

April 17, 2025

The Manager
Spectrum Licensing Policy Section
Australian Communications and Media Authority
PO Box 78
Belconnen ACT 2616

Re: Five-year spectrum outlook 2025–30

Dear Manager, Spectrum Licensing Policy Section –

The Dynamic Spectrum Alliance (DSA)¹ appreciates the opportunity to provide input on the Draft Five-year spectrum outlook 2025–30 Consultation (Spectrum Outlook)². The DSA recognizes the Australian Communications and Media Authority (ACMA) for its open approach to spectrum management, particularly regarding Radio Local Area Network (RLAN) implementation in the 6 GHz band. ACMA’s decision to extend RLAN access to 6425-6585 MHz with the same technical rules of the lower 6 GHz band demonstrates its commitment to fostering next-generation wireless connectivity while ensuring efficient spectrum use.

By enabling Wi-Fi expansion in the upper 6 GHz band, the ACMA is taking an important first step in aligning with global efforts to advance high-speed broadband, digital transformation, and smart infrastructure. The inclusion of additional spectrum for RLAN use is critical in enhancing wireless performance in high-density environments, supporting industry use

¹ The DSA is a global, cross-industry, not for profit organization advocating for laws, regulations, and economic best practices that will lead to more efficient utilization of spectrum, fostering innovation and affordable connectivity for all. Our membership spans multinationals, small-and medium-sized enterprises, as well as academic, research and other organizations from around the world all working to create innovative solutions that will benefit consumers and businesses alike by making spectrum abundant through dynamic spectrum sharing. A full list of DSA members is available on the DSA’s website at dynamicspectrumalliance.org/members.

² Available at <https://www.acma.gov.au/five-year-spectrum-outlook>.

cases, emerging applications such as augmented reality (AR), virtual reality (VR), and next-generation IoT networks.

While these efforts are valuable, the DSA believes that higher-power RLAN devices in the 5925-6585 MHz band will further amplify the benefits of Wi-Fi 6E and Wi-Fi 7, enabling outdoor enterprise-grade wireless connectivity. To maximize economic and technological advantages, we urge ACMA to consider expanding power limits for RLAN operations and introducing Automated Frequency Coordination (AFC) for responsible spectrum sharing. Furthermore, we recommend the ACMA to continue considering the 6585 – 7125 MHz band for RLAN use, because WAS/RLANs not public mobile networks continue to support the vast majority of wireless internet traffic today and we see a need for more Wi-Fi spectrum for some key enterprise use cases now in education, hospitality, industrial/manufacturing, public services, retail, and finance. As a result, we believe further Wi-Fi allocations in the U6 band would be needed to leave Wi-Fi networks well positioned to help achieve ACMA's future connectivity policy goals.

1. The Necessity of Higher-Power RLAN Devices in Australia

The 5925-6585 MHz band has already been allocated for Wi-Fi in Australia under the Low Interference Potential Devices (LIPD) Class License. However, the current regulatory framework restricts devices to low-power indoor use only, limiting their potential in public, commercial, and industrial applications.

To align with global best practices, the ACMA should authorize higher-power RLAN devices with Automated Frequency Coordination (AFC) to ensure responsible spectrum sharing while expanding Wi-Fi accessibility beyond indoor environments. Specifically:

- Higher-power RLAN access would enable broader outdoor deployments, supporting smart cities, transportation hubs, enterprise and industrial network solutions and rural broadband expansion.
- Advanced spectrum-sharing mechanisms, such as AFC, allow Wi-Fi devices to dynamically adjust power levels and frequencies, mitigating interference concerns while preserving coexistence with incumbents.
- Countries such as the United States and Canada have implemented AFC systems, successfully allowing standard-power Wi-Fi operations in the 6 GHz band without disrupting incumbent services.

2. Economic & Technical Advantages of Expanding RLAN Power Limits and spectrum access in 6 GHz

Permitting higher-power RLAN devices indoor and outdoor in the 5925-6585 MHz band and expanding indoor Wi-Fi access in the 6 GHz band will accelerate Australia's transition to a high-performance wireless ecosystem, delivering:

- Enhanced broadband access in urban, suburban and rural areas complementing fiber and mobile networks.
- Smart infrastructure advancements, including connected devices, industrial automation and IoT applications.
- The cumulative economic value for the Australian economy between 2024 and 2034 for allocating the full 6 GHz band for unlicensed use amounts to US \$ 1,685.9 billion, comprising US \$ 1,219.2 billion in GDP contribution, US \$ 189.1 billion in producer surplus and US \$ 277.6 billion in consumer surplus ([Assessment the economic value of 6 GHz Spectrum band in Australia](#))³.
- For Australia to take advantage of the full economic and societal benefits available to other countries, indoor WAS/RLAN needs access to a minimum of 1200 MHz of spectrum.
- It is important to recognize that allocating less than 1200 MHz will lead to less cost effective or sub-optimal WAS/RLAN and these networks may be insufficient to meet the fast-rising demand for indoor wireless connectivity in Australia.

3. Policy Recommendations

To maximize the benefits of next-generation Wi-Fi while ensuring responsible spectrum management, DSA urges ACMA to:

- Permit higher-power RLAN devices in the 5925-6585 MHz band for outdoor and standard-power use cases.
- Implement Automated Frequency Coordination (AFC) to ensure interference mitigation while protecting incumbent services.
- Align Australia's spectrum policy with the more advanced WAS/RLANs markets globally, ensuring device interoperability and industry growth.

³ Available at <https://www.dynamicspectrumalliance.org/2024/AssessingEconomicValueWi-FiAustralia2034-2044.pdf>.

- Consider the 6585–7125 MHz band for the use of Low Interference Potential Devices (LIPD), where WAS/RLANs could help achieve connectivity policy goals in the near future.

By adopting these measures, ACMA can foster economic innovation, technological advancement, and universal wireless connectivity, reinforcing Australia’s leadership in modern spectrum regulation.

We appreciate your consideration of this submission and welcome any opportunity to engage further on this topic.

Sincerely,



Martha SUAREZ

President

Dynamic Spectrum Alliance