



3 February 2025

Joint Standing Committee on Foreign Affairs, Defence and Trade  
C/- Committee Secretary  
PO Box 6021  
Parliament House  
Canberra ACT 2600

Dear Members of the Joint Standing Committee on Foreign Affairs, Defence and Trade

**RE: DroneShield Submission to the  
Joint Standing Committee on Foreign Affairs, Defence and Trade  
Inquiry into the Department of Defence Annual Report 2023–24**

Thank you for the opportunity to provide a submission to the inquiry into the Department of Defence Annual Report 2023-24.

This submission addresses the key focus areas of the inquiry with a particular emphasis on counter-drone technologies, given their critical role in modern warfare and national defence. The submission also examines sovereign defence industrial priorities, defence estate security and resilience, AUKUS initiatives, uncrewed and autonomous systems integration, the transformation into an integrated force, and Australia's international defence cooperation and competition.

We commend the Australian Government's ongoing and bi-partisan efforts to enhance national security and resilience, particularly in the face of evolving global challenges.

Australia's defence posture must remain adaptive and resilient to address emerging threats and challenges. Counter-drone technologies represent a critical capability to ensure the security of Australia's defence assets and infrastructure. The initiatives outlined in this submission aim to support Defence's objectives and ensure the nation's security and prosperity.

We appreciate the Committee's attention to these critical issues and look forward to contributing further to this important dialogue.

Yours sincerely

Oleg Vornik  
CEO and Managing Director  
DroneShield

Unclassified



## About DroneShield

DroneShield (ASX:DRO) is an Australian publicly listed company with operations in Australia, the United States (US), LATAM, Europe and the Middle East. DroneShield provides counter-drone solutions that focus on radio frequency sensing, artificial intelligence and machine learning, sensor fusion, electronic warfare, rapid prototyping and military-specification manufacturing.

Headquartered in Pyrmont NSW, 100 per cent of our manufacturing is done in Australia. We have a robust Australian supply chain with our products reaching around 85 per cent of Australian Industry Content.

Our capabilities are used to protect military, government, law enforcement, critical infrastructure, commercial and high value personnel throughout the world.

Through our team of engineers, we offer customers bespoke solutions and off-the-shelf products designed to suit a variety of terrestrial, maritime or airborne platforms.

## Sovereign Defence Industrial Priorities

A robust sovereign defence industry is indispensable for Australia's strategic autonomy and national security. We note the release of the National Defence Strategy and the Defence Industry Development Strategy and note the importance of achieving tangible progress in priority five: the development and integration of autonomous systems; and priority six: the integration and enhancement of battlespace awareness and management systems.

DroneShield note Defence's progress of LAND156 – a major project to develop and implement Counter small-Uncrewed Aerial Systems (CUAS) and drone detection capabilities in support of deployed Joint Forces and across Defence establishments, which we believe will significantly contribute to priorities five and six of the Sovereign Defence Industrial Priorities.

The proliferation of drone technology poses significant risks, including surveillance, sabotage, and kinetic attacks. Developing a sovereign counter-drone capability to detect and counter hostile drone operations is essential if the ADF is to prevail in modern warfare. The experience in the Israeli/Gaza conflict and the Ukraine-Russia war is testament to the increasing importance of drone and counter drone capabilities.

Australia's strategic autonomy relies on the ability to independently develop, produce, and maintain critical defence technologies. A sovereign counter-drone capability would ensure that Australia can respond rapidly to emerging threats without relying on other countries and international companies that are likely to have competing priorities. The increasing use of drones in both military and civilian contexts—by state and non-state actors—highlights the urgency of establishing a domestic counter-drone industry to mitigate risks such as espionage, targeted attacks on critical infrastructure, and incursions into secure areas.

Moreover, sovereign capability fosters innovation within Australia's defence industrial base, reduces supply chain delays and strengthens resilience, and creates high-skilled jobs. It reduces exposure to geopolitical risks that may disrupt access to imported systems and ensures that sensitive technologies remain under national control. Sovereign solutions also enable better alignment with Australia's unique operational requirements, including environmental conditions and regional security challenges.

**Recommendation:** Defence should establish an enduring partnership with an Australian sovereign counter-drone technology company that ensures that Australia is at the forefront of drone defence and is able to rapidly procure capability when threats arise, without being reliant on other nations.

Unclassified



## Defence Estate, Security, and Resilience

A secure and resilient Defence estate is indispensable for operational effectiveness and national security. We note the increasing importance of ensuring infrastructure survivability and force protection, particularly in light of asymmetric threats and evolving environmental challenges.

The Defence estate must be capable of withstanding emerging threats, including drone-enabled surveillance and attacks. Protecting personnel and assets from drone-based threats is paramount, as drones have become an accessible and potent tool for adversaries.

We are seeing more examples of unauthorised drones accessing Australian and FVEY military bases and assets including:

- Footage uploaded recently to X (formerly Twitter) in December 2024 of a Chinese tourist who landed a First-Person View drone on a Royal Australian Navy surface vessel at Garden Island in Sydney. The footage is understood to be several years old;
- Reports in December 2024 of mystery drone sightings over military bases in New Jersey USA;
- Reports from November 2024 of small drones flying around a cluster of US Air Force (USAF) bases in the UK, including RAF Lakenheath (which operates the F-15E Strike Eagle and F-35A Joint Strike Fighter), RAF Mildenhall (home of the USAF 100<sup>th</sup> Air Refuelling Wing), RAF Feltwell (ISR Squadron), and RAF Fairford (where US bombers are currently deployed);
- Reports from December 2023 of multiple drone incursions at Langley Air Force Base in Virginia (US) – home of the USAF F-22s.

