



Hewlett Packard Enterprise

15 July 2024

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

Re: Remaking the low interference potential devices class licence

Hewlett Packard Enterprise (HPE) appreciates the opportunity to provide comments in response to the Australian Communications and Media Authority (ACMA) consultation on Remaking the Low Interference Potential Devices Class Licence.

Please find on the following pages HPE's comments on ACMA's consultation. Should you have any questions, please do not hesitate to contact the HPE signatory below.

Sincerely,

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Questions for comment

1. Frequency hopping radiocommunications transmitters in the 5925 – 6425 MHz band

HPE respectfully disagrees with the ACMA's assertion that "arrangements for low-power narrowband frequency-hopping (FHSS) transmitters in the 5945 – 6425 MHz band have been finalised in Europe." In reality, ETSI BRAN currently maintains an active work item, "[BRAN-230030](#)," focused on revising EN 303 687. One of the scope of this work item is to develop a channel access mechanism for FHSS operation in the 6 GHz band. Given the ongoing work of the standard, HPE recommends that the ACMA continue monitoring this development before finalising any regulatory decisions regarding FHSS operation in this band.

In addition to that, we note that while ACMA has proposed to adopt the power spectral density (PSD) and emission limits outlined in EN 303 687, it has not proposed to mandate the ETSI standard in its draft "Radiocommunications (Low Interference Potential Devices) Class Licence 2025". Importantly, Section 4.3.6.3 of EN 303 687 requires devices to use a "Listen Before Talk" protocol with a Clear Channel Assessment (CCA), to ensure efficient spectrum sharing among RLAN devices. Similarly, the U.S. FCC mandates under 47 CFR §15.407(d)(6) that all non-standard power RLAN devices operating in the 5.925 – 7.125 GHz band use contention-based protocols.

While we recognise the justification and flexibility of not mandating EN 303 687 in LIPD class licence, HPE recommends that ACMA establish appropriate spectrum access mechanisms to ensure coexistence and fair spectrum sharing among different LIPD technologies in the 5925 – 6425 MHz band — particularly if FHSS operation is to be permitted in the future.

2. RLAN radiocommunications transmitters in the 6425 – 6585 MHz band

HPE strongly recommends the ACMA include the entire upper 6 GHz (6425 – 7125 MHz) in the LIPD class licence. Expanding Wi-Fi access into the upper 6 GHz band aligns Australia with global efforts to accelerate high-speed broadband deployment, support digital transformation, and improve national economic productivity.

Broadband users in Australia have the demand of accessing the entire 6GHz band

Enterprise Wi-Fi deployments typically require at least 7 to 9 non-overlapping channels to maintain low Co-Channel Interference (CCI). In high-density venues such as sports stadiums, universities, and airports, more than 20 channels may be needed. While the ACMA's allocation of the lower 6 GHz band (5925 – 6425 MHz) to the LIPD Class Licence in 2022 was a positive step, many of our enterprise customers are still limited to 40 MHz channels, or at most, partial use of 80 MHz, resulting in marginal performance improvement compared to existing 5 GHz networks.

