DILP 2021 Concept Paper

In order to ensure the success of the ninth Fundamental Input to Capability (industry) without mandating percentage of final contract value being spent in Australia, how can the Department of Defence more clearly articulate measures of success in Australian Industry Capability?

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Executive Summary

One of the primaries aims of the Australian Industry Capability program is to grow Australian businesses that are a part of the Defence Industry. It is our summation that the current measure of success with this regard, mandating percentage of final contract spend value being spent in Australia doesn't actually meet this aim and therefore it would be preferable to use a range of measures to ensure this.

To address multiple issues, our final recommendation was:

Continue to use % of final contract spend value as one requirement in contracts tendered

However, to also add:

- The Number of contracts awarded as a measure of success for Defence
- The number of FTEs employed by Defence Industry organizations within Australia working on Defence contracts to show growth in organizations and increased capacity
- Measure teaming to strengthen the industry to ensure organizations work together to become stronger than their individual parts.

By doing these four parts of the pizza model, the Department of Defence can assist in growing the Industry as a whole, which will lead to great sovereign capability and secure better outcomes for our service personnel.

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Disclaimer

The contents of this report are the opinions and conclusions of the authors and do not necessarily represent the views of the author's organisations, the contributors, the contributors' organisations, the South Australian Defence Industry Program (SADILP) or the Defence Teaming Centre (DTC).

To inform this Concept Paper, our team engaged with the industry and government through a series of unstructured interviews and general discussions.

We would like to express our gratitude to all individuals who gave up their time to support the development of our concept paper, who spoke to us on the condition of anonymity

Introduction (By Hilary Schubert-Jones)

Over 97% of Australian businesses can be classified as small (0-19 employees), with 2.4% of businesses are medium-sized (20-199 employees)^[1]. Reflecting this pattern, Australian Defence Industry consists of large global primes, sub-primes, a small core of medium-sized businesses, and a strong section of smaller companies (<25 employees), which has created an industry structure with few companies in the middle tier. As our team consisted of two members from SMEs and one from the Department of Defence, we approached this concept paper mainly from the point of view of SME organizations and the issues most relevant to those.

Approach

To tackle this issue, we utilized the following methodologies:

- A literature survey using Government documentation including policies, white papers, guidance documents and other documentation; Senate estimates transcripts; previous SADILP concept papers; and publicly published media articles.
- Interviews with subject matter experts, predominantly from SMEs and relevant Department of Defence CASG teams, but also representation of the Prime perspective.
- Discussion and debate within the group.

What is AIC?

AIC is a method of bringing Government, Primes, and Australian Industry together to build up the sovereign industrial base necessary to meet current and future Defence capability requirements^[2]. Throughout our research however we continually returned to the concept that building Australian Capability should not come at the risk to our service personnel. As noted by Brent Clark (AIDN CEO)

"A nation that does not have access to sufficient scientific and technological smarts in industry to keep pace with these modifications, is a nation that is willing to place its service men and women in grave risk. AIDN cannot accept that Australia is willing to treat its brave service people this way" [3]

The overarching structure put in place by the government to ensure that Australia can create a sovereign capability is captured within the '5 Pillars approach' to support Defence industry quoted directly from the Minister for Defence Industry Melissa Price (Price 2020):

- 1. A new and enhanced Australian Industry Capability contractual framework
- 2. An independent AIC Plan Audit Program.
- 3. Commonwealth Procurement Rules (CPR) guidelines update.
- 4. Centre for Defence Industry Capability (CDIC) Review and its implementation; and
- 5. Australian Standard for Defence Contracting (ASDEFCON) Review.

The '5 pillars' approach is intended to drive reforms through the Defence industry and support Government bodies to focus and improve effectiveness in ensuring sovereign capability goals are achieved. [4]

AIC Objectives

The objectives of the AIC Program are to enhance Australian Defence capability through:

- Encouraging investment in Australia,
- Providing opportunities for Australian companies to participate in Defence Programs within Australia and overseas,
- Encouraging Primes to support Australian industry and invest in increasing Australian capability, and
- Supporting technological transfer and advancement within Australian industry.

One of the key objectives therefore of AIC is to support and grow Australian SMEs as it is believed this will bring many opportunities to innovate and introduce new capability into Australian businesses as a by-product of supplying Defence.

How AIC is currently measured

In the main and for the purposes of this concept paper, a measure of success for a contract subject to AIC policy would be the contract awardee meeting their tendered claim of % spend within Australia. However, this poses several issues. Firstly, the Commonwealth Procurement Guidelines states "AIC deeds formalize the expectation that international primes will market-test and engage Australian industry where cost-effective. Owing to the requirement to achieve value-for-money under the AIC Program, any determination that an AIC deed is required for a particular procurement is to be underpinned by a business case" [5]

It's the term 'cost-effective' that is contentious, with the term meaning different things to a SME to a Prime to Defence itself. Something so subjective is not helpful.

