim to international corporations’ workforce reductions.

SME and supply base sovereignty help improve national economic resilience, reducing reliance on foreign procurement (or parent companies with divergent performance priorities); however, it also exposes SMEs to unique challenges and vulnerabilities, particularly those that rely on a single customer (namely, the Commonwealth) for success.

Key takeaways on SMEs’ value proposition

SMEs’ unique blend of innovation (which can be further enhanced by increasing business acumen and understanding of *viability*, in conjunction with their existing strengths), agility and accelerated delivery allows them to be optimal candidates to achieve speed to capability targets, capitalises on their strengths, and enables them to achieve a **lasting** and **impactful** presence in the sector – regardless of strategic direction.

Growth and Opportunity

Our research considered opportunities for SMEs in the contemporary and evolving Defence landscape, based on the direction set in policy for future capability and strategic priorities. This topic was then broken down into further subtopics as follows:

1. Are there opportunities for SMEs in the Defence sector?
2. What impact has the DSR, SCFR, NDS, DIDS and IIP on opportunities for SMEs?
3. What is the perception of opportunity for SMEs amongst interviewees?

⁶⁹ ‘SAPA calls for better definition of what constitutes an Australian business’, Geotech Review, 11 November 2024, <<https://www.govtechreview.com.au/content/gov-tech/news/sapa-calls-for-better-definition-of-what-constitutes-an-australian-business-744668205>> (accessed 18 November 2024)

⁷⁰ ‘Boeing to lay off 10pc of workforce in bid to recoup finances, end mass employee strike impeding jet production’, ABC News, 12 October 2024 < <https://www.abc.net.au/news/2024-10-12/boeing-to-cut-one-tenth-of-its-workforce-after-record-losses/104465274>> (accessed 16 October 2024)

Are there opportunities for SMEs in the Defence sector?

As shown below in Figure 8, in the financial year ending 30 June 2024 (FY23/24), Commonwealth contracts with SMEs weighed strongly in the Defence sector (noting that Defence has consistently been the leading portfolio in terms of spend every year for the last decade). Defence held an overwhelming lead in overall SME contracts' value over the other nine of the top ten portfolios. In all procurement contracts awarded in the last financial year (across all portfolios), SMEs represented 18.8% of the total value awarded, spread across just over half (52.3%) of the total number of contracts awarded.⁷¹

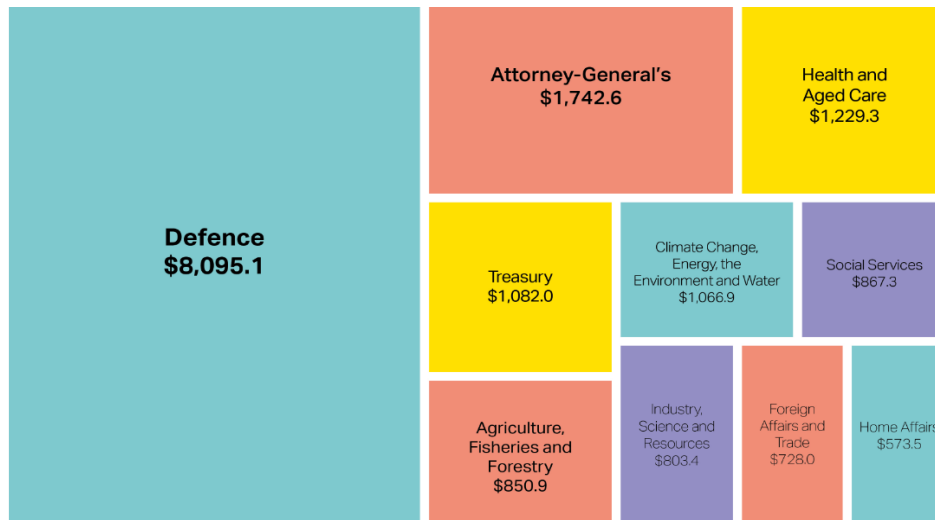


FIGURE 8: COMMONWEALTH CONTRACTS WITH SMEs FOR FY23/24 BY TOP 10 PORTFOLIOS (VALUE IN MILLION AUD⁷²)

The Australian Government implemented targets for supporting SMEs across all budget portfolios, including procuring:

- 20% of all Government contracts (by value) from SMEs, and
- 35% of all Government contracts (by value) from SMEs, for contracts with a value of less than \$20 million.⁷³

Demonstrating a commitment to continuous improvement in SME engagement, these targets have increased on 01 July 2024, to 25% and 40% respectively.

⁷¹ Department of Finance, 2024

⁷² Department of Finance, 2024

⁷³ Department of Finance, 2024

From a strategic perspective, the evolution of the force structure to encompass five domains (maritime, land, air, space and cyber) expands the potential industry from the conventional maritime, land and air model. This expansion, coined the *Integrated Force*, may provide opportunity for SME companies to shift into emerging Defence markets in cyber and space, or for SMEs that would otherwise not have had a part to play in the Defence landscape to enter the fold. In particular, the DSR acknowledges that in the space domain, “commercial capabilities will also play an increasingly important role in complementing and augmenting Defence’s Space Command structure”.⁷⁴ The potential for Defence to blend both commercial and military capabilities in the expansion of the Integrated Force can assist Defence in achieving the speed to capability priority, whilst allowing greater involvement from a wider industrial supply base.

Looking more closely at Defence spending, as mentioned above, the IIP forecasts strong growth, with the Defence budget set to increase by \$100 billion over 10 years, with a total \$760 billion allocated to Defence capabilities.⁷⁵ SMEs which can deliver innovation and next-generation capabilities are likely to prosper under the current strategy direction, with priority in the IIP being placed both on highlight advanced autonomous systems capable of operating in contested warfighting environments, as well as smaller, low-cost, expendable capabilities for deployment in larger numbers.

Furthermore, opportunities within the IIP are not just limited to spend. The IIP also specifically targets initiatives to increase support Defence industry, through the introduction of the Defence Industry Vendor Qualification Program. This program is an AUKUS initiative which aims to “streamline and accelerate the qualification of suppliers into United States supply chains”⁷⁶. Major product families will be targeted over a series of phases, commencing with machined parts and electrical components in mid-2024.⁷⁷

Likewise, given SMEs capacity for innovation discussed earlier, the identification of critical capabilities (such as those identified in Figure 4) targeted for development, which cover both technology and logistics systems, may present opportunity for greater SME involvement in the industry.

Conversely, identification of critical capabilities may also present challenges due to the technological complexity and level of development required, particularly for undersea warfare capabilities, targeting and strike, and integrated air and missile Defence. These capabilities that will likely rely on international partnerships and Prime leadership.

Looking to the SFCR, the announcement of the fleet compositions offers a chance for certainty, continuity of work, and presents opportunities for growth associated with an anticipated doubling of the surface fleet size, including associated maintenance and sustainment activities. The onus will be on SMEs to establish complementary offerings and relationships to court the relatively small number of Prime Contractors that will be responsible for the delivery of these vessels, and their through-life support.

The SCFR further identifies the recommended locations for the fleet construction, maintenance and sustainment, being South Australia (Osborne) for Submarines and Tier 1 Vessels, and Western Australia (Henderson) for LOSVs and Minor War Vessels. This identifies centres of gravity for SME support, particularly for service-based organisations.

⁷⁴ *Defence Strategic Review*, 2023

⁷⁵ Marles et al, 2024

⁷⁶ *Integrated Investment Program*, p. 26

⁷⁷ *Integrated Investment Program*, p. 26

Overall, with long term increased investment in Defence, the current suite of Defence strategy documents ought to provide SMEs with greater certainty and transparency on government intent for investment. SMEs also ought to have greater opportunity to thrive under the new policy if they, for example:

1. are geographically proximate to a major Defence hub (such as the Continuous Naval Shipbuilding Hubs in South Australia and Western Australia (or offer services that can be delivered remotely, or are easily transportable));
2. deliver innovative products aligned to the SDIPs or other capabilities targeted for investment;
3. are capable of rapidly translating next-generation technology into capability;
4. exploit initiatives targeted at improving Supply Chain resilience; or
5. align internal business strategies to government policy and Defence strategy.

As such, the strategic changes brought about by the DSR, SFCR, NDS, DIDS and IIP appear to be creating substantial opportunity for SMEs, provided that SMEs' business strategies align to these objectives – however, closer inspection reveals a need for caution.

What is the perception of opportunity for SMEs amongst interviewees?

Consistently, our research identified that theoretical opportunities are either not being realised by SMEs (at all, or within a tolerable timeframe) or, alternatively, the barriers outweigh the opportunities.

Interviewees were asked to consider the question “how do you believe the current Defence direction and strategy (DSR, IIP, AUKUS etc) impacts SME’s growth and opportunities? Are these factored into SME’s business strategies and offerings?”

Largely, our respondents painted a cautious picture, often highlighting further barriers and challenges or questioning the effectiveness of existing initiatives, rather than engaging positively with the future opportunities available to SMEs in Defence.

Moreover, many of our interviewees emphasised that the only opportunities for domestic SMEs are in AUKUS/Maritime or GWEO, due to the degree of FMS in other sovereign priorities. This was identified as a limiting factor for engagement for SMEs, with the implication being that if an SME cannot contribute to these capabilities, there is little value in SMEs participating in the Defence industry.

