

29 October 2022

Prof the Hon Stephen Smith; and
Air Chief Marshal Sir Angus Houston AK, AFC (Ret'd)
Defence Strategic Review Team

E: strategic.review@defence.gov.au

Dear Sirs

Thank you for the opportunity to meet with you on 14th September and the invitation for the Defence Teaming Centre (**DTC**) to provide input to the Strategic Review. Enclosed for your consideration is a summary of the points we discussed, including additional points raised by our members.

Based in South Australia, the DTC is a not-for-loss industry association connecting, developing and advocating for Australia's defence industry. Our organisation has 280 member companies spanning small to medium sized businesses, defence primes and academia across Australia. Our organisation is the only defence industry association developing and supporting industry to grow to fill the void of medium-sized businesses noticeably lacking from Australia's defence industry sector. Since our inception 26 years ago, our ethos has focused on creating an ecosystem for Australian industry that supports collaboration and growth through teaming.

The enclosed report summarises written submissions provided by member companies and feedback gathered through targeted interviews with member primes, SMEs and researchers. The report can be summarised into five recommendations:

1. Grow sovereign industrial capability;
2. Increase Australia's skilled workforce;
3. Improve the efficiency of Defence's contracting and procurement processes;
4. Improve the reliability and integration of ICT; and
5. Law reform that prioritises industry's support to Defence during war.

I would be grateful if you would please consider the submissions contained within the report and contact me should you have any questions.

Yours sincerely



Audra McCarthy
Chief Executive Officer

DTC Member Submission

Defence Strategic Review 2022

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Executive Summary

This report summarises the issues which are impacting DTC members' ability to support Defence preparedness efficiently and effectively in a rapidly changing strategic environment. It highlights areas requiring policy reform, necessary legislative changes and the additional investment required to support industry's ability to fulfil its role as a Fundamental Input to Capability (**FIC**) for Defence.

Since 2016, Defence industry policy has focused on maximising the Australian industry's involvement in defence procurement following the announcement of industry as a FIC. However, unlike Defence's other FICs, industry's role and capacity to support Defence during times of a higher state of readiness, or, during deployment has never been tested or modelled. By contrast, Defence regularly tests the preparedness of its uniformed personnel and assets through formal exercises.

The closest Australian industry has come to being tested is during the sudden economic lockdowns created by COVID-19 in 2020 & 2021. During this period the DTC observed the following:

1. Defence and Government had no data or visibility of tiers two and three of its supply chains to quantify how sudden changes to legislation would impact industry's ability to deliver defence capability to the Australian war fighter.
2. Legislation changes made at both the State and Federal level did not account for the critical role of defence industry, disrupting production schedules and work practices until defence industry exemptions could be negotiated.
3. Australia's exposure to foreign sourced supplies in the production and sustainment of defence capability had not been previously considered.
4. How defence industry's ability to deliver defence capability would be impacted by disruptions to Australia's freight lines.

This report explores the challenges faced by industry including timely decision making, broadly defined Sovereign Industrial Capability Priorities (**SICPs**), data security and legislation required to support industry's role as a fundamental input to capability during times of conflict or operations.

The DTC's recommendations, following consultation with its members, can be summarised as:

1. Grow sovereign industrial capability;
2. Increase Australia's skilled workforce;
3. Improve the efficiency of Defence's contracting and procurement processes;
4. Improve the reliability and integration of ICT; and
5. Law reform that prioritises industry's support to Defence during war.

Sovereign Industry

Sovereign Industrial Capability Priorities

The intent of the Sovereign Industrial Capability Priorities to encourage greater investment by industry into technologies and capabilities valued by Defence has not been met.

First, the current priority areas are too high-level and loosely defined. As a result, such ambiguity creates uncertainty which means almost anything can be posited as a sovereign industrial capability. This consequently creates a perception by industry that everything must be manufactured in Australia for sovereignty reasons. This is incorrect; economically, it is not feasible for Australia to manufacture everything. The investment needed to establish the industrial capability in the time frames required by Defence is prohibitively expensive and Defence budgets cannot afford this. Australia must decide on the key technologies, products and capabilities that are required to give Australia the regional superiority needed to defend Australia and protect its national interests.

Secondly, establishing a sovereign industrial capability requires ongoing, consistent investment and development. SICP grants are valuable in offsetting the capital costs associated with investing in technology to meet the needs of Defence. However, the return on investment to the Australian taxpayer is nil when Defence does not procure from the Australian businesses or promote and grow these businesses on the global stage.

