



10 July 2023

Senate Foreign Affairs, Defence and Trade Legislation Committee
ATTN: Mr. Sean Turner, A/g Committee Secretary

Submitted electronically via My Parliament and via email fadt.sen@aph.gov.au

Dear Committee,

Thank you for inviting DroneShield to make a submission into committee's inquiry into the performance of the Department of Defence (DoD) in supporting the capability and capacity of Australia's defence industry.

DroneShield is a global leader in Australian-manufactured Counter Unmanned Aerial Systems (C-UAS) solutions deployed worldwide, with a strong presence and partnerships in Australia, the US, and Europe. In Australia, DroneShield has a strong background of partnering with the Australian Government, including the Australian Defense Force (ADF), and industry.

DroneShield strongly welcomes the inquiry. It could not come at a more important time, given geopolitical tensions across the region and the world.

The Defence Strategic Review has highlighted the need for stronger partnerships between the DoD and local industry, and the need for greater clarity and focus for the task ahead, particularly in acquiring urgently needed C-UAS capabilities.

Australia is home to many world-class small and medium defence manufacturers, including DroneShield, and our industry's expertise and technology is in high demand internationally.

Australia's sovereign capability must support our defence industry to enable rapid delivery, reduce supply chain reliance and to grow and retain a competitive advantage over offshore manufacturers.

Strong local manufacturing and defence industries are integral to the future security of our nation, our region and our partners. It will also deliver significant benefits and opportunities across the entire economy and make the most of our highly skilled and educated workforce.

This requires a clear, detailed plan and a timeline to lift the participation of local firms, backed by a tangible Australian Government commitment to drive collaboration with industry.

We look forward to the outcome of this review as we continue to support a stronger industry partnership with the DoD and the Australian Government. We welcome the opportunity to provide additional information in writing or in person as desired by the committee.

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DroneShield's response to the committee's Terms of Reference follows:

a) DoD's support to Australia's defence industry in meeting the current and future needs of the Australian Defence Force;

DroneShield has found the DoD, both Australian Public Service (APS) and ADF personnel, to be generally receptive to engagement. Recently, "star rank" military officers have made time to explore concepts with DroneShield given there is recognition of the overall importance of the need for a substantial C-UAS/counterdrone capability.

Senior Executive Service (SES) level APS staff have been accessible for policy discussions and to help facilitate the export of DroneShield's products with DroneShield seen as an export success story within Australian Defence Industry.

However, DroneShield's engagement has often fallen short of expectations as there is a general lack of clarity as to:

- Who "owns" the C-UAS space within ADF, given its wide-ranging applications.
- Funding options for C-UAS acquisition – either from a dedicated allocation or drawn from numerous related program areas, which would leave a critical capability vulnerable to shortfalls and competing requests.

This is a significant oversight within capability development and without urgent resolution, Australia risks being without a C-UAS acquisition strategy and unprotected from the serious threat posed by UAS.

The conflict in Ukraine has clearly highlighted the role and effect of drones in modern conflict and the requirement to protect people and equipment from such strikes.

In regard to the suitability of existing industry support programs:

- CDIC, ODIS and Defence Innovation Hub (DIH): even though DroneShield has benefited from a DIH grant (out of approximately 5 full applications we submitted to DIH), we believe the mistake in DIH's philosophy was not understanding that their job is to support the broader industry, and instead trying to pick top 1% of applications, in what was a very non-transparent process (advised by KPMG, from what we understand). Instead, a setup similar to US Government's SBIR programs is likely to be more successful at a general uplift of Australian defence industry's capability. The value-add of CDIC and ODIS is unclear.
- Grants – generally, we believe it's giving work orders, rather than grants, that makes for a thriving local industry. Outside of Defence, DroneShield has benefited from R&D Tax Incentive from the Federal Government, and to a much lesser extent (due to lesser pool of funding). Export Market Development Program (EMDG).
- Structured industry engagement: US is exceptionally good at organizing "field day demos" inviting broader industry to attend and trial their products for specific applications, followed by direct engagement by participating Government agencies with well-performing participants. Most of DroneShield's US business has come through this avenue.
- Team defence Australia (TDA) events: this has been great for building export markets, and DroneShield participates in about 5-10 TDA events every year. The advice here is to cut out TDA events at small/insignificant markets in terms of size of export



opportunities (such as Malaysia), and double down on events in larger markets (such as US and UK).