Even where SMEs have the capability to contribute, caution remained, with one interviewee noting:

“just because AUKUS is large, doesn’t mean that your [SME] share will be significant.”

Consequently, there was a view that rather than focusing on specialisation (and risking being pigeonholed into a niche that falls out of strategic favour), SMEs are best off positioning themselves to deliver services and sustainment, or platform-agnostic technologies and manufacturing to ensure that SMEs can insert themselves into the supply chain, regardless of the strategic direction.

Key takeaways on opportunity for SMEs

Our research shows that there is substantial opportunity with Defence generally, because of the Australian Government’s commitment to increase spending in the Defence industry, and transparent communication on strategic priorities and capabilities earmarked for investment. However, this will not necessarily translate directly into opportunities for SMEs.

Barriers and Challenges

The research involved an analysis of the barriers SMEs experience in entering the Defence market, working with the Defence customer, and challenges that SMEs face in terms of building and exercising resilience in response to changing priorities.

Full elimination of barriers and challenges is not the goal of achieving a resilient industrial base, and indeed is an unachievable target, given the ever-changing environments and sources of threat that supply chains must navigate. Instead, the goal is to identify the barriers and challenges impacting SMEs, and ensure appropriate frameworks are in place to assess the associated risk, and support SMEs to navigate their environment.

What impact has the DSR, SFCR, NDS, DIDS and IIP had on barriers and challenges experienced by SMEs?

As discussed above, while the strategic direction set in the DSR, SFCR, NDS, DIDS and IIP are increasing opportunities for Defence industry at large, without considered effort by SMEs, this will not necessarily translate to increased opportunity for SMEs and may indeed increase barriers and challenges in some areas.

Entry into the Defence industry

The high barriers for entry into the Defence industry are well known. To deliver Defence projects, all contractors, regardless of size, must satisfy the same complex legal and regulatory frameworks, with the nature of the Defence environment demanding higher safety, security and quality standards than some otherwise similar industries.

By virtue of their size, SMEs generally have limited in-house technical expertise to navigate these requirements, making it necessary for SMEs to engage contractors to support in key areas such as contract law, export controls, and cyber security or risk. Without this support, SMEs are at risk of making costly errors which could significantly impact both their current business and future opportunities within the Defence industry.

There are no clear pathways for SME's innovations into CASG
Davis et al

Davis et al⁷⁸ observes that “in particular, there are no clear pathways for SME's innovations into CASG... it is critical to strongly champion the local innovation.” Likewise, Curzens et al acknowledged that “SMEs are seen as exemplar innovators in the Australian Defence industry” and that barriers to entry, including ASDEFCON contracting models and documentation burdens, “should be lowered as much as possible” for the industry to truly benefit from their innovations.⁷⁹

⁷⁸ S Davis et al, 'Innovation Catalysis: ASCA', 06 December 2023 <https://dtc.org.au/files/documents/DILP-Research-Papers/Innovation-Catalyst.pdf> (accessed 18 November 2024)

⁷⁹ A Curzens et al, 'ASDEFCON: Does the Department of Defence still require a standardised contracting model?', 06 December 2023 < <https://dtc.org.au/files/documents/DILP-Research-Papers/ASDEFCON.pdf> > (accessed 18 November 2024)

The additional costs can be significant. When combined with potential equipment or technologies required to ensure SMEs present a competitive bid against larger organisations, the upfront investment required can be too large for some organisations. This barrier may be compounded by the implementation strategy set out in the SFCR for Tier 2 vessels. The initial offshore build strategy may limit opportunities for initial engagement for SMEs, and result in the establishment of overseas supply chains that create a higher barrier to entry. Where an initial offshore build strategy is being pursued, clarification will be required to determine which existing gaps require resolution by Australian providers as opposed to international partners, and to identify pathways to develop the necessary capabilities and skills. SMEs may be able to take a proactive approach in upskilling and investing in niche capabilities; however, without Commonwealth or Prime Contractor engagement, the SMEs will be investing at-risk.

Figure 9 outlines a case study relating to the impact to suppliers following the cancellation of a major program⁸⁰⁸¹.

Case Study – Cancellation of JP9102

On 03 April 2023, Lockheed Martin was down selected for JP9102, involving the delivery of a \$7 billion network of three to five satellites to provide high-level protection against cyber and electronic warfare attacks as part of Australia's largest-ever Defence space contract; however, on 04 November 2024, only 18 months after the initial announcement, it was confirmed that the program had been cancelled, as it no longer met strategic priorities. Following the cancellation, Av-Comm, a supplier working for the Prime integrator for the program, expressed severe disappointment due to the “months and years tirelessly preparing the business to participate in the program”, and having spent “over \$3 million preparing the organisation to an acceptable level for Defence”. Chairman of the Space Industry Association of Australia (SIAA) Jeremy Hallett warned that about the impact of the cancellation on the Defence industry: **“While other OECD nations see sovereign space capability as critical to creating high-tech, high-value jobs and a military advantage, in our own backyard we seem to be doing the exact opposite... I am sure some companies will seriously consider the business case for dealing with Defence as a customer in the future, which I worry will mean our warfighters will miss out on homegrown innovations that can make a difference on the battlefield...”**

FIGURE 9: CASE STUDY – JP9102 CANCELLATION

Regardless of the upfront investment, there is no guarantee of return. While the opportunities available can be significant in value, the nature of the market means new players generally have limited success, as the Australian Defence industry is generally not sufficiently large to sustain most SMEs unless they have alternative sources of revenue to survive. Despite best intentions Defence projects are regularly delayed for various reasons, and this has resulted in the past to the loss of SMEs who committed and invested but were unable see out the delays.

Further, while the commitment to Continuous Shipbuilding offers opportunities for certainty and continuity for SMEs, absence of clear timelines and potential concentration of work within a relatively small group of Prime Contractors presents a risk to SMEs seeking to invest in niche or specialised capabilities.

⁸⁰ M Cratt, 'The Australian Government's JP9102 decision – response by Michael Cratt on behalf of Av-Comm', Sat News, 05 November 2024 <<https://news.satnews.com/2024/11/05/the-australian-governments-jp9102-decision-response-by-michael-cratt-on-behalf-of-av-comm/>> (accessed 10 November 2024)

⁸¹ A Thorn, 'Industry may not deal with Defence after JP 9102 axing, says SIAA', Defence Connect, 05 November 2024 <[Industry may not deal with Defence after JP 9102 axing, says SIAA](#)> (accessed 10 November 2024)

Although there is a push from Government to relentlessly pursue technological innovations and modern capability, particularly through the ASCA program, and a re-focus on speed to capability, SMEs are often hindered by project lags and burdensome requirements, preventing the realisation of innovations. Although policy direction offers a new perspective on MVC and MVP, emphasizing the need for a solution with the lowest acceptable mission performance over the tireless pursuit of perfection, the lack of clarity around Technology Readiness Level (TRL) acceptability and MVC practicalities presents challenges for SMEs to truly pioneer.

Availability of Defence funding

Importantly, while Defence spending is being increased, this is not necessarily translating to increased cash flow to SMEs, particularly in the immediate term. The ADM’s Top 40 Defence Contractor survey, ranking the top 40 contractors by revenue, presents a good gauge of the market status, where a large proportion of Defence spending and budget is being invested. In the 2023 survey, ADM notes that:

“...the past few years have been good to Australian Defence industry. The Top 40 surveys from 2021 and 2022 showed record growth in the sector. This year, however, is a very different story.”⁸²

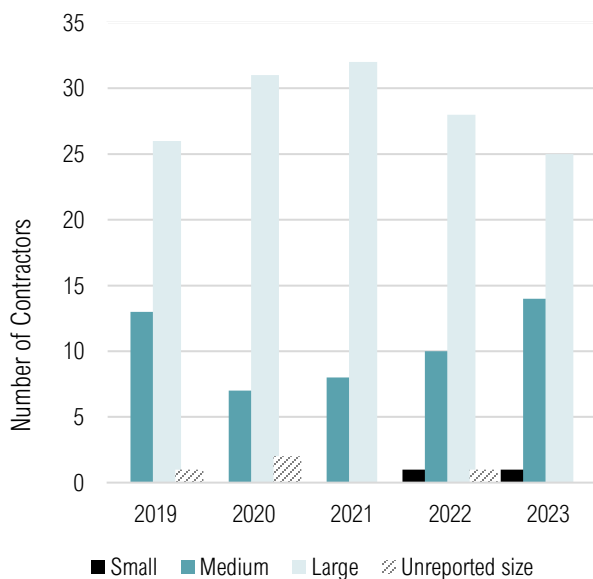


FIGURE 10: TOP DEFENCE CONTRACTORS BY SIZE, PER ADM

ADM highlights the concern of a shrinking industrial supply base in Australia and implies that our industry may be losing resilience due to political factors and lower spending. A reported 10.5% decrease in total turnover across the Top 40 businesses from 2022 to 2023 is of concern, and the **“blame for this largely falls on the Defence Strategic Review”**. Lags in major program decisions, and “delayed projects on both sides of the DSR release have hit Defence industry revenue hard”.⁸³

SME presence in the Top 40 survey shows an upwards trend, where medium sized companies are seen graduating into this top tier of income stream. A significant decrease between 2019 and 2020 is seen for medium sized companies ranked in the Top 40; however, between 2020 and 2023 this number has gradually been recovering (refer to Figure 10)⁸⁴. In addition, 2022 saw a small sized company break through into the Top 40 (SME Gateway), and it remained ranked in the 2023 survey.