An example of where the SICPs have proven ineffective involves DTC member PMB Defence (**PMB**). Australian owned, PMB are the sole manufacturers of the batteries needed for the Collins Class submarine.¹ This specialist capability falls into two SICPS – Collins class submarine maintenance and technology upgrade; and the Continuous Shipbuilding Program (including rolling submarine acquisition). PMB are the only submarine battery manufacturer in Australia and can demonstrate significant investment into R&D to improve battery performance and reliability for Australia's Collins Class submarine.

In 2017, the opportunity arose for the design of a battery system for Australia's Future Submarine Program. Overseas suppliers, Exide GmbH and Systems Sunlight Systems were granted the opportunity to compete against PMB for this lucrative opportunity. Our understanding is that Naval Group saw this as a very clear dis-endorsement of PMB, since in France the local partner option would be sole-sourced. This is the perfect example where Defence should have ideally formed a partnership with PMB, as a SICP, to collaboratively design and deliver the best capability for Australia. In turn, Government would have continued to grow a sovereign capability through direct investment into an Australian owned and operated entity. At the time that the Future Submarine program was cancelled PMB had new technology development contracts with both Sweden and the UK as well as submarine battery supply contracts with countries including Canada, the UK and Sweden. This Australian business has overseas

¹ For further information about PMB Defence, please refer to their website: <https://pmbdefence.com.au/>

defence departments reaching out requesting their expertise, however it cannot get the same collaboration or recognition from Australia.

Australia must grow a sovereign industrial capability in key areas where we know Australia can be true world leaders. To do this, Defence must be prepared to trust and partner with its industry to deliver the required outcomes. Purchase orders deliver ongoing economic benefits to Australian taxpayers where grants deliver a once off benefit, or in some cases, no benefit. This means in some instances, sole source procurements will be necessary to support the growth of our sovereign industrial capabilities.

Australia must remove its dependency upon overseas countries for capability like the US and UK and invest and grow capabilities where disruptions to freight lines and supply chains would expose the safety of Australians. In some cases this may require a cost premium which would be regarded by the Australian National Audit Office (**ANAO**) as not representing value for money. Therefore the ANAO's audit scope should include an assessment on how the Government's procurements contribute to the defence and security of Australians through the investment into sovereign capabilities, instead of focusing on whether a cheaper alternative was available at the time.²

Australia's Industrial Landscape

Australia's defence industry landscape is skewed a plethora of small businesses, a few medium sized entities and a few defence primes. The industrial landscape of the defence sector is vast. The DTC has been serving the needs of defence industry for over 26 years. Eighty percent of the DTC's membership are SMEs employing less than 50 full-time equivalents (**FTE**). Twenty-three percent of the DTC's SMEs have been successfully operating in the defence sector for over ten years and the DTC regards these businesses as mature defence suppliers, yet defence work constitutes only 10-20% of their turnover. During the troughs of defence budget spending, this reduces to nil.

The skew towards small organisations, which in many cases includes sovereign industrial capabilities, as measured by the SICP grants awarded since 2018, is a risk where rapid scale-up is required. Businesses of this size lack ready-access to capital and expertise necessary to quickly scale-up. Smaller businesses face significant risks entering the defence sector. The required investment into R&D is large, bid costs are high and tender evaluation processes are notoriously long, with some lasting years. Industrial policy therefore needs to change to support existing, mature businesses with capability to grow, whilst providing targeted support to smaller entities to grow into mature defence suppliers. Industrial policies need to focus on building a greater quantity of medium sized businesses (i.e. companies employing more than 200 FTE) to fill the existing void. Defence needs to be supported by a robust industrial base, particularly in those areas deemed to be critical for our sovereign capability.

² Refer Commonwealth of Australia, 2018, *Army's Protected Mobility Vehicle – Light*

Skilled Workforce & Clearances

Despite Australia facing a skilled workforce crisis, DTC members are unable to put the right people in the right job at the right time for two reasons.

The first relates to timely access to the Skilling Australia's Defence Industry (**SADI**) grant. Applying for SADI grants is unnecessarily complex and slow. A typical grant application takes 4-6 months and then it requires significant administrative effort by the SME to acquit and complete the grant reporting requirements. Grant applications require the names of employees expected to undertake the training to be identified at the time of submitting the grant application. In the current climate where organisations are experiencing unprecedented staff turnover, SMEs are experiencing excessive administrative overhead to update names on grant applications and grant agreements. On average, members report applications take approximately 3 full days to complete, with reporting activities taking an extra 1 day per report. Furthermore, long wait times for grant approvals means SMEs have been unable to upskill staff as and when required by the business. With grant applications taking typically five months, organisations can be forced to wait up to an additional 10-12 months to execute the training, depending upon course delivery and enrolment cut-off dates for university courses.