- Australian Defence Exports Office (ADEO): it is somewhat unclear as to their utility for defence export SMEs. DroneShield has been on ADEO's Defence Sales Catalogue for several years now, which has not led enquiries, and we are not familiar with anyone else to find the Catalogue contribute to sales.
- Australian Industry Capability (AIC) Program – we understand this has been helpful for “dumb” side of the manufacturing (metal sheet work, cables, etc), however not successful at Defence Primes using high IP suppliers (such as DroneShield) with relevant technology transfers if required. Our suggestion is to insist on AIC in high-tech/high IP areas, both across build and sustainment.

b) DoD's role providing and supporting opportunities for adjacent industries to contribute to the sustainability and viability of Australia's defence industrial capability;

As widely acknowledged, a thriving local defence industry is critical to our nation's wellbeing and for DoD to be able to deliver the best defence solutions. Creating a viable local industry takes time and requires continuous nurturing.

Without well-planned, ongoing procurements our industry is forced to shift focus to either overseas orders and priorities, or into completely different sectors not aligned to Defence's requirements to remain viable.

The DoD does need solutions in the short term. This need can already be met by world class local manufactures who are proven. This includes companies like DroneShield, which delivers high technology, battle-tested, off-the-shelf products, in a cost-effective manner and at meaningful scale.

Private sector funding (for listed entities like DroneShield and privately-held firms) is available to support businesses that perform and deliver.

But without a procurement system that rewards local capability, the industry will struggle to remain viable and that is a challenge for DoD, risking the Australian Government's plan to lift sovereign capability.

Small and medium size private defence firms offer advantages and are generally open to taking development risk. Unlike major programs run by defence primes, where the Commonwealth often ends up taking risk on time and cost overruns, smaller private sector companies are more agile as long as there is a genuine pipeline of committed contracts in delivery and development.

In the US, the US DoD is proud to point out how they bring non-traditional companies into Defence industry. Indeed, the US DoD has successfully brought DroneShield “into the fold” with a number of current and growing contracts with various agencies - however our counterdrone revenues from the Australian DoD are small (even in proportion of Australian vs US defence budgets). We have built a successful business exporting around the world. The only reason we maintain an interest in the Australian Defence market is that we have expert knowledge around the ADF needing our capability, however it appears that no one in Defence can act on it.



c) DoD's work to address the reliance of Australia's defence industry on inputs, be they tangible or intangible, from abroad and key capabilities that could form the basis of targeted exports;

Reliance of defence industry on inputs depends on the specific solutions being offered – some require several layers (e.g., GWEO) and some can potentially be done entirely locally (e.g., cyber work) – with most falling somewhere in-between.

We must aspire, as a nation, to minimise offshoring. It will always be necessary at times. But an over reliance on foreign defence industry primes inevitably hampers local capability. This is because the natural inclination of defence primes is to do lower value work locally (metal bending, fabrication etc.), and to keep “smart” work for their organisations overseas, depriving Australia of the tech and innovation benefits.

A genuine pipeline of properly funded contracts for local firms will help build skills and train a workforce - that will ultimately foster much needed sovereign capability and drive advanced manufacturing and technology.

Further on reliance on inputs from abroad, there are often issues associated with data sharing. For example, if DroneShield would work on the F-35 program, there would be significant hoops just to access the data. We see this in a lot of settings, even in relatively simple situations like utilising Harris radio comms for ADF when we may be linking up with their communications systems. Defence needs to reduce reliance on overseas technologies, neglecting homegrown companies, or at the least make the interface with the overseas tech used by Defence as streamlined as possible, for endorsed Australian industry participants.

Key export capabilities already exist – Australia has a range of world leaders in certain sectors, such as C-AUS (being DroneShield), passive radar, and other key niches. This expertise should be harnessed and leveraged by the government to create a sustainable, cutting-edge local capability.