⁸² Leonard, 2023

⁸³ Leonard, 2023

⁸⁴ Levick 2023, Levick 2022, Zeising 2021, Zeising 2020

Procurement delays, and changing Defence needs and priorities

While changes in direction are necessary to outpace the threat and maintain a contemporary and ready ADF, it is critical that SMEs remain willing participants in the sector. Defence Teaming Centre has highlighted the risk of companies exiting the industry altogether because of the compounding effect of cancellation of the French submarine build project in South Australia, and the new uncertainty presented by the DSR.⁸⁵

The lack of safeguards in place for the industrial base negatively impacts domestic suppliers, particularly SMEs. Without measures in place to protect SMEs, government and Defence procurement behaviour – namely, delaying acquisition projects, reluctance to execute on priorities, program cancellations, rediverting funding to other priorities, and a lack of clarity and direction – can not only exacerbate the risk of a supply base with poor resilience, but also makes the Defence industry a **less desirable sector for SMEs to engage in**.

Figure 11^{86 87} identifies an attempt to deliver innovative technologies – and the impact on industry due to delays in execution.

Case Study – ASCA: “Too Slow”

JP9102 is not the only Defence program to be impacted by changing priorities. Criticism of ASCA, intended to rapidly develop military technology, drew attention to the familiar delays in developing new technologies. The initiative to rapidly develop disruptive military technologies through the ASCA program was described by Defence Minister Richard Marles on 04 November 2024 as taking “too long”.

Criticism highlighted the fact “that local companies had been strung along for months, and the costly exercise would result in bankruptcies.” Claims that “**multiple Australian SMEs would be put into administration because of the lack of investment and lack of uncertainty**” highlights how susceptible SMEs can be to government behaviours in pursuing new capabilities.

FIGURE 11: CASE STUDY – ASCA LAGS

⁸⁵ B Willis, ‘SA Defence companies likely to exit sector under new review’, In Daily, 30 January 2024 <<https://www.indaily.com.au/business/2023/05/01/sa-Defence-companies-likely-to-exit-sector-under-new-review>> (accessed 29 September 2024)

⁸⁶ A Greene, ‘Military companies warn of bankruptcies as Defence project faces criticism for being ‘too slow’, ABC News, 04 November 2024 <https://www.abc.net.au/news/2024-11-04/Defence-technology-project-cancelled-following-investment/104560128?utm_campaign=abc_news_web&utm_content=link&utm_medium=content_shared&utm_source=abc_news_web> (accessed 10 November 2024)

⁸⁷ B How, ‘Marles wants faster ASCA missions after complaints’, InnovationAus, 05 November 2024 <<https://www.innovationaus.com/marles-wants-faster-asca-missions-after-complaints/#:~:text=Addressing%20the%20concerns%20on%20Tuesday%20morning%2C%20Mr%20Marles,and%20we%20do%20have%20competitive%20processes%20in%20place>> (accessed 08 November 2024)

Regardless of resilience measures put in place by industry participants, particularly SMEs, the investment in people, time, and money may seem grossly disproportionate to the risk of project cancellations that the Defence customer is known to make when priorities change. Similar sentiment was expressed in 2022, when the deferment of the Land 400 Ph3 program was announced – after numerous SMEs and suppliers had “spent many hours and many dollars to be Defence ready.”⁸⁸

Business acumen and implementing effective plans to meet Defence needs

Strong business acumen is key to the success of the SME, as it allows the company to make sound, informed decisions about their operations, strategy and financial health while balancing both short-term needs and long-term goals.

Due to rising costs and often poor cash flow, many SMEs fail to employ adequately experienced personnel in key areas such as finance, operations, business development and compliance. While these are generally seen as cost saving exercises within the organisation, the reality is that failure to employ or consult in these areas generally leads to poor decisions being made. This in turn substantially increases the risk of significant and potentially catastrophic results for the SME that could include the closure of the business.

Availability of suitability qualified and experienced personnel

Australia does not currently have enough skilled personnel with Defence industry experience to fulfill existing program requirements. AI Group reported in 2022 that 83% of businesses in the Defence industry sector were reporting skills shortages.⁸⁹

When considering the current major programs such as Hunter Class Frigate Program, Collins Class Submarines, F-35 Joint Strike Fighter and Land 400 Infantry Vehicles as well as the announcement of AUKUS and the procurement of nuclear-powered submarines for Australia, it becomes clear that Australia needs significantly more experienced Defence manufacturing personnel to achieve the desired outcomes. Indeed, according to a freedom of information request sourced by former independent Senator Rex Patrick, when looking at only four trades (electricians, construction managers, metal machinists and welders) (not the full forecast resourcing demand), Australia will require a further 75,000 workers by 2030.⁹⁰

As contractors compete to deliver their projects on time, workforce shortages make experienced people highly sought after by Prime integrators and other large organisations within the industry. This presents a challenge for SMEs in maintaining skills within their businesses. As previously discussed, strong financial control for SMEs is crucial to their survival and on many occasions Prime integrators and other larger organisations can support higher wages and salaries due to their large order books and longer-term contracts. Additionally, they also can generally provide more opportunities for driven individuals who want to further their careers.

⁸⁸ P Roberts, ‘Land Forces 2022 – SMEs suffer as Defence contracts delayed, by Michael Slattery’, AuManufacturing, 12 October 2022 < <https://www.aumanufacturing.com.au/land-forces-2022-smes-suffer-as-Defence-contracts-delayed-by-michael-slattery> > (accessed 2 November 2024)

⁸⁹ A Horton, ‘Australia’s most pressing Defence challenge: skills’, The Strategist, 24 June 2024, <<https://www.aspistrategist.org.au/australias-most-pressing-Defence-challenge-skills/#:~:text=A%202022%20report%20by%20the,the%20depth%20of%20the%20challenge.>> (accessed 17 November 2024)

⁹⁰ L Garman, ‘Rising to the challenge: Delivering Defence capabilities amid ongoing workforce constraints’, Defence Connect, 08 July 2024 < <https://www.Defenceconnect.com.au/industry/14341-rising-to-the-challenge-delivering-Defence-capabilities-amid-ongoing-workforce-constraints> > (viewed 12 November 2024)

Without the same order books or levels of financial support, SMEs struggle to compete with Primes, with the result being that they need to take in less experienced individuals and provide them detailed training to enable them to firstly understand, and then ensure compliance to stringent Defence industry requirements. As these individuals grow and gain experience within the industry, they become highly sought after by Primes and other large organisations, and the employment/training cycle starts again. This laborious process is time consuming for already resource-constrained SMEs.

The lack of availability of experienced workforce, combined with changing priorities and the difficulty in obtaining Defence contracts means that it is not only challenging for SMEs to be innovative, and to grow, but also to meet the demands of the new strategic priorities.

Key takeaways on barriers and challenges

SMEs face a wide range of barriers and challenges that impact their ability to achieve resilience within the Defence industry. Consistent themes in our research reveal extended decision timeframes, changes in strategic priorities, limited availability of suitably qualified personnel, as well as onerous regulatory requirements. These factors compound typical challenges faced by SMEs in providing sufficient attention to business acumen while balancing competing priorities.

Effectiveness of Existing Initiatives

This research has assessed existing initiatives (grants, policy, frameworks and education) that exist to assist in SME entry to market and resilience, and considered whether the initiatives are *accessible*, *effective*, and whether SMEs are *aware* of them.

As outlined in Appendix 2, and throughout earlier discussion, building resilience across Australia's supply chain generally (and particularly for the Defence SME industrial base) has been a major focus of the Commonwealth and industry alike.

Such is the focus on this area that numerous initiatives have been introduced in 2024 alone, including:

- revisions to the Commonwealth Procurement Rules;
- the MOU with the US and UK to work collaboratively to enhance strategic supply chain resilience;
- expansion of the Global Supply Chain Program; and
- introduction of JOSCAR.

These initiatives closely followed others introduced in 2023, such as ASCA (noting the *intent* of the program was to accelerate innovation and capability procurement from industry – but faces its own challenges in delays and lags. Refer to Figure 11).

Given the recent introduction of many of these initiatives, this research has not been able to gather sufficient data to fully assess their efficacy. Nonetheless, the perceptions of our interviewees on the effectiveness of existing initiatives, including introduction of new initiatives, is enlightening.

The interview findings were consistent that existing initiatives fail to optimally penetrate the market and industry

One key limitation was in knowledge of existing initiatives. It is notable that **65% of interviewees commented on the efficacy of grants**, without acknowledging the full breadth of initiatives available. In relation to grants specifically, their capacity to deliver enduring outcomes for SMEs were criticised, aligning to criticisms raised by Senator Fawcett that they result in simple “sugar hits”⁹¹. In particular, the perception of a lack of longevity in grant cycles acts as a deterrent to participation, by failing to adequately translate to improving SMEs ability to secure bank loans, employ long term and mentor new personnel, nor does it guarantee the SME will be awarded a contract.