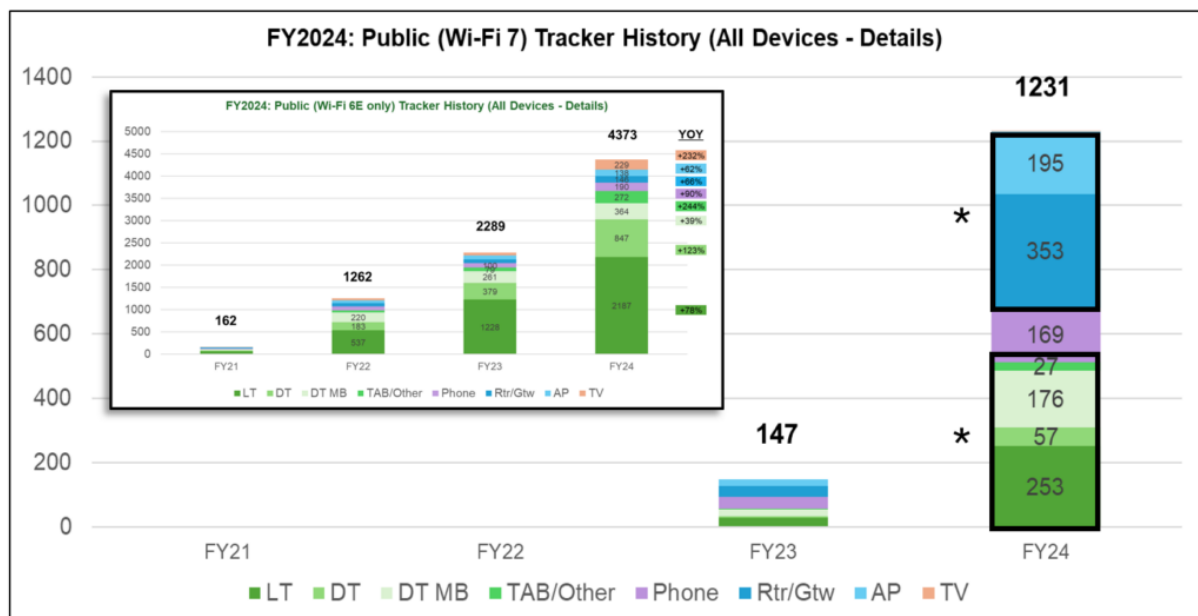


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For example, the library building at the University of New South Wales presents an open space RF environment, we previously deployed 21 channels of 20 MHz in the 5 GHz band to manage CCI. Recently, we added 80 MHz channel in the 6 GHz band to address growing demand for gigabit-speed broadband. However, the lower 6 GHz band only has 6 x 80MHz channels, we can only deploy that in selected areas on a single floor. If the ACMA were to include the entire upper 6 GHz band under the LIPD Class Licence, it would enable us to fully deploy 80 MHz channel across the entire library building—significantly enhancing user experience and network capacity.

A thriving 6GHz Wi-Fi device ecosystem can deliver immediate benefits to Australia.

Since the FCC decided to open the 6 GHz band for unlicensed RLAN use, a strong international equipment ecosystem for 6 GHz Wi-Fi has been developed. Recent research by Intel reveals that more than 5000 Wi-Fi device models now support 6 GHz band.



Wi-Fi 7 and 6E device releases as function of year and per device category since 2021

HPE has observed from our customers that the adoption of Wi-Fi 6E and Wi-Fi 7 technologies is progressing much faster in countries such as the United States, Canada, and South Korea who have opened the full 6 GHz band. For example, the University of Notre Dame has projected that by August 2025, up to 90 percent of its 13,000 students will use 6 GHz Wi-Fi devices¹. The university recently launched an AFC-

¹ [HPE deploys outdoor Wi-Fi 6E at Notre Dame stadium and pilots private 5G for connectivity everywhere with HPE Aruba Networking.](#)



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controlled outdoor Wi-Fi network, a significant milestone in its multi-phase rollout of a Wi-Fi 6E deployment.

In response to ACMA's earlier consultation on "Planning options in the upper 6 GHz band", HPE notes the competing interest from Australia IMT industry of accessing the band for WBB service. We would like to draw the ACMA's attention to [a recent proposal by the UK's Ofcom](#), which seeks to maximise spectrum efficiency while preserving long-term regulatory flexibility. Ofcom has outlined a two phased approach:

- **Phase 1:** Immediate authorisation of Low Power Indoor (LPI) Wi-Fi access in the 6425 – 7125 MHz range. This enables UK consumers, businesses, and industries to quickly benefit from the latest Wi-Fi technologies.
- **Phase 2:** Potential introduction of IMT services in the band, subject to the outcome of ongoing European-level discussions on harmonised use of the upper 6 GHz band, expected to conclude by 2027.

This approach enables near-term benefits from Wi-Fi access while retaining the option to introduce IMT in the longer term, in alignment with harmonised international developments.

HPE respectfully encourages the ACMA to adopt a similarly balanced and forward-looking approach—one that authorises near-term LPI Wi-Fi access in the 6425 – 7125 MHz band while preserving regulatory flexibility for future IMT deployment. For Australia to remain competitive on the global digital stage, it is crucial to implement a regulatory approach that fosters the growth of both Wi-Fi and mobile technologies, driving innovation and ensuring the country's long-term digital prosperity.