

References

- A. *Drone Security Public Consultation Paper 2026.*
- B. *Aviation White Paper-Towards 2050*

Overview

1. DEWC Services (DEWC) is pleased to provide the below response to Reference A – Drone Security Public Consultation Paper 2026.

Outline

2. It is recommended that Australia adopts a risk-based, mode-agnostic, technology-neutral drone security framework that protects national security, public safety, and critical infrastructure while enabling innovation and maintaining community trust. The right policy balance is therefore not to regulate all drone usage uniformly, but instead to apply graduated controls where risk, sensitivity, and operational consequences justify them.
3. It is envisioned that a future drone security framework should:
 - Distinguish between low-risk recreational/commercial use and high-risk operations near sensitive assets.
 - Harmonise requirements across aerial, maritime, and terrestrial drone usage, while recognising operational differences.
 - Expand electronic identification, remote visibility, and operator accountability.
 - Authorise carefully controlled deployment of detection and counter-drone technologies.
 - Strengthen penalties for malicious misuse while avoiding unnecessary regulatory burden on legitimate users.
4. A future drone security framework should also align with:
 - Civil Aviation Safety Authority (CASA) Civil Aviation Safety Regulations (CASRs)
 - Security of Critical Infrastructure Act 2018
 - Aviation White Paper-Towards 2050
 - Applicable International Standards as required by organisations such as the International Civil Aviation Organisation, the European Union Safety Agency, and the Federal Aviation Administration.

Question 1: Are there specific risks you believe are unique to maritime or land-based drones that should be addressed differently within a national framework?

Maritime Drones

5. Uncrewed maritime vehicles (UMVs) and uncrewed underwater vehicles (UUVs) present a qualitatively distinct threat profile compared to aerial systems. The primary differences stem from operating environment, detectability, and the nature of the assets at risk.
6. Maritime surface drones are difficult to detect using conventional radar calibrated for crewed vessel traffic, and UUVs are effectively invisible to surface-based monitoring. Both can approach critical offshore infrastructure such as oil and gas platforms, undersea cables, port facilities, and desalination plants, with high persistence and minimal acoustic signature. Unlike aerial drones, which are subject to CASA regulation and existing airspace architecture, maritime drones currently operate in a near-regulatory vacuum with respect to security. While the Australian Border Force (ABF) is responsible for maritime surveillance, there is no equivalent of the CASA drone safety framework that extends to UMVs.
7. DEWC recommends that a national drone framework establish maritime-specific threat categories including infrastructure sabotage, harbour access denial, and undersea intelligence gathering. DEWC also recommends that detection and response obligations be developed in partnership with the Australian Maritime Safety Authority (AMSA), the ABF, and relevant port operators.

Land-based Drones

8. Terrestrial drones, including autonomous delivery devices, agricultural vehicles, and industrial inspection robots, introduce risks that are primarily bounded by physical access control and road or rail corridor management rather than airspace rules. Key unique risks include contraband facilitation at correctional perimeters, disruption to automated logistics hubs, and cyber intrusion via connected operational technology (OT) networks.
9. DEWC strongly supports the Government's acknowledgment that land-based drone security should be considered alongside the Automated Vehicle Safety Law under development by the Department of Infrastructure. We recommend explicit legislative coordination to avoid duplicative or contradictory obligations on land-based drone operators.

Question 2: How can a mode-agnostic, technology-neutral framework ensure legitimate commercial and recreational users are not unduly burdened while still mitigating security risks?

10. DEWC supports a mode-agnostic framework in principle, provided it incorporates the following design principles.
11. First, a risk-tiered architecture. Obligations should scale with operational risk, not merely with drone type or mode. A small agricultural drone operating on a remote property presents a fundamentally different risk profile to a maritime drone approaching a port. The framework should define risk tiers based on proximity to sensitive sites, payload capacity, degree of autonomy, and operating environment, instead of imposing flat obligations across all modes.
12. Second, outcomes-based standards. Rather than prescribing specific technologies (which risk becoming outdated), the framework should specify the security outcomes required and allow operators to demonstrate compliance through a range of means. This approach, consistent with Australia's aviation safety model, supports innovation while maintaining standards.

13. Third, a unified compliance interface. A single digital platform, analogous to CASA's existing drone safety apps, should serve as the authoritative source for zone restrictions, registration obligations, and incident reporting across all modes. Fragmented compliance pathways across multiple agencies will generate confusion and impose disproportionate costs on legitimate operators.

14. Fourth, proportionate phase-in periods. New obligations, including registration, Remote ID, and geo-fencing compliance, should be phased in with adequate lead times to allow manufacturers and operators to adapt. The paused Recreational Registration scheme, introduced in mid-2023, demonstrates the cost of implementing requirements without adequate industry readiness.

Question 3: Are there sectors that may face disproportionate impact from an all-modes approach, and how should government address these impacts?

15. DEWC identifies four sectors as warranting particular attention when considering sectors that may face disproportionate impact from an all-modes approach to framework design.

Agriculture and Primary Industries

16. Australian farmers deploy aerial and ground-based drones at scale for precision spraying, crop monitoring, and livestock management, frequently in remote areas with limited connectivity. Requirements for real-time network-based Remote ID will be technically infeasible in many of these locations. The framework must accommodate low-connectivity operational environments through offline or broadcast-mode conspicuity options, and should not mandate network connectivity for agricultural operations below a defined risk threshold.

Emergency Services and Search and Rescue

17. Emergency drone operators, including State Emergency Service units, fire agencies, and paramedic services, require rapid deployment capability that may conflict with pre-authorisation workflows. The framework should include a streamlined emergency authorisation pathway enabling qualified public safety operators to operate in restricted zones with appropriate notification protocols.

Mining and Resources

18. Large-scale mining operations deploy land and aerial drones in geographically isolated environments. These operators typically have mature internal safety management systems. The framework should recognise existing industry safety cases and avoid requiring duplicative compliance where sector-specific standards already deliver equivalent security outcomes.

Recreational Users

19. Australia has a large recreational drone community. The indefinite pause on Recreational Registration reflects the complexity of extending regulatory obligations to this cohort. Any new recreational obligations must be accompanied by simple, low-cost compliance pathways, supported by retailers and hobby groups at the point of sale.

Follow-up Engagement

20. For any further queries or engagement, please contact the DEWC BD team via:

[REDACTED]