A further recurring theme amongst our interviewees highlighted difficulties in gaining clear visibility of available government assistance. The often-limited capacity of SMEs to prioritise business acumen and strategy mentioned earlier is likely to be a contributing factor to SMEs not always being aware of available initiatives. Alternatively, SMEs may lack the capacity to research and apply for all the funding programs available to them.

Those interviewees who *were* aware of the programs and support were jaded by the stringent eligibility requirements, complexity of the application process, and long lead times for approval. A by-product of this complexity is the risk that Defence funding continues to go to well-known companies with a proven history in Defence contracts, rather than supporting new SMEs to enter the market, or existing SMEs to grow.

Nonetheless, our research has identified positive progress in improvements in navigating entry or security requirements, through the Commonwealth and Primes offering support services and collaborating proactively to enable navigation of the procurement procedures and security roadblocks, for example, through JOSCAR and the Global Access Program.

Further, while ASCA has been criticised as not fully addressing the speed limitations of its predecessor, the Defence Innovation Hub (DIH), it has seen some success through its focus on accelerating acquisition processes, with each project being limited to three years; and a mission-based approach has delivered successful programs like the Ghost Shark⁹². Through co-government-private funding, Anduril has co-designed the Ghost Shark and will deliver the program alongside 42 mostly small companies⁹³.

Likewise, it can be argued that the DIDS grant to Droneshield contributed to their speed to capability and enabled them to provide their anti-drone capability to Ukraine to in its engagement with Russia. This presents a greater success story aside the DIH, which was only able to deliver 10 technologies over seven years at the cost of \$441,000,000⁹⁴.

⁹¹ D Fawcett, ‘Defence Capability Assurance Bill’, 2023 < <https://senatorfawcett.com.au/in-the-senate/Defence-capability-assurance/> > (accessed 30 October 2024)

⁹² Systematiq, ‘ASCA primed to innovate Defence industry’, ADM, 26 September 2023, <www.australianDefence.com.au/news/sponsored/asca-primed-to-innovate-Defence-industry> (accessed 01 November 2024)

⁹³ P Conroy (Minister for Defence Industry and Capability Delivery, Minister for International Development and the Pacific), ‘Albanese Government to accelerate production readiness of Ghost Shark program’, media release, 05 August 2024 < <https://www.minister.Defence.gov.au/media-releases/2024-08-05/albanese-government-accelerate-production-readiness-ghost-shark-program> > (accessed 02 November 2024)

⁹⁴ Conroy, 2024

Key takeaways on effectiveness of existing initiatives

Our research shows that the Commonwealth clearly recognises the challenges to resilience in the SME industrial base and is working proactively to attempt to reduce them. However, the efficacy is being limited by the sheer weight of the barriers and challenges being experienced by SMEs, as well as limited awareness amongst SMEs of the full range of initiatives available to provide support. More will be known over time as recently introduced initiatives can be tested.

What was clearest in this research was SMEs' eagerness to break-through and remain resilient within Defence industry; however, further support is required to support SMEs to achieve this goal.

Business Resilience State

This paper conducted research into the factors required for businesses to demonstrate resilience when exposed to vulnerabilities or risk, and SMEs' assessment of their ability to withstand and respond to change.

How do the DSR, SFCR, NDS, DIDS and IIP address resilience?

Resilience is a key theme throughout the DSR, SFCR, NDS, DIDS and IIP. As a starting point, the DSR includes 'domestic resilience' as a key outcome in the 'whole of nation' effort to develop strategic resilience as a part of our national Defence.⁹⁵ The DSR and other strategic plans for Defence industry look to provide the guidance to SMEs to improve their planning and resilience.

The DIDS further reinforces the need for national resilience and includes a vision for the future of Australia's sovereign Defence industrial base that is capable, resilient, competitive and innovative in developing and sustaining Defence capabilities in areas of strategic priority.⁹⁶ The DIDS identified Russia's illegal invasion of Ukraine and the COVID-19 pandemic as placing pressure on existing supply chains, highlighting the importance of resilient supply chains with trusted partners, and criticality of domestic production capability and industrial capacity.⁹⁷

Maintaining a resilient industrial supply base is considered by the DIDS to contribute to the nation's greater self-reliance.⁹⁸ The DIDS also characterised Australia's Defence industrial base as an environment where companies have different industrial capabilities that can be broadly categorised as follows:

1. Tier 1 businesses are the prime system integrators that provide Defence with a platform, system or product.
2. Tier 2 businesses deliver major equipment, systems, assemblies and services.
3. Tier 3 businesses provide parts, consumables and services.⁹⁹

The DIDS looks to grow the number of businesses in Tier 2 and, in doing so, improve the resilience of the Defence supply base. To increase the number of businesses operating in Tier 2, it is recognised that the following is required:

- simplification of procurement processes;
- development and retention of a skilled workforce;

⁹⁵ *Defence Strategic Review, 2023*

⁹⁶ *Defence Industry Development Strategy, 2024*

⁹⁷ *Defence Industry Development Strategy, 2024*

⁹⁸ *Defence Industry Development Strategy, 2024*

⁹⁹ *Defence Industry Development Strategy, 2024*

- growth through exports;
- increased security posture of the industrial base; and
- where appropriate, mandating the use of critical Australian businesses in Defence projects.

Further, scalability as an advantage of SMEs was highlighted in the DIDS, while also recognising the challenges they face, including cash flow, access to work force and access to finance.¹⁰⁰ Increased shipping costs, inflation and supply chain deficiencies are other risks that were recognised as having a greater impact on an SME than on a Prime integrator.¹⁰¹

What is the current state of resilience in the SME Defence industrial base?

A common theme from the interviews is that adaptability by SMEs through adjustment of process after lessons learned requires a level of natural or planned experimentation. This permits an organisation to improve policy, processes and performance from iterative improvement through the implementation of the ideas that work best. Processes and structures in adaptive companies enable flexibility and learning and avoid a hardness that limit the effectiveness of change in response to adversity.

There has been a shift in how organisations operationalise resilience. Business Continuity Planning (BCP) is recommended to include the lessons from the effects of crises in recent years.

What are indicators of resilience?

The research identified that SMEs should consider a range of factors in an organisation's BCP, including:

1. **Risk Management:** Identify and consider potential risks and assess their likelihood and potential consequence. This should consider the development of contingency plans for key risks. Having a warning system in place will assist an organisation in responding in a timely manner when the effectiveness of risk controls and mitigations are reduced.
2. **Operational Flexibility and Agility:** Consider the organisation's ability to quickly pivot or adapt processes and operations in response to sudden changes. This could involve flexible work policies, alternative business procedures, adaptable supply chains, or alternative product lines.
3. **Employee Training and Preparedness:** Consider how employees can better understand their roles in crisis situations and train them to respond effectively. This should be based on good communications and include all staff in wargaming and other drills.
4. **Security, including Cybersecurity:** Strengthen Defences against physical and cyber threats, which are increasingly a significant source of business disruption. This includes incident response plans, data protection measures and regular cybersecurity training.
5. **Financial Resilience:** Build financial protections that can leverage resources that allow the business to endure financial strain during a crisis. Some examples include cash reserves, diversified revenue streams, and insurance coverage.

¹⁰⁰ *Defence Industry Development Strategy, 2024*

¹⁰¹ *Defence Industry Development Strategy, 2024*

6. **Stakeholder and Supply Chain Management:** Collaborate closely with suppliers, partners, and customers to ensure clear communication and coordinated responses during disruptions. Understand capacities and fragility and consider how to improve weaker business lines. Companies are embedded in supply chains, business ecosystems, economies, societies, and natural ecosystems.

A BCP that includes resilience permits a company to develop a structured response plan that enables essential functions to be maintained during a disruption or crisis. Implementing a level of redundancy can safeguard systems against unexpected disruptions. Whilst additional protections may reduce efficiency in the short-term, the long-term value cannot be under-estimated. Redundancy can be achieved through duplicating functional areas or having different areas with similar functions in different parts of the business.

Another indicator of resilience is incorporating a diversity of responses to ensure that broader thinking prevents processes from failing. This may come at the expense of the efficiencies obtainable through standard processes in the short term. The resilience from employing people from different backgrounds and with different intellectual qualities creates an environment that encourages multiple ways of thinking and doing things.

Additionally, modularity mitigates the risk of individual processes failing rather than the organisation. Whilst the efficiency of a tightly integrated organisation is reduced, a modular organisational design enables greater flexibility in response to a crisis as different parts of the organisation can mitigate disruption to the system.

How can organisations improve resilience?

There are many strategies that SMEs can adopt to maintain a lasting and impactful presence in the sector. Balancing specialisation, innovation, collaboration, expertise and agility is key to succeeding in this highly regulated and competitive market.

To better understand how to build a resilient organisation, particularly in uncertainty, a business leader should consider the following actions for their organisation:

1. **Adopt an expanded view of resilience:** Consider how to build resilience into all business functions as both a strategic opportunity and operational imperative.
2. **Recognise and address the trade-off between long-term resilience and short-term efficiency:** Invest in resilience to obtain long-term competitive advantage.
3. **Shift your mindset:** Expect and prepare for crises. Understand how to manage and leverage a crisis to create opportunity and competitive advantage.
4. **Measure resilience:** Introduce performance metrics for agility and responsiveness relative to competitors.
5. **Operationalise resilience:** Apply principles that support the organisation's ability to include resilience in planning and execution.
6. **Model leadership behaviours:** Lead the cultural shift that adopts resilience and learns from the impacts of past crises.

