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**TELSTRA GROUP LIMITED**

# **Remaking the LIPD Class Licence**

**Telstra public submission**

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# 1 Introduction

Telstra welcomes the opportunity to make this submission to the ACMA's consultation on *Remaking the Low Interference Potential Devices (LIPD) Class Licence* (the **consultation**).

Australians need and deserve quality mobile service, regardless of where they live, and Australia needs an ambitious approach to spectrum allocation to achieve this.

Telstra is committed to delivering quality mobile services for our customers and working with Government and industry on spectrum allocation arrangements that make the most of available spectrum for the benefit of the Australian community.

Current decisions about future spectrum policy and the allocation of adequate spectrum to IMT are critical to ensure quality consumer and business mobile communications over the coming decades. A pipeline of additional spectrum is required to increase cellular capacity to meet the growth of mobile services and to improve the quality of mobile services delivered to consumers and to provide optionality for future Satellite To Mobile (STM) services.

We are very concerned that the Australian Communication and Media Authority's (ACMA's) December 2024 decision to allocate 160 MHz of the Upper 6 GHz spectrum band to RLAN (Wi-Fi) and the potential of this decision to negatively impact the pipeline of spectrum and compatible devices required to bring 5G Advanced and 6G technologies to Australia.

The Low Interference Potential Devices (LIPD) class licence is an important instrument that enables the licensed operation of billions of devices around Australia. Any device using Wi-Fi or Bluetooth, including mobile phones, laptops and their accessories, through to connected household appliances, and even the humble garage-door remote rely on the LIPD class licence to operate. Telstra and its customers are significant users of Wi-Fi and Bluetooth technologies. We have significant experience in these technologies, are strong advocates for continuity of LIPD licensing arrangements for these technologies, and as such we support the remaking of the LIPD class licence.

While remaking the instrument however, the ACMA plans to make some changes, including: 1) only partially aligning (rather than fully aligning) to ETSI Standard EN 303 687; 2) allocating a further 160 MHz of the Upper 6 GHz band to RLAN; and 3) making amendments to allow Wireless Multichannel Audio Systems (WMAS) in the Ultra-High Frequency (UHF) Band (520-694 MHz). We have concerns about all three changes, and are strongly opposed to the latter two.

Our submission is structured as follows:

- **Section 2** expresses our support for remaking the LIPD class licence and for the changes proposed for RLAN devices operating in 5150-5250 MHz;
- **Section 3** raises concerns with the ACMA's proposal to "align" the 2025 LIPD class licence with only some of the ETSI technical characteristics – we strongly recommend the ACMA reference the entire ETSI standard, to ensure devices operating in Australia are compliant with the whole standard, rather than only parts of it;
- **Section 4** provides details of our opposition to the change to allocate 160 MHz of the Upper 6 GHz band to RLAN, and explains what we consider to be the detrimental consequences of proceeding to implementation ahead of global standards being ready; and
- **Section 5** provides details of our opposition to the introduction of WMAS in the UHF band above 612 MHz.

## 2 The ACMA should remake the LIPD class licence

We strongly support the ACMA remaking the LIPD class licence before it is allowed to sunset. We agree with the ACMA's preliminary view that "... the LIPD class licence is operating effectively and efficiently. It continues to play a necessary role in the radiocommunications regulatory framework – specifically, in relation to the class licensing of radiocommunications devices."<sup>1</sup>

### 2.1 We support the introduction of digital modulation radiocommunications transmitters into 5150-5250 MHz

The ACMA proposes to broaden the type of devices allowed to operate in the 5150–5250 MHz band to include all digital modulation radiocommunications transmitters.<sup>2</sup> We support the ACMA's proposal to include the operation of all digital modulation radiocommunications transmitters in 5150-5250 MHz that operate in accordance with FCC rules.

## 3 We support changes to 5925-6425 MHz that align with global standards

Since the ACMA's October 2022 proposal to introduce RLAN in 5925-6425 MHz, ETSI have released the standard governing RLAN transmitter characteristics, EN 303 687, noting that the most recent published version (Ver 1.1.1) was released in 2023.<sup>3</sup> In this standard, ETSI define the out-of-band emission (OOBE) limit below 5925 MHz as -45 dBm/MHz; which is 8 dB lower than the ACMA's October 2022 proposal (of -37 dBm/MHz). We agree with and support full alignment with global standards.

### 3.1 Reference the full ETSI standard, not a subset

Despite the consultation paper explaining the ways in which the LIPD class licence will align with EN 303 687, the draft version of the 2025 LIPD class licence does not incorporate all the parameters of EN 303 687, nor does it include a single reference to that standard. We support the ACMA's proposal to align the OOBE requirements with those in EN 303 687, and consider the best practical way to achieve this is to simply reference the standard itself in the LIPD, rather than transcribe values for characteristics only at the 5925 MHz boundary (such as Power Spectral Density (PSD), OOBE, receiver filter characteristics, etc.) into the 2025 LIPD class licence.

We request the ACMA amend the draft 2025 LIPD class licence in relation to frequency hopping transmitters in 5925-6425 MHz to reference the full EN 303 687. For example, at section 42(1) of the draft LIPD class licence, rather than specify "10 mW EIRP per 1 MHz", reference Table 3 in section 4.3.3.2 of EN 303 687. Similarly, for section 42(4), specify that the out-of-band emissions (OOBE) must comply with section 4.3.4.1.2 of EN 303 687, rather than just referring to one of the values from that section (for emissions below 5925 MHz).

This will also ensure compliance with band edge requirements at 6425 MHz, which the ACMA has not included in drafting the draft 2025 LIPD class licence. ETSI Standard EN 303 687 clearly articulates requirements at 6425 MHz (for example, the aforementioned Table 4 in section 4.3.4.1.2, p.18) which prescribes OOBE above 6425 MHz. It is imperative that the ACMA include all aspects of the device

<sup>1</sup> Consultation paper, p.1.

<sup>2</sup> The LIPD currently limits devices to RLAN transmitters. FCC rules ([47 CFR 15.407](#), paragraph (a)(1)(iv)) allow for 'client devices' in the 5150–5250 MHz band.

<sup>3</sup> ETSI EN 303 687, Ver 1.1.1, June 2023. Available at: [https://www.etsi.org/deliver/etsi\\_en/303600\\_303699/303687/01.01.01\\_60/en\\_303687v010101p.pdf](https://www.etsi.org/deliver/etsi_en/303600_303699/303687/01.01.01_60/en_303687v010101p.pdf)

characteristics when compiling the 2025 LIPD class licence, rather than selectively including only some of them.

As noted above, the best way to achieve this is to reference EN 303 687 in its entirety, rather than lifting specific values from the Standard, and entering them as discrete numeric values directly in the LIPD class licence.

### **3.2 No explanation for making non-standard changes to 5925-