Secondly, as AIC only covers the overall large-scale contract, then SMEs are included only as a whim of a Prime (often foreign owned), or to reach their contractual % AIC target. It doesn't empower SMEs themselves to grow or continue to be successful at their own size, so it doesn't actually grow Australian capability only content. As stated earlier, with around 98% of all Australian businesses being SMEs, this doesn't help grow Australian Industry all that much, as they are beholden to others rather than masters of their own contracting with Defence. SME's have barriers to entry with certification processes being long and arduous, and without the overall cash flow to support the 3–5-year process in some cases, they cannot compete.

Finally, we also found that using % spend does not necessarily reflect a true \$ amount spent on Australian businesses or innovation, as many shell companies are set up to take advantage of this requirement, but this fails to 'trickle down' in the way that trickle-down economics rarely does.

Alternative Measures (By Hugh Bila)

Introduction

There are several avenues besides evaluating a percentage of final contract spend to measure success of capability within Australia. Most importantly a percentage of spend is not a recommended metric to incentivise industry growth and capability. We only must look as far as the recent abandonment of the \$90 billion contract between the Department of Defence and Naval Group. It was suggested that a contributing factor to expenditure overblow was driven by the ambitious goal of working towards 60% Industry Capability for the Future Submarines.

In essence such a lofty goal was never going to be possible within the specified budget and therefore lessons must be learned, and more sustainable measures of success must be articulated for future programs. Organisations need to tie these outcomes to an AIC imperative that provides a compelling reason as to why organisation need to invest time, energy, and funds into what they may (on the surface be seen as not being strategically and financially attainable).

A Redundant Question

In simple terms, if success of industry was merely based on a single metric being a percentage of a contract spend then a suggestion could be made that Australia is setting itself up for failure. It would be naïve to assume a single metric constitutes the success of the defence industry. Therefore, there is no question that alternative methods than a percentage of spend need to be evaluated and measured if we are serious about increasing industry as a capability. Several alternative measures will be suggested to provide a guidance on how to better articulate industry growth from the proposed percentage of spend.

The Current State

Before we explore the alternative measures, we need to best understand the current state which heavily focuses on measuring dollars spent. Whilst this is certainly necessary to evaluate the percentage of a contract spend it is limited in measuring capability. Measuring spend is a nonnegotiable for Defence as it is a link between an effective supply chain and investment programs funnelled down to SME's. Defence wants to see that there is substantial jobs and economic activity. For example, Thales believe there is strong support evidence in support of the Government's policy of requiring high levels of Australian Industry Capability (AIC) in its acquisition and sustainment programs. There is a strong correlation between Sovereign Industry Capability and the greatest benefit flowing to Australian suppliers. They believe this is where the greatest benefit accrues^[i]. Thales have been successful in working within the % of spend with over 60% alone going to Small and Medium sized enterprises.

The metrics presented by Thales show that costs are flowing down the supply chain, an assumption can be made that by hitting their mandated percentage that capability is being increased through dollars invested in industry. Undoubtably this measure needs to remain as key metric to measure capability. However, we need to expand our horizons and apply several other measures which will give a better indicator than a percentage of spend.

Number of contracts

Measuring the number of contracts between industry and defence is an obvious metric that could be easily put in place, measured, and implemented to a point that would provide an overview of industry growth. This measure assumes that has the number of contracts increases as does capability. It assumes that contracts as a whole result in collaboration, knowledge sharing and industry development. It is important to note that contracts being used a measure must provide value, enhance capability and are not over burden with paperwork. Perhaps the greatest advantage of measuring contracts as a measure of success is that it is very easy to measure. Surveying at regular intervals should give a straight-forward metric if the number of contracts is increasing as is industry capability.

FTEs Engaged

An appropriately skilled and qualified workforce is vital to deliver the Australian Government's significant investment in defence capability. That is why the Government is investing \$87 million in funding (to the end of FY2021-22) into the Defence Industry Skills Flexible Funding Pool to deliver new and existing initiatives to help industry Engage, Attract, Train and Retain a capable STEM workforce^[iii]. An assumption can be made that capability grows as more Australians contribute directly and indirectly to defence projects.

Therefore, it would be wise to include measures that account for the thousands of Australians working across the country on defence projects and industry that are not in the Defence Force. It is a straightforward assumption that if there is job growth in industry than capability is naturally increasing.

Like all measures, this too has its limitations. For example, it can be difficult to assess how many FTEs are purely dedicated to defence projects. One SME surveyed noted that defense equates to only 15% of gross sales, resources in this organisation can be contributing to multiple projects at any one time. Therefore, it can be difficult to gauge exactly how many are directly contributing at any one time. Another limitation is that reporting can be quite static and does not change regularly.

In summary, if managed correctly with a clear baseline or sample pool of organisations contributing to regular surveys, measuring FTEs contributing to industry can be a useful alternative measure.