Key Takeaways on business resilience

SMEs should ensure that the factor BCP into their business framework, as ensuring robust frameworks are in place in advance will assist SMEs to build resilience, and weather inevitable challenges as they arise.

CHAPTER 5: RECOMMENDATIONS

In order to achieve a lasting and impactful presence in the Defence market, and contribute to the resilience of Australia's national economy and Defence sector as a whole, SMEs are encouraged to consider the following recommendations.

Recommendation 1: Diversification

Diversify

SMEs should ensure their organisation has an effective diversification strategy

Defence SMEs need to be prepared for descoping or cancellation of existing and future contracts, and changes in strategic priorities. Resilience against these changes, and maintenance of a lasting impact can be achieved through effective diversification.

Why?

Diversification allows the SME to increase utilisation of existing Intellectual Property (IP), as well as increasing market significance through expansion into complementary product lines. Furthermore, leveraging alternate markets smooths cash flow, by splintering cause-and-effect chains with reduced likelihood of overlap. The need for diversification is a recurring theme, with Defence Connect reporting that “diversification [is] essential for SME survival” as early as 2016¹⁰², predating the changes to the Defence landscape.

How?

SMEs can diversify in several ways:

- Diversification out of Defence (e.g. Medical, Mining & Petroleum, Civil, Commercial);
- Diversification out of Australia (e.g. by exporting alternative markets such as US, UK or EU); and
- Diversification of product lines or offerings.

Diversification out of Defence

While Defence is a significant consumer of SME-driven support and innovation, the Australian market offers opportunities with alternate industries, including civil, mining, oil & gas, energy, transport, space, and others. This is highlighted by BlueZone Group's CEO Neil Hodges, who identifies parallels between technologies utilised in the Oil & Gas industry and Defence, to assist in the balancing of peaks and troughs in demand and ensure self-sustainability.¹⁰³ Technology solutions related to communications, autonomy, environmental and sustainable engineering, and cyber are transferrable between sectors, and offer diversification pathways.

¹⁰² 'Diversification essential for SME survival', Defence Connect, 26 December 2016 <<https://www.Defenceconnect.com.au/joint-capabilities/184-diversification-essential-for-sme-survival>> (accessed 16 November 2024)

¹⁰³ 'Diversification key to success', Defence Connect, 16 August 2017 <<https://www.Defenceconnect.com.au/joint-capabilities/1108-diversification-key-to-success>> (accessed 16 November 2024)

To achieve this form of diversification, SMEs should:

- actively research adjacent industries;
- identify commonalities in problems and solutions;
- determine alignment of opportunities with existing and projected product & service offerings; and
- proactively engage segment leaders to establish alternate income streams.

Figure 12 outlines a case study of an SME that successfully diversified into adjacent industries.¹⁰⁴

Case Study – Redarc

Redarc is an Australian business that commenced operations in 1979 with the design and manufacture of consumer electrical/electronic systems, including vehicle ignition systems and voltage converters. Following the establishment of robust, high-quality manufacturing processes as well as an in-house design capability and capacity, the business has been able to undergo a 2015 expansion into the Mining and Industrial sector (sensing, monitoring, and measurement devices), as well as a 2019 expansion into the Defence sector (rugged power storage, conversion and distribution). This diversification across multiple sectors allowed Redarc to leverage its existing IP to greater effect and maximise the benefits of high-value Defence work, while maintaining resilience through ongoing delivery of consumer and Industrial solutions.

FIGURE 12: CASE STUDY – REDARC

Diversification out of Australia

The Australian Defence market is expected to receive \$48b of annual investment¹⁰⁵ in FY2024/25, across all areas of acquisition, sustainment, and operation. In comparison, the US Defence market is projecting an investment of \$849.8b¹⁰⁶, exceeding the Australian investment in metrics including absolute value, per capita, and % of GDP.

The US 2022 National Defense Industry Strategy¹⁰⁷ highlights the need for resilient supply chains, workforce readiness, flexible supply chains, and economic deterrence, and proposes the utilisation of allied suppliers as a viable solution. Australian SMEs have the opportunity to utilise existing products, services, and capacity to provide in-country as well as remote support to these overseas markets. In addition to opportunities for growth, separation of markets provides multiple independent income streams increasing SME resilience, while participation on an international scale further increases the impact of SME contributions, incentivising further investment in capability.

¹⁰⁴ ‘Our Story’, Redarc <<https://www.redarcelectronics.com/au/our-story>> (accessed 16 November 2024)

¹⁰⁵ Budget 2024-25: Cost of living help & a future made in Australia, Commonwealth of Australia, May 2024 <<https://budget.gov.au/content/overview/download/budget-overview-final.pdf>> (accessed 02 November 2024)

¹⁰⁶ Office of the Under Secretary of Defense (Comptroller)/Chief Financial Officer, *Defense Budget Overview: United States Department of Defense Fiscal Year 2025 Budget Request*, 04 April 2024 <https://comptroller.defense.gov/Portals/45/Documents/defbudget/FY2025/FY2025_Budget_Request_Overview_Book.pdf> (accessed 02 November 2024)

¹⁰⁷ Department of Defense, *National Defense Industrial Strategy, 2023* <<https://www.businessdefense.gov/docs/ndis/2023-NDIS.pdf>> (accessed 2 November 2024)

Figure 13 outlines a case study of an SME that successfully diversified into international markets.^{108 109 110}

Case Study – Pacific Marine Battery (PMB)

Established in 1989 to support battery production for the Collins-class submarine program, PMB maintained a focus on its core offering of submarine batteries. Following the establishment of the SEA1000 Future Submarine Program, PMB's specialised submarine battery expertise placed it in prime position to provide a high-quality solution for the unique needs of the Program. After its cancellation, PMB successfully diversified outside of the Australian market, winning contracts with SAAB to support the Swedish submarine program, a contract with the UK Ministry of Defence to test and qualify their nuclear submarine battery systems, as well as other international partners.

FIGURE 13: CASE STUDY – PMB

SMEs can diversify into overseas markets either:

- Directly, through establishment of an in-country presence and direct contracting to Government and Prime contractors; or
- Indirectly, through leveraging of Australian-based Prime partnerships, to identify export opportunities as part of the Primes' global supply chains.

To achieve this form of diversification, Australian SMEs should actively identify aligned programs in overseas markets, and develop strategies and plans for stakeholder engagement, investment, and export/regulation compliance in support of international investment and expansion.

Additionally, SMEs should proactively engage with Australian-based Prime contractor representatives, to identify opportunities for export as part of their Global Supply Chains. An example of a currently available pathway is BAE's Global Access Program¹¹¹, which seeks to actively identify and facilitate export opportunities for Australian SMEs, including provision of advisory services and training to maximise chances of success. SMEs can leverage a registration on the Industry Capability Network¹¹² to gain visibility and access to these opportunities.

Diversification across product lines or services

In addition to identifying opportunities to leverage existing IP, Australian SMEs can also increase their resilience and impact through investment in, and expansion of their product lines and services. Diverse products and services offer:

- An increased ability to pivot in response to changes in client needs – for example, diversification across hardware engineering and integrated logistic support allows a professional services SME to pivot from supporting an acquisition phase of a program (hardware engineering), to support of the sustainment;

¹⁰⁸ PMB Defence, <<https://pmbDefence.com.au/>>

¹⁰⁹ Saab, 'Saab supports Australian industry innovation – PMB Defence contracted for Swedish submarines', 23 November 2020 <<https://www.saab.com/markets/australia/news/stories/2020/saab-supports-australian-industry-innovation---pmb-Defence-contracted-for-swedish-submarines>> (accessed 21 November 2024)

¹¹⁰ 'PMB Defence Engineering signs submarine battery agreement with UK MOD', Defence Connect, 21 August 2024 <<https://www.Defenceconnect.com.au/industry/14602-pmb-Defence-engineering-signs-submarine-battery-agreement-with-uk-mod>> (accessed 21 November 2024)

¹¹¹ BAE Systems, Global Access Program < <https://www.baesystems.com/en-aus/our-company/our-suppliers/global-access-program>> (accessed 21 November 2024)

¹¹² Industry Capability Network, <<https://icn.org.au/>>

- Opportunities to complement and combine products/services to provide higher impact, higher complexity, and higher value offerings – for example, expertise in electronics and software enables the delivery of higher value integrated, software-enabled products; and
- A reduction of risk associated with changes in Defence priorities, by reducing excessive exposure to changes in any single program – for example, provision of Maritime and Land uncrewed systems reduces the risk associated with cancellation of a Maritime uncrewed system program).