As an example, DroneShield offers a world leading solution that will address the DoD C-UAS gap though we are yet to be part of any meaningful procurement in Australia. The majority of our revenue flows from US, European, and other governments globally. Domestic procurement helps us and the many firms like grow, build and retain a skills an Australian technology base.

d) DoD's assessment and response to the risks that interruptions to supply chains may present to the ready access to such inputs and the benefits of producing defence industry outputs in Australia;

Australia is a relatively small defence market, and the entire supply chain will likely never be completely self-reliant. For example, even if a firm starts producing batteries locally in Australia, rare earth elements and a number of other key supply chain components are still likely to come from overseas.

Volume and critical mass are essential to underpinning sustainable local supply chains. That's why local procurement as far as possible must be the priority. We believe by fostering local businesses, DOD can help drive a more robust, deeper supply chain over time.



War stocks: in the current uncertain geopolitical environment, it is critical to acquire and hold sufficient strategic supplies across a wide range of equipment and consumables to equip ADF and provide replacement inventory for the used/spent items. This is now clearly seen in Ukraine for ammunition, artillery shells and similar (and the C-UAS equipment, of course).

e) DoD's role in enhancing Australia's defence industrial base by pursuing greater advanced scientific, technological and industrial cooperation through AUKUS and other defence partnerships;

Defence agencies in the US, France and the UK counterparts along others are excellent ambassadors for their industries. Agencies work in tandem with material attaches, embassies and trade promotion agencies. They are pro-active, coordinated and commercial when it comes to promoting their own manufacturers.

To grow our local industry, we must ensure Australia competes and builds on the work of the Australian Defence Export Office. Only by advocating for and promoting our defence manufacturers internationally, can we truly build a sustainable long-term industry here and achieve the target of becoming a leading defence exporter.

What conditions are necessary for Australian Defence industry to participate in larger, international (i.e. US) science and technology efforts that are typically unavailable due to NOFORN rules. Can / should DoD and Government lobby for changes to get us inside the tent?

What should DoD do to make sure that Australian Industry can participate in large scale, offshore platform acquisitions (i.e. Nuclear Submarines).

With US being a key part of our defence strategy, the big barrier is export controls (EAR and ITAR). So what are we doing about this?

State jurisdictions invest significantly in technology, innovation, skills and training and precinct planning. They also carry out significant amounts of trade promotion in key export markets. A more structured, aligned strategy showcasing our industry abroad could see a significant national and state and territory benefit.

Export efforts coordinated by the federal government could be mirrored by a domestic strategy that would see the Australian Government working more closely with states and territories to drive local industry growth with a greater focus on the many small and medium enterprises rather than competing for the few defence primes.

We would encourage all parliamentarians at federal and state level to develop this important conversation with relevant agencies and communities so we can all work together and remain focused.

In addition, ongoing priority should be given to tech transfers that deepen Australian defence industrial base given ever growing geopolitical instability and the national security task we all face. Australia's emerging technologies need to integrate with AUKUS and NATO. Same time, where possible, Australia should acquire own developed products (including high-tech, with technology transfers into the country) as opposed to purchase foreign made kit.



f) DoD's design and implementation of programs and initiatives that seek to improve the Australian defence industry's capability and capacity;

Greater accessibility and engagement with key DoD personnel is fundamental to supporting local defence companies. One important step would be access to a full list of DOD capability managers which is currently not externally available.

DoD needs to choose Australian partners earlier in capability development in order to deepen the relationship and get outcomes faster.

Better matchmaking between industry and the right DoD personnel would be mutually beneficial and highly efficient, lifting shared knowledge and expertise and ultimately supporting fast tracked delivery.

Our defence industry base should be operating at full scope, able to tackle and participate in major procurements and specialist assignments.

Consideration should be given to funding streams outside "super-major" programs, backing a range of smaller, tailored projects driven by local Australian companies. Those who succeed in delivering required capabilities, should then qualify for larger amounts of work as part of an incentivised system that drives local capability.

g) Any other related matters.

Please find attached the Post-DSR Position Paper on C-UAS, that DroneShield has recently put together. In it, we summarise various aspects of this subject.