Industry associations like the DTC are best placed to identify and respond to the training needs of members. However, for the same reasons identified above, even industry associations, despite their integral ability to understand the needs of industry and the nuances of grant processes, are unable to access grant funds efficiently and effectively. Industry associations need greater scope to submit grant applications without having to identify the actual names of businesses forecast to attend the training. A more effective approach would be to share the risk of grant reporting and execution with the applicant, with 50% of the grant payable upon application approval, and the balance payable when the grant is acquitted, and the industry association can demonstrate the training was delivered to businesses who meet the grant criteria.

The second reason SMEs are struggling to attract, retain and develop the necessary workforce is due to security clearances. Whilst improvements in processing times for security clearances have been realised, the timeframes are too slow and do not meet the agile and responsive needs of industry operating in a fast-paced environment. Security clearances for NV 1 on average are reported to take three months. For many businesses, this means three months of paid salaries for staff underutilised and not creating a return. Some companies will delay the commencement of staff until the security clearance has been gained. In the few months it takes to process the security clearance good candidates are offered alternative positions in other sectors not requiring clearances, enabling candidates to commence earning salaries sooner. DTC members are forecasting continued growth in the demand for security clearances and it's not clear AGSVA are appropriately resourced to meet this demand.

Access to timely security clearance processing is complicated in the case of skilled migrants. A key criterion for security clearances in Australia is Australian citizenship. Citizenship can take months, if not years to be approved and in the defence sector, this wait-time is almost crippling to industry's ability to

deliver to Defence. Fast-tracking citizenship applications for defence is rare, yet it happens regularly in the sport sector where Australia identifies an elite athlete that will promote Australia's chances of winning in elite competitions like world cricket, boxing, Olympics or Commonwealth Games. In these instances, applications have been known to be processed within a few weeks. A similar methodology should, where appropriate, apply to skilled defence industry migrants.

Defence Procurement

The speed at which Defence procures, including the decision timeframes to support procurements, is alarmingly slow.

Australia's submarine program and Land 400 Phase 3 are excellent examples. Industry are carrying significant investments in skilled workers, facilities and equipment to deliver these programs and establish a sovereign industrial capability, however delays in decision-making means investments are sitting idle and SMEs especially are burning valuable working capital.

Defence Contracting

DTC members report notoriously long and frustrating processes associated with Defence procurement. When compared with procurements in other sectors of equal value, especially those in the mining or oil and gas sectors; members highlight the timeframes in Defence are typically two to three times longer. Members also advise that procurement times in Defence are inordinately slow when compared to other Commonwealth departments, which is surprising given most Commonwealth organisations must adhere to the same Commonwealth Procurement Rules (CPRs).

In 2015, the Commonwealth's total number of contracts for that year was 51,264 of which 27% were issued by Defence.³ The second highest department was the Attorney-General's department with 7%. In the 2020-21 financial year the Department of Finance reported the Commonwealth issued 84,054 contracts worth \$69.8bn, of which \$37.34bn were issued by Defence. Defence is the leading department in issuing Commonwealth contracts highlighting the need for this to be an efficient and effective process by industry standards. If mobilisation was to occur, rapid procurement and acquisition decisions would need to be made and using current performance as a guide, it is reasonable to assume the existing systems and processes do not support the scale of mobilisation required without any compromise to governance or quality.

Identified root causes for delays in procurement and contracting include:

- i. The availability and ability of staff, including delegates, to execute and progress the procurement in the shortest time possible. There are no measurable KPIs to track and monitor performance.

³ Commonwealth of Australia, 2015, Indigenous Procurement Policy

- ii. A shortage of skilled staff with the required knowledge and experience in contracting to effectively execute procurements and contracts.
- iii. A shortage of commercially astute staff, or staff with breadth and depth of commercial contracting experience, who can successfully negotiate and execute contracts in a timely manner. There are no KPIs to track and monitor the time taken to complete contract negotiations and sign and execute a contract.
- iv. A reluctance to apply CPR exemptions and execute sole-source procurements.
- v. A lack of market knowledge by Defence to appropriately determine whether adequate Australian industry capability exists in Australia and issue a limited tender opportunity, resulting in wasted time and resources sending an opportunity to market with limited suppliers and inviting international suppliers to compete.
- vi. The Smart Buyer framework has not realised its intended objectives. Consequently, Defence gold plates requirements beyond its limited budget. Improving industry consultation to collate requirements that better utilise leading technologies, research and industry's capabilities, will produce tenders that better meet Defence's needs and budget.
- vii. Modern day business practices have evolved and the existing ASDEFCON contracting template has not kept abreast of this. Examples include the prevalence of the software as a service business model. This model immediately gives a consumer functionality whilst incentivising the supplier to continually evolve and upgrade its product to deliver enhanced functionality for the consumer. By comparison, ASDEFCON is not agile and does not support updates and upgrades on the go. Instead, delays are experienced at requirements definition state while Defence defines the perfect outcome for the contract.