Figure 14 outlines a case study of an SME that diversified into adjacent product lines. ^{113 114 115 116 117 118 119 120 121}

Case Study – Anduril

Established in 2017, Anduril started as a venture capital backed business intending to leverage the agility and innovation capacity of Silicon Valley for Defence purposes. By 2020, having reached an estimated USD 67m in annual revenue, Anduril diversified its product line to include an AI-enabled Unmanned Aerial Vehicle (UAV) – Anduril Ghost – leveraging existing capabilities with AI. Following this, Anduril performed a series of acquisitions aimed at diversifying its product offering by acquiring Area-I (drone designer and manufacturer), Adranos (rocket engine company), Blue Force Technologies (autonomous aircraft developer), and Dive Technologies (Autonomous Underwater Vehicle start-up). This diverse, but complementary (often sharing AI and software expertise) set of products has enabled Anduril to both grow its revenue to an estimated USD 420m annually by 2023 and also tackle highly impactful projects and initiatives such as the Ghost Shark autonomous submarine for the Royal Australian Navy.

FIGURE 14: CASE STUDY – ANDURIL

To achieve this form of diversification, Australian SMEs should seek to identify and invest in (or perform mergers/acquisitions) complementary or diverse product lines and solutions, emphasising their ability to:

- Enhance the value of the existing offering; and
- Provide alternate solutions targeting new market elements in a way that seeks to reduce risk.

¹¹³ ‘Anduril in 2023: A year in review’, 22 December 2023 < <https://www.anduril.com/article/anduril-in-2023-a-year-in-review/>>

¹¹⁴ S Levy, ‘Inside Palmer Luckey’s Bid to Build a Border Wall’, *Wired*, 6 November 2010 < <https://web.archive.org/web/20210414015255/https://www.wired.com/story/palmer-luckey-anduril-border-wall/>>

¹¹⁵ Sacra, Revenue <<https://sacra.com/c/anduril/#:~:text=Sacra%20estimates%20that%20Anduril%20hit,in%202023%2C%20up%2050%25.>>

¹¹⁶ ‘Anduril Introduces Ghost 4’, 10 September 2020 <<https://www.anduril.com/article/anduril-introduces-ghost-4/>>

¹¹⁷ ‘Anduril Industries Acquires Area-I, Adds ALTIUS Capabilities to Hardware Portfolio’ 1 April 2021 <<https://blog.anduril.com/anduril-industries-acquires-area-i-adds-altius-capabilities-to-hardware-portfolio-36633ebcc73b>>

¹¹⁸ ‘Anduril Industries Acquires Solid Rocket Motor Manufacturer Adranos’, 25 June 2023 <<https://www.anduril.com/article/anduril-industries-acquires-solid-rocket-motor-manufacturer-adranos/>>

¹¹⁹ ‘Anduril Industries Acquires UAS Developer Blue Force Technologies’, 7 September 2023 <<https://www.anduril.com/article/anduril-acquires-blue-force-technologies/>>

¹²⁰ ‘Anduril Technologies Acquires Dive Technologies’, 2 February 2022 <<https://www.anduril.com/article/anduril-industries-acquires-dive-technologies/>>

¹²¹ ‘Anduril Australia to Build Ghost Shark Factory’, 14 August 2024 <<https://www.anduril.com/article/anduril-australia-to-build-ghost-shark-factory/>>

Recommendation 2: Collaboration & Teaming

Collaborate

SMEs should explore opportunities to increase collaboration and teaming

SMEs may struggle to break into the Tier 2 Prime category, or grow past 200 personnel (noting that this is not necessarily a desire of SMEs, as they could potentially lose their value and strengths if they grow beyond SME status), due to many incentives, grants, and exemptions not being applicable once this threshold is reached.

Small businesses (19 or fewer people) have fewer opportunities to diversify, due to limited capacity and cash reserves to support such efforts. Limited diversity often leads to a fragile cash flow, leading to a degradation of resilience with success or failure seemingly outside of the SME's control. Collaboration and/or teaming can help build resilience by:

- establishing project/program agnostic partnerships with an emphasis on capability and capacity; and
- allowing the rapid formation of larger entities with increased maturity, and the capacity to have a more impactful presence.

Why?

Collaboration, particularly with Primes, allows the establishment of long-lasting credentials that are transferrable to other programs/projects even in the event of Defence direction changes. Large Primes often have multiple programs underway and leverage their network of proven and reliable SMEs to achieve the required outcomes. Effective collaboration allows for improved transfer of information both ways, building the Primes' understanding of SME capability, while providing SMEs with insights into Primes' needs. As a result, SMEs can provide higher impact support, and maintain longer lasting relationships with greater resilience, due to increased likelihood of continued engagement in the event of changes.

Teaming, possible through a range of mechanisms ranging including partnerships, conglomerations, joint ventures, and mergers & acquisitions, allows the rapid increase of an organisation's size, merging both the capabilities and capacities of the constituents, while allowing the unification of compliance and governance functions (reduced overheads). Larger entities possess the scale to tackle more significant, large scale and large volume tasks, allowing them to have a higher impact and value both as a standalone body (if seeking to contract directly with the end clients) and as partners. Larger entities also possess greater resilience, due to more significant cash flows allowing for greater investments and a higher risk tolerance, as well as their increased ability to secure a meaningful, long-term workshare on larger programs.

How?

Effective collaboration can be achieved by emphasising communication, good partnering practices, and a focus on business and marketing fundamentals, including:

1. **Ensuring that stakeholder management is not overlooked:** SMEs should have plans for engaging suppliers, partners, and clients, with a clear understanding of who the key representatives are, when, how, and by whom they need to be engaged, and what the intended outcomes of the engagement are;

2. **Maintenance of clear definition of capabilities, and business value proposition:** SMEs need to understand, and be able to clearly and effectively convey their capabilities and value proposition, to provide prospective clients and partners with an understanding of how they may fit into their supply chain;
3. **Establish credentials with a Prime, and leverage these as case studies:** SMEs (particularly on the smaller end) need to collaborate with Prime contractors on a “starter” contract, and demonstrate their ability to deliver the required outcomes. This process of “credentialling” can – and should – be leveraged as a case study when engaging other Primes, as it establishes credibility and enables capture of future work;
4. **Emphasise SME strengths in delivery:** SMEs need to deliver on their unique value proposition, including agility and adaptability to client needs, speed, quality and cost. These are the fundamentals of any competitive business, so an inability to maintain or perform trade-offs with these elements (e.g. higher quality at higher cost) will result in the SME failing to secure work in contrast with their competitors.

In addition to collaboration, SMEs can explore teaming, such as partnerships, joint ventures, or mergers and acquisitions. SMEs should consider:

- Partnerships with similar organisations if the organisation is limited by capacity (e.g. manufacturing), or compatible organisations if an increase in capability is required (e.g. a sensor organisation partnering with an effectors organisation, to deliver an end-to-end solution);
- Merger & Acquisition, including sale if required to avoid business failure, to allow the organisation and its staff to continue to maintain an impactful presence as part of a larger entity, or purchase in the event that cash reserves allow an effective acquisition of a compatible organisation and expansion of capability and/or capacity;
- Opportunities to partner with others to allow tendering for higher value and higher complexity tasks, emphasising complementary capabilities and skills. This is regularly seen with Prime contractors as well, who will partner to deliver very high complexity programs (e.g. a Ship Platform System Integrator partnering with a Combat System Integrator).

Figure 15 outlines a case study of successful SME teaming.^{122 123 124 125 126}

Case Study – ASDAM Group

ASDAM Group was formed in 2019, following the acquisition of Australian-based Marand Precision Engineering, and Levett Engineering organisations by CPE Capital – an Australian Private Equity firm. The two organisations possessed complementary capabilities, focusing on the design and manufacture of equipment, tooling, and other products. In 2022, the Group expanded by further acquiring TAE Aerospace, and RUAG Australia (now Rosebank Engineering), expanding the capabilities to include engine maintenance, repair and overhaul, and further expanding their precision manufacture capacity. As a result, ASDAM is now Australia's largest supplier to the F-35 Joint Strike Fighter Program, with further commercial relationships with major partners including BAE Systems, Lockheed Martin, BHP and others. ASDAM is continuing its expansion through pending acquisition of Quickstep Holdings, which will expand its capability to include advanced manufacturing of composites.

FIGURE 15: CASE STUDY – ASDAM GROUP

SMEs should implement robust stakeholder management practices, and emphasise clear, concise, and accurate communication of capabilities and niche areas. Collaboration can also extend beyond technical, and can encompass partnering for relationship management, talent acquisition, approach to market, or testing of new technologies. SMEs should also investigate opportunities to procure complementary organisations (if larger, or with access to funding streams), maintain willingness to team/partner with other organisations including competitors to allow capability and scale to capture more significant opportunities, and be prepared to be acquired rather than ceasing trade.

Finally, SMEs can leverage industry bodies (such as the Defence Teaming Centre) to identify opportunities for collaboration and teaming, gather information about Defence direction, and obtain a pathway for effective communication back to key stakeholders and decision makers.