Deploying advanced counter-drone technologies across Defence estates, including radar systems, electronic jamming devices, and kinetic interceptors, is essential to neutralise drone threats in real time. These efforts must be complemented by comprehensive risk assessments to identify vulnerabilities and implement protective measures such as hardened facilities and redundant systems.

DroneShield support Defence's acquisition of counter-small drone capability through major Defence project LAND156, and stands ready to provide mature and proven capability, including for the purposes of Command and Control and fixed site detection and defeat of unauthorised drones.

**Recommendation:** In light of the growing number of instances of unauthorised drones operating over military assets, Defence should place a high priority on deploying counter-drone technologies in the near term across its estates and integrate sustainability measures to enhance resilience and security.

## AUKUS Initiatives

The AUKUS partnership is central to Australia's strategic posture. Progress in Pillar Two capabilities is critical in ensuring that the technologies and infrastructure required to enable Pillar One SSN-AUKUS keep pace.

In this regard, advances in cyber capabilities, AI, quantum technologies, and hypersonics are crucial. Interoperable counter-drone technologies and systems will enhance the protection of tangible AUKUS capabilities, as well as joint operations.

It is crucial that Australian plays its role in developing capability as a partner of AUKUS, and pivots from being a purchaser or importer of capability, to one that is harnessed to grow, develop and manufacture capability for contribution to the AUKUS partnership.

As an Australian company, two thirds of DroneShield's revenue (2024) was from sales to the US. We are proud providers of drone detection and defeat capabilities to the US and United Kingdom military and law enforcement.

Unclassified



**Recommendation:** Strengthen collaboration with AUKUS partners through development of sovereign Australian projects to accelerate capability deployment.

## Uncrewed and Autonomous Systems, AI, and Joint Force Integration

Uncrewed systems and AI will redefine modern warfare, and DroneShield is uniquely positioned to deliver mature and proven solutions in this domain. DroneShield's expertise in AI-driven sensor fusion allows for unparalleled detection, tracking, and defeat of uncrewed aerial systems. This capability is critical to ensuring the effectiveness of the Joint Force and addressing current and emerging threats.

DroneShield's technologies may integrate seamlessly into existing Defence networks, offering scalable and interoperable solutions tailored to Australia's operational requirements. By leveraging advanced machine learning and AI, DroneShield systems provide rapid threat assessment and response, even in complex environments. These capabilities are operationally validated and represent a low-risk, high-impact investment for Defence.

**Recommendation:** Defence should prioritise investment in mature AI-driven sensor fusion capabilities and mature counter-drone solutions as part of its broader strategy for integrating uncrewed and autonomous systems into the Joint Force.

## Progress on Transformation to an Integrated Focused Force

We support Defence's transformation into an integrated force, designed to address Australia's most significant strategic risks.

In addressing key priorities, including securing Australia's northern approaches, strengthening regional partnerships, and enhancing maritime domain awareness, DroneShield support Defence investment in sovereign Australian, mature and proven technologies - where such capabilities are readily available. DroneShield's advanced counter-drone systems are exemplary in this regard, offering tested and effective solutions to safeguard against aerial threats.

Counter-drone systems are a critical component of protecting Australia's economic and strategic interests. These technologies ensure the security of key assets, enhance situational awareness, and enable rapid response capabilities in complex and evolving threat environments.

**Recommendation:** Defence (through Defence Science and Technology Group and the intelligence agencies) should form a partnership with an Australian counter-drone company partnership to create a mechanism for technology development in response to changes in threat, in supporting the transformation into an Integrated Focused Force. This includes prioritising surveillance, rapid response, and counter-drone systems to address evolving threats effectively.

## Australian International Defence Cooperation and Competition

Australia's international defence engagements are pivotal to regional and global security. Deepening defence ties with allied nations is essential to countering shared threats, including drone-based risks. Expanding training programs and joint exercises with regional partners will strengthen collective security.

DroneShield is proud to contribute to Australia's defence export industry, with 100 per cent of its advanced technologies developed and manufactured domestically. Notably, approximately 95 per cent of DroneShield's sales are exports, underscoring the global demand for Australian innovation in counter-drone systems.

Unclassified



Supporting Australian defence exporters strengthens not only Australia's economy but also its strategic influence in key global markets.

We commend Defence's robust export control framework, which ensures alignment with international obligations, regional security, and national interests. However, the current approach to export permit assessments must remain impartial and responsive to the needs of allied nations operating in complex environments. Non-kinetic counter-drone technologies, such as those developed by DroneShield, are pivotal for protecting allied forces and critical infrastructure without escalating conflicts.

**Recommendation:** Defence should actively support Australian defence exporters to enhance strategic influence, promote regional stability, and ensure timely access to essential technologies for allied nations.

Unclassified



## Terms of Reference

### **Inquiry into the Department of Defence Annual Report 2023–24**

The Joint Standing Committee on Foreign Affairs, Defence and Trade will inquire into the Department of Defence Annual Report 2023-24.

The Defence Subcommittee has identified the following primary themes for the inquiry:

1. Sovereign Defence Industrial Priorities
2. Defence Estate, Security and Resilience
3. AUKUS
4. Uncrewed/Autonomous Systems and their integration into the Joint Force
5. Progress on the transformation to an integrated focused force
6. Australian international defence cooperation and competition
7. Other issues as communicated to Defence.