The CPRs and government legislation do not support the Defence and industry collaboration needed to deliver regionally superior capability in an efficient and effective manner. Whilst industry has been identified as a FIC, the role of business rules and legislation has not been amended to support this.

Improving the efficiency of Defence's procurement processes is needed to support preparedness and mobilisation activities in a timely manner.

Information Communications Technology

Information and communications technology (**ICT**) is a critical capability for Defence and industry. From an industry perspective, ICT is no longer treated as an enabler, but rather a fundamental input supporting successful project outcomes and superior capability for Defence.

Integration of ICT into Capability Delivery

DTC members are reporting instances where capability functionality has been restricted because Defence's networks and information environments cannot handle the leading and advanced technologies being offered by industry. Members also report how the incorporation of leading-edge technology to advance R&D projects is restricted because timely and suitable engagement with the Chief Information Officer Group cannot be achieved.

Industry needs access to and visibility of Defence's networks to create a synergy that delivers regionally superior solutions. However, delays in successfully engaging CIO Group to inform requirements definition and delays accessing Defence's networks restrict industry's ability to deliver projects on-time and to budget.

ICT can no longer be treated as a separate entity in today's technologically advanced environment, but rather must be considered at every step of project delivery. It is also at the heart of capability upkeep, update and upgrade requirements highlighting the need for CIO Group to have a much closer relationship with the end-user and CIO Group to have a more integrated approach with capability delivery.

Data Centres

Some commentators have suggested that the future operating visions of the ADF and its allies are predicated in large on being able to realise a next-generation form of command and control, of which cloud and edge computing are a necessary component.⁴

CIO Group has already set out in its Information and Communication Strategy Defence's aspiration to create a Single Information Environment (**SIE 2.0**). The stated challenge is to set the posture of the SIE to be *"secure, resilient, survivable and scalable – increasing access to information when it is needed, whilst reducing vulnerabilities to threats that can impact decision making"*.⁵

To achieve these goals, Defence will need to establish in the estate and infrastructure domains new edge and remote computing architecture to better collect and process source data where and when it is needed.

Much of the data centre fabric used by Defence and the Commonwealth today is concentrated on the East Coast of Australia and therefore uses a small set of common power grids. Industry today is already

⁴ Defence Connect, 2 September 2022, William Leben

⁵ Ready to Fight and Win in the Digital Age – 2022 Defence Information Communications Technology Strategy, p12

investing and building data centre capability in edge locations such as Adelaide, Darwin, Perth and regional centres on power grids diverse to those commonly used on the East Coast and Capital Region.

To achieve resilience and survivability of ICT platforms Defence industry and Defence need geographically diversified data centres which are powered by separate grids to provide uninterrupted service delivery should a catastrophic event happen to Australia's East Coast power.

In setting priorities, the opportunity exists for Defence to partner with the data centre industry to secure suitable resilient and diverse data centre fabric by 2023 / 2024 well ahead of the of the timelines that are achievable under traditional Defence procurement methods (such as those that involve capital works in the Parliamentary Standing Committee on Public Works setting).

These facilities lie at the heart of all information communications technologies capability and defence's engagement with industry must also allow for the very long supply lead times and specialist operations capability necessary to provide this mission critical infrastructure.

Preparedness & Mobilisation Implications for Defence Industry

Critical Suppliers

Since being identified as a FIC the role of industry in delivering Defence capability beyond acquisition and sustainment during normal operations has never been considered nor defined. The *Security of Critical Infrastructure Act 2018 (Cth) (SOCI)* defines Australia's critical infrastructure across various sectors, including defence industry, and prescribes the necessary security requirements. However, this legislation does not consider the role of Australia's critical defence industry supply chains during times of war. This is a critical oversight and should be remedied.

Plainly, Defence needs to identify its Critical Defence Suppliers. This is not to be confused with sovereign industrial capability priority.

The Australian Government defines Critical Infrastructure as:

*'those physical facilities, supply chains, information technologies and communication networks, which if destroyed, degraded or rendered unavailable for an extended period, would significantly impact the social or economic wellbeing of the nation, or affect Australia's ability to conduct national defence and ensure national security.'*⁶

The legislation's focus is on how the destruction or loss of such assets will impact Australia. It does not refer to the critical role these suppliers perform in the defence of Australia.