¹²² S Kuper, 'Aussie private equity firm acquires SA Defence SME', Defence Connect, 04 November 2019, <<https://www.Defenceconnect.com.au/joint-capabilities/5072-aussie-private-equity-firm-acquires-sa-Defence-sme-levett-engineering>> (accessed 21 November 2024)

¹²³ 'Leading sovereign Defence, advanced manufacturing and sustainment company ASDAM acquires TAE Aerospace and RUAG Australia', CPE Capital, 01 September 2022 <<https://cpecapital.com/asdam-acquires-tae-aerospace-and-ruag-australia/>> (accessed 21 November 2024)

¹²⁴ ASDAM <<https://asdam.com/>> (accessed 21 November 2024)

¹²⁵ I Cotton, 'Quickstep Holdings the target of off-market takeover bid from ASDAM Operations', Small Caps, 07 November 2024 <<https://smallcaps.com.au/quickstep-holdings-off-market-takeover-bid-asdam-operations/>> (accessed 21 November 2024)

¹²⁶ QuickStep <https://www.quickstep.com.au/capabilities/> (accessed 21 November 2024)

Recommendation 3: Business Maturity Enhancement

Enhance

SMEs should prioritise enhancing their business maturity

A key challenge identified was the relatively low perceived business maturity of SMEs, including ability to manage projects, stakeholders, cash flows, contracts and risk, and the ability to establish strategies and plans for the future. Besides being good practice, SMEs need to focus on effective business fundamentals to manage avoidable barriers to resilience and set themselves up for success.

Why?

Emphasis on business fundamentals allows the business to effectively manage both risks and opportunities, and ensure that adverse outcomes are avoided, and benefits are realised. Several key areas of focus include:

- Cash flow management – effective cash flow management ensures that the business maintains sufficient liquidity to cover its obligations (e.g. invoices, remuneration), as well as providing clarity around funds that can be utilised for investment. In cases of high-risk/high-reward investment, effective management of cash flow ensures that in the event that the investment is not successful (e.g. an ASDEFCON bid response), the SME's ability to continue to maintain an impactful presence is not diminished;
- Reduction of reliance on grants and incentives – while these should be leveraged to support growth or expansion, grants and incentives represent transient funding streams that are not secure or guaranteed. Reduced reliance on these in favour of establishment of contracted revenue streams ensures that the SME is resilient against Defence investment strategy changes, while being able to continue leveraging grants for activities not critical to continued business operation (e.g. research and development);
- Stakeholder management – effective stakeholder management ensures that new opportunities are captured and prosecuted, that the full range of capabilities on offer can be proposed and utilised, and that a pipeline of opportunities exists to support transitions from concluding activities to emerging ones;
- Contracts & Commercial terms – a comprehensive understanding of contracts and commercial terms allows SMEs to identify and negotiate potentially dangerous terms (e.g. unlimited liability, significant liquidated damages), as well as to build in commercial protections covering a range of unexpected scenarios (e.g. project delays and cancellations). This ensures that the SME is able to maintain continuity of operations, and recover from adverse events.

How?

A key approach that SMEs can employ is investment in training and development of key staff in basics of business (e.g. Financial & Commercial Acumen, SWOT Analysis, Risk Assessment), and allocation of responsibilities/accountabilities to cover key management areas (including stakeholder management). A critical element of business basics also includes management of risk when investing, to ensure that the business has adequate reserves to continue operations in the event of investment failure.

SMEs should also prioritise contracts and cash flow opportunities over grants, accelerators, and other short-term initiatives. SMEs can develop strategies and plans for how these transitions will occur and use these to guide decision making and action. Strategies and plans can also be applied to specific opportunities to determine how to approach, compete for, win, and deliver.

Finally, SMEs need to establish an understanding of core Defence compliance requirements (Security/Clearances, DISP, ASDEFCON, EXIM), and have a plan for how to achieve and manage them – these are fundamental to working within the Defence environment. SMEs can leverage industry bodies (such as DTC) and Prime contractors to build competence in these areas, by participating in workshops, training courses, and knowledge sharing events that seek to promote broader industry awareness and appreciation of the intricacies of these processes.

General Recommendations

To safeguard the integrity of the industrial base, all Defence stakeholders and participants in the industry must collaborate, and consider actions that can contribute collectively to a more safeguarded, resilient industry.

In addition to the specific recommendations highlighted above, the research team has identified a broad range of general recommendations for all Defence stakeholders, which reflect the broader industry sentiments; however, which do not have straightforward pathways for implementation. Stakeholders should consider options for incremental improvements or conduct further research into these areas.

- **Timeliness of Decision Making:** A key recommendation for the Government is to review decision making processes and seek to reduce the associated timelines. Improvements in this area would lead to a reduction in quantity and duration of industrial valleys of death, build broader industry confidence, and avoid downstream paralysis pertaining to contracting and investment.
- **Pivots vs Cancellations:** While it is understood and appreciated that the rapidly changing Defence landscape necessitates shifts in strategic priorities and needs, cancellations or reductions of scope of major programs cause significant downstream impacts to both Primes, as well as SMEs. Preparation for the delivery of these programs regularly requires prior investment and preparation, and a sudden cancellation can result in business collapse at a critical time. Noting that SMEs in particular are valued for their agility and willingness to accommodate changes, Government should consider opportunities to pivot major programs as opposed to cancelling them, and to prioritise the re-alignment of existing suppliers with the new priorities. This would significantly increase supplier confidence when engaging with Defence, including increasing industry willingness to proactively invest in advanced technologies and capabilities.
- **Simplification of access to grants and accelerators:** It was noted during our research that a range of initiatives such as grants are ineffective, as a result of difficult or expensive application processes, and significant overheads associated with mandatory reporting. Entities offering grants should consider approaches for simplifying access, and increasing industry awareness of their existence. A possible approach could involve utilisation of a tiered approach to grants, with a large volume of low-value grants with low barriers to entry, aimed at supporting the development of initial concepts, with organisations that successfully achieve the stated goals becoming eligible to apply for lower volume, higher-value grants to develop the promising ideas further, with increased oversight and reporting.
- **Renewed commitment to AIC:** Following the release of the DSR, the Australian Defence industry has seen a significant pivot in strategy from AIC-driven procurement to a speed to capability approach. With the strategic landscape in a state of flux, it is prudent for Australia to maintain sovereign capabilities wherever possible. Defence should consider opportunities for re-instating AIC targets particularly around Australian SME involvement and emphasise a clarified definition of “Sovereign” as Australian owned and operated. While foreign-owned organisations offer the opportunity of importing mature solutions, they carry an inherent risk of changes in direction from their overseas parents.

- **Simplification of access to opportunities:** it was noted that tendering utilising the ASDEFCON Suite of templates presents a very significant upfront burden and cost, making it inaccessible to most SMEs. Defence should consider opportunities to employ alternate mechanisms to the ASDEFCON Suite, as well as investigating options to simplify access to opportunities through investment in tools, processes, training, support, and funding to assist in the tendering process.
- **Risk Management and sharing:** Engagement with Defence on projects presents a range of risks to businesses, including cost of bidding, impact of contract execution delays, costs of innovation/R&D, impact of workforce availability, changes to input prices, and more. Currently, these risks are typically borne by the Prime contractor, resulting in only the most significant organisations being able to afford to take the Prime mantle, and often resulting in flow down of high-risk terms to downstream SME suppliers (e.g. unlimited liability). If risks eventuate, this can act as a business killer for smaller organisations. Defence should consider opportunities to establish more equitable risk sharing, for example underwriting some of these risks, offering greater protections for SMEs to reduce impacts of delays, and funding pre-tender activities to establish early cash flows and assist in maturation of concepts.
- **Vertical integration of Primes:** It was noted that some Primes seek to increase the level of vertical integration within their organisations. While this does offer some benefits (compatibility, comprehensive solutions, speed, cost), it risks reducing options for variation by locking the clients into an all-or-nothing solution, and stifles innovation by presenting barriers to smaller, more innovative SMEs. Prime Contractors and Government should consider opportunities for reduction of vertical integration in areas of thriving SME activity and seek to engage and incentivise participation of SMEs at lower product levels, freeing up the Primes to focus on higher complexity integration and synthesis.

Appendix 1: Table of Acronyms

Acronym	Meaning
ABN	Australian Business Number
ABS	Australian Bureau of Statistics
ADEO	Australian Defence Export Office
ADF	Australian Defence Force
ADO	Australian Defence Organisation
AI	Artificial Intelligence
AIC	Australian Industry Capability
AK	Knight of the Order of Australia
APS	Australian Public Services
ASCA	Australian Strategic Capability Accelerator
ASDEFCON	Australian Standard for Defence Contracting
ATO	Australian Tax Office
AUD	Australian Dollars
AUKUS	Australia, United Kingdom, United States
BCP	Business Continuity Planning
CASG	Capability Acquisition and Sustainment Group
DBRT	Defence Business Readiness Tool
DIC	Defence Industry Capability
DIDS	Defence Industry Development Strategy
DIH	Defence Innovation Hub
DISP	Defence Industry Security Program
DoD	Department of Defence
DSPF	Defence Security Principles Framework
DSR	Defence Strategic Review
DTC	Defence Teaming Centre
ECGA	Export Control Group Australia
EU	Europe
EXIM	Export Import
GDP	Gross Domestic Product
GSC	Global Supply Chain
GWEO	Guided Weapons & Explosive Ordnance
HMAS	His Majesty's Australian Ship
IIP	Integrated Investment Program
IP	Intellectual Property
MOU	Memorandum of Understanding
MP	Member of Parliament
MVC	Minimum Viable Capability
MVP	Minimum Viable Product

