



5 June 2024

The Australian Association for Uncrewed Systems (AAUS) is pleased to provide this submission to the Australian Communications and Media Authority's (ACMA) public consultation on the proposed approach to expiring spectrum licences.

### **About AAUS**

The Australian Association for Uncrewed Systems is Australia's oldest and largest industry advocacy group for drones and the emerging Advanced Air Mobility (AAM) sector. AAUS is a not-for-profit organisation which represents the drone and AAM industry across three domains: land, sea, and air. AAUS' objective is to promote a professional, safe and commercially viable uncrewed systems and AAM industry. AAUS achieves this through its industry advocacy and promotion, education and outreach, and networking activities.

AAUS provides a single representative voice for the full breadth of the drone and urban AAM industry. AAUS' 4,500 members spans small-to-large enterprise, manufacturers, licensed and unlicensed operators, training providers, academic institutions, Government, and other supporting technical and professional services in the Australian drone and AAM industry.

### **AAUS Feedback on the proposed approach to expiring spectrum licences**

- The use of emerging aviation technologies including drones and advanced air mobility (AAM) vehicles is forecast to increase by an average of 20% per annum over the next 20 years – culminating in 60 million flights in 2043<sup>1</sup>.
- With the emergence of longer-range drones, AAM and Uncrewed Traffic Management (UTM) systems, AAUS sees our sector moving quickly with respect to technology and spectrum needs. We encourage a continuation of proactive engagement with key stakeholders to keep ahead of emerging spectrum requirements for these technologies.

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<sup>1</sup> [https://www.airservicesaustralia.com/wp-content/uploads/2024/02/Sizing-the-Future-Drone-Industry-in-Australia\\_February.pdf](https://www.airservicesaustralia.com/wp-content/uploads/2024/02/Sizing-the-Future-Drone-Industry-in-Australia_February.pdf)

- Currently most commercial (and recreational) drone systems in Australia utilise Low Interference Potential Devices (LIPD) frequency bands for short range operations. This currently suits these operations that are conducted within visual line of sight of the remote pilot.
- As the drone industry moves towards ubiquitous beyond visual line of sight (BVLOS) operations inside the next 3-5 years, the LIPD frequency bands will not meet their communication needs. The emerging industry will need access to spectrum that enables long range control and non-payload communication (CNPC) as well as those that allow for the transmission of high-quality video and other data. Industry will require megabit level, reliable, secure communications for CNPC and payload communications.
- Regarding spectrum, the emerging aviation industry has reported that lower (HF) frequencies are unsuitable due to bandwidth limitations. Also, higher frequencies (SHF) can be unsuitable due to power requirements to deliver suitable range.
- AAUS supports provision of dedicated spectrum in the 300 – 3000 MHz band to enable emerging aviation operations.

## Contact

AAUS would be pleased to provide additional information to ACMA on the matters contained in this submission. [REDACTED]