Teaming Outcomes

Perhaps the greatest step in creating sustainable sovereign capability is assessing the number of teaming outcomes which would factor in instanced of industry collaboration, joint ventures and partnering. One company cannot do as much as three companies that have combined their unique skillsets to boost their capability and become more appealing. This collaboration focuses on unifying the strengths of multiple organisations to position teams as a partner of choice.

There are plenty of examples of organisations joining forces of late including Adelaide's own Shoal Group and Lockheed Martin for the JP9102 program which will see the delivery of the next-generation military satellite communications (MILSATCOM) system. Another example is the potential collaboration between Hanwha Defense Australia and Elphinstone Pty Ltd for the LAND 400 Phase 3 Program should Hanwa be successful. If the Hanwha-Elphinstone bid was successful, Elphinstone would manufacture vehicle hulls in Tasmania and the vehicles would be assembled in Geelong.

Both are just some examples of how teaming can delivery delivers unparalleled coverage, capacity, and resilience, but also extensibility to meet Defence's unique strategic and capability requirements. From speaking to several SME's one of the common themes was that this has not been done well to date. However, this is an opportunity with those willing to grasp the opportunity will leave competition in the dust becoming more appealing when being down selected for projects and programs.

In summary, more teaming outcomes the better signs of industry collaboration. Like the other alternative measures this is not perfect however can be a useful tool when applied along with other measures. The key for success lies in the fact that measures would need to be put in place to assess its success and these could focus on instances of industry partnerships, joint ventures, and skill collaboration. Another potential measure could be the number of industry partners engaged or export opportunities realised. The answer lies in a comment from one of our interviewers "collaboration not competition be the key to success".

Recommendations (By Darren Smith)

As outlined above, there are a number of opinions as to what an effective measure for ensuring development of AIC in defence projects. The ultimate measure can be subjective, based on the specifics of a project, the desired outcome of a project, and the risk of not having sovereign capability.

Some examples of measures could be:

- Design Ownership: Is having the ownership of a design the ultimate measure of AIC? Should the outcome of an engagement to build ships be that the design is done and owned by Australian sovereign entities?
- Technical Sovereignty: There are a number of examples form history of the importance of
 having defence counter measures to your enemies' attacks. If a nation relies on a third party
 for these countermeasures, then in a time of conflict it is possible that small changes to a
 weapon or attack methodology could not be effectively countered. So a measure of success
 may be the ability to alter counter-measures during a time of conflict without outside
 support.
- Monetary / Business Growth: As discussed, the current measures of AIC relate to monetary spend. This is an important part of AIC, but, as we have discussed, there is a multi-faceted approach that is recommended.

This paper has developed an approach which is termed the Pizza Model for AIC.

The Pizza Model allows selection from a number of facets to AIC, discussed above. These four measures are:

- 1. Percentage spend with Australian Businesses
- 2. Number of Contract
- 3. FTE's Engaged
- 4. Teaming Outcomes

The measures are discussed in detail above in this paper.

The key consideration for our approach to increasing and more effectively measuring AIC is that it is a shift to a long term solution and a long term capability building effort. The timeframe needs to be 10 years or 20 years, not a single election cycle, or short term outlook. Our focus as a nation is to build a capability not simply increasing Australian content in defence contracts.

Design of procurement processes should include the four proposed measures as key parts of a project specific AIC measurement tool. Procurement strategies form other industries could be considered. It was noted that in the mining and minerals industry, procurement practices in a remote region are often designed with the local supplier in mind. This means that if the locals need certain payment terms, or certain size of projects, or certain other considerations, then the mining company will adjust procurement strategies for local businesses. This is focused on creating more local capability – which in turn will drive down prices for the mining company by ensuring local employment. The Defence industry, while on a much larger scale, should be considering flexible, adaptable procurement strategies – targeting local capability.

The basic elements of the proposed pizza model approach has already been flagged as an appropriate model for AIC. As evidenced in September 2021, the then Defence Minister Linda Reynolds stated:

"Defence will strengthen the requirements for AIC in Defence contracts through additional contractual and non-contractual measures and will consult with industry on these changes over the coming months,"

The contracting of AIC elements in to the final terms of an engagement will ensure that small businesses are supported and protected as part of a larger project. This will bolster confidence form small business to deploy resources into defence projects – rather than reassigning capability to other more lucrative and better understood industries.

Measurement is a key limitation for ultimate AIC understanding. The scope and degree of measuring success will need to be developed in time as the proposed multi-faceted model of AIC engagement is used and implemented.

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Conclusion

While as we discussed in the above document there are measures for AIC, unfortunately the only true measure for success of sovereign capability building will come at a time of conflict. It is a concept raised by Paul Kennedy in the book Engineers of Victory. Which shows the sovereign capability in times of war and the outcomes for success on the battlefield. While focused on World War 2, this is relevant to our current process for building strong sovereign capability today.

Ultimately, in the theatre of war, we will find if it's successful or not ultimately.

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