Acronym	Meaning
NDS	National Defence Strategy
NGTF	Next Generation Technologies Fund
NSSG	Naval Shipbuilding and Sustainment Group
ODIS	Office of Defence Industry Support
R&D	Research and Development
SCFR	Surface Combatant Fleet Review
SME	Small to Medium Enterprise
SWOT	Strengths, Weaknesses, Opportunities, Threats
TO	Turnover
TRL	Technology Readiness Level
UK	United Kingdom
USD	United States Dollars

Appendix 2: Snapshot of Existing Initiatives

Initiative	Description
Office of Defence Industry Support (ODIS) Department of Defence	ODIS supports SMEs entering or expanding their presence in the Defence industry. It provides SME engagement opportunities, mentoring and advisory services, education specific to the Australian Defence environment as well as grants. ODIS aims to equip SMEs to become “Defence-Ready” and provides a Defence Business Readiness Tool (DBRT) to assist to SMEs to self-assess their supply and capability ¹²⁷ . ODIS publishes monthly updates aimed at SMEs to increase awareness of programs or initiatives to increase competitiveness.
Office of Supply Chain Resilience Department of Industry, Science and Resources	The Office of Supply Chain Resilience advises the Australian Government on critical supply chain vulnerabilities. It supports SMEs through its Industry Growth Program, which provides advisory services, access to specialist expertise as well as opportunity to apply for matched grant funding. Development of Defence capability is identified as a priority area for this program, which aims to support SMEs to commercialise products, processes and services, improve market engagement as well as increase scalability. ¹²⁸ In September 2024, the Office of Supply Chain Resilience supported Australia to sign a memorandum of understanding (MOU) for supply chain resilience with the US Department of Homeland Security and the UK Department for Business and Trade. This MOU “gives a platform for strategic cooperation on critical supply chains”. ¹²⁹
Australian Strategic Capability Accelerator (ASCA)	Consistent with the focus on speed to capability set by the DSR, the Australian Government launched the Australian Strategic Capability Accelerator to speed up the delivery of innovative capability to the ADF. ASCA aims to streamline the Defence innovation system by focusing on pre-defined missions with an agile approach. ASCA has recently supported the launch of the AUKUS Pillar II electronic warfare innovation challenge and progressed the Ghost Shark program to build three more autonomous undersea vehicles in Australia. Ghost Shark saw 10 Australian companies brought together with 42 in the larger supply chain for a total of \$140M investment to date shared between Defence and industry funding ¹³⁰

¹²⁷ ‘Why work with Defence?’, Defence Industry <<https://www.Defenceindustry.gov.au/businesses>>

¹²⁸ Department of Industry, Science and Resources, ‘Industry Growth Program’, <<https://www.industry.gov.au/science-technology-and-innovation/industry-innovation/industry-growth-program>>

¹²⁹ Department of Industry, Science and Resources, ‘Enhanced cooperation with the US and UK on critical supply chain resilience’, 13 September 2024 <<https://www.industry.gov.au/news/enhanced-cooperation-us-and-uk-critical-supply-chain-resilience#:~:text=Signed%20by%20senior%20officials%20on,information%20on%20supply%20chain%20risks>>

¹³⁰ ASCA, ‘Ghost Shark – Mission Zero’, <<https://www.asca.gov.au/missions/ghost-shark-mission-zero>>

Initiative	Description
Defence Industry Vendor Qualification Program	This program, identified within the IIP, is an AUKUS initiative which aims to “streamline and accelerate the qualification of suppliers into United States supply chains”. ¹³¹ Major product families will be targeted over a series of phases, commencing with machined parts and electrical components in mid-2024. ¹³²
Export Controls Group Australia (ECAG)	ECAG was launched in February 2024 as a not-for-profit and membership-based body, aiming to lower the compliance burden for SMEs by supporting them to remain compliant with international Export Control standards and agreements. ¹³³
Defence Industry Development Grants Program	The Defence Industry Development Grants Program provides funds to SME to build Australia’s sovereign capability. Split into four streams of sovereign industrial priorities, exports, security and skilling, the program delivers grants from \$100,000 to \$1,000,000 ¹³⁴ , for programs to be delivered by 2028 to support the Defence Industry Development Strategy. Recent examples include Droneshield who received \$59,000 to acquire two spectrum analysers for use in RF detection in anti-drone warfare systems ¹³⁵ and Hexion Australia, who received \$1,000,000 to establish a hexamine production facility for explosive ordnance manufacturing.
Commonwealth Procurement Rules Department of Finance	Recognising the role procurement policy plays in acting as a “major economic lever”, revised Commonwealth Procurement Rules issued in 2024 include a range of initiatives aimed at using Commonwealth purchasing power to better support for SMEs. ¹³⁶ Most significantly, the Commonwealth Procurement Rules enhanced exemptions allowing for SMEs to be directly engaged for procurements valued up to \$500,000, provided that the SME is an “independent entity”, meaning that it is not supported by the resources of a larger entity. ¹³⁷ The reforms also increased the target of contracts awarded to SMEs by non-corporate Commonwealth entities from 20 to 25% for contracts up to \$1 billion, in addition to increasing the target for contracts valued up to \$20 million from 35% to 40%.
JOSCAR	Introduced to Australia in 2024 and supported by the Australian Department of Defence and primes, JOSCAR is a supplier management community which aims to reduce the costs associated with supplier compliance and administration by providing a single supplier gateway, providing SMEs with access to multiple Defence primes through a single application. ¹³⁸

¹³¹ Integrated Investment Plan, p. 26

¹³² Integrated Investment Plan, p. 26

¹³³ ECAG, ‘About Us’ <<https://www.ecag.com.au/about-1>>

¹³⁴ Business.gov.au, ‘Funding for business to strengthen Australia’s Defence industry’, Defence Industry Development Grants Program, 04 November 2024 <<https://business.gov.au/grants-and-programs/Defence-industry-development-grants-program>>

¹³⁵ P Conroy (Minister for Defence Industry and Capability Delivery, Minister for International Development and the Pacific), ‘Millions in grants to help industry deliver priority capabilities for Defence’, media release, 16 April 2024 < <https://www.minister.Defence.gov.au/media-releases/2024-04-16/millions-grants-help-industry-deliver-priority-capabilities-Defence#:~:text=The%20Defence%20Global%20Competitiveness%20and,Australian%20businesses%20through%20both%20programs>> (accessed 10 November 2024)

¹³⁶ K Gallagher, ‘Foreword’, Commonwealth Procurement Rules, <<https://www.finance.gov.au/government/procurement/commonwealth-procurement-rules/foreword>>

¹³⁷ Department of Finance, ‘Table of changes to the Commonwealth Procurement Rules (CPRs) commencing 1 July 2024’, < <https://www.finance.gov.au/sites/default/files/2024-08/Table-of-Changes-CPRs-July-2024-Update.pdf>>

¹³⁸ Hellios, Introducing JOSCAR, <<https://hellios.com/news/joscar-au>> (accessed 16 November 2024)

Initiative	Description
Australian Industry Capability Program (AIC Program)	The AIC Program embeds sovereign capability objectives into ASDEFCON contracts with the aim to maximise Australian industry participation. Amongst a range of objectives, the AIC Program specifically aims to increase inclusion of SMEs and encourage innovation and collaboration. ¹³⁹
Global Supply Chain Program (GSC Program)	The GCS program aims to achieve a “more sustainable, resilient and competitive sovereign Defence capability” by partnering with Primes to identify and capture opportunities within the Primes’ global supply chains. ¹⁴⁰ Expanding the GCS Program was a priority of the 2024 Defence Industry Development Strategy. The Department of Defence reports that the program has delivered “over \$1.9 billion of contracts to more than 250 suppliers.” ¹⁴¹
Global Expansion Program State of South Australia	The Global Expansion Program provides grants of up to \$50,000 to support South Australian businesses in a range of priority sectors, including Defence and space, to build export capability.
Australian Defence Export Office (ADEO)	ADEO promotes and assists Australian Defence businesses in securing international Defence contracts and supporting exports of Defence-related goods and services.
Next Generation Technologies Fund (NGTF)	NGTF supports research and development in emerging technologies that are crucial to Australia’s future Defence needs.
Defence Industry Security Program (DISP)	DISP provides a framework to help companies understand and meet the security requirements for working with the Australian Defence industry.
Defence Industry Capability (DIC) Programs	DIC Programs provide targeted support to businesses looking to build expertise or expand their operations within the Defence sector.
SME Gateway	SME Gateway is an initiative to link government and industry by providing government buyers with a single point contact through which to access thousands of small businesses throughout Australia. Their goal is to deliver sovereign capability across the nation by being an engaging, innovative SME which grows SME impact across government and industry ¹⁴² .

¹³⁹ Department of Defence, Australian Industry Capability Program, Canberra <<https://www.Defence.gov.au/business-industry/industry-capability-programs/australian-industry-capability-program>> (accessed 16 November 2024)

¹⁴⁰ Department of Defence, Global Supply Chain Program, Canberra < <https://www.Defence.gov.au/business-industry/industry-capability-programs/global-supply-chain-program>> (accessed 16 November 2024)

¹⁴¹ Department of Defence, Global Supply Chain Program, Canberra < <https://www.Defence.gov.au/business-industry/industry-capability-programs/global-supply-chain-program>> (accessed 16 November 2024)

¹⁴² SME Gateway, <www.smegateway.com.au/>

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