⁶ Revised Explanatory Memorandum, Security Legislation Amendment (Critical Infrastructure) Bill 2021.

Defence defines a sovereign capability priority as:

“Sovereign Industrial Capability Priorities are capabilities that are critical to Defence and must be developed or supported by Australian industry. This means Australia must have access to, or control over the skills, technology, intellectual property, financial resources and infrastructure that underpin the Priorities.”⁷

This describes in general terms Australia’s industrial capability but does not define the actual supplier and their role in the support of Australian operations.

By contrast, the DTC proposes a Critical Defence Supplier should be defined statutorily as:

an organisation delivering a product or service to Defence or Defence supply chain where the failure to deliver the product or service will have a detrimental impact on the delivery of Defence capability, putting lives of Australian war fighters and Australia’s Defence at risk.

The proposed definition, or a variation thereof, provides much needed clarity where, alarmingly, there currently is none. It would provide legislative and regulatory certainty to industry about the nature of suppliers, their roles and expectations.

Role & Needs of Critical Suppliers

During periods of advanced preparedness or mobilisation Critical Defence Suppliers require the following:

- i. Safety protection mechanisms, remuneration and deployment procedures to support the deployment of civilians employed by Critical Defence Suppliers to repair and overhaul capability in conflict zones.
- ii. The state of preparedness, including response and deployment times expected from Critical Defence Suppliers to support capability in conflict zones.
- iii. Definition of any enhanced (if required) physical and personnel security requirements expected of Critical Defence Suppliers to guarantee supply chain performance.
- iv. Communications plan for Critical Defence Suppliers that identifies how, when and what channels/technology will be used to communicate with Critical Defence Suppliers.

The *Defence Act 1903* (Cth) will need to be amended to consider the following:

- i. Identifying who has the power to designate a Critical Defence Supplier.
- ii. Amending section 60 to clarify whether the workforce of Critical Defence Suppliers is exempted from conscription in times of war.⁸

⁷ Sovereign Industrial Capability Priority Fact Sheet, Commonwealth of Australia

⁸ *Defence Act 1903* (Cth) s 60 and associated regulations.

- iii. Emergency initiatives to support the re-deployment of staff to support Critical Defence Suppliers.
- iv. Should fuel be rationed, the application of exemptions to Critical Defence Suppliers and supporting logistics function to support uninterrupted production and delivery of defence supplies.
- v. Special powers of Defence in relation to modern transport means such as civilian aircraft to convey essential personnel and defence goods and services. Existing legislation only refers to traditional transport methods such as road and rail.

Recommendations

1. Grow sovereign industrial capability.

- a. Refine and prioritise the SICPs. Opportunities for the supply of goods or services that meet the definition of a SICP must not be offered to market via open tender, but rather be procured via sole source or limited tender offered to Australian owned and operated companies only.
- b. Establish industrial policy to incentivise and support small businesses to grow and build more businesses employing more than 200 FTE.

2. Increase Australia's skilled workforce.

- a. Add flexibility to the SADI grant application process to accommodate industry's need to swap and change employees out as needed.
- b. Simplify the grant application and acquittal process to reduce the administrative burden to SMEs and Industry Associations.
- c. Give Industry Associations greater flexibility to leverage from a SADI grant to facilitate the delivery of group training to members.
- d. Establish business rules with Dept of Home Affairs for priority citizenship processing where citizenship is being sought to support a security clearance application for the defence sector.
- e. Negotiate improved security clearance processing times with AGSVA to support a forecast expedited defence acquisition and sustainment program.

3. Improve the efficiency of Defence's contracting and procurement processes by:

- a. Modernising ASDEFCON to align with modern day business practices.
- b. Review the suitability of CPRs to meet the flexibility and speed needed by Defence. Defence needs greater flexibility to make sole-source decisions to procure from Australian suppliers to support the growth and resilience of sovereign industrial capabilities.
- c. Improving the professionalisation of contracting and procurement skills across Defence to build greater commercial awareness and expertise.

4. Improve the reliability and integration of ICT:

- a. Improve the integration of CIO Group into capability requirements setting and capability delivery to support the timely realisation of technology and industry's ability to deliver projects on-time and to budget.
- b. Establish diverse data centre capacity on separate power grids to provide data surety for defence projects.

5. Establish laws to prioritise industry's support to Defence during war:

- a. Establish a definition for "Critical Defence Suppliers" and establish policies for how these suppliers will be treated and managed under the *Defence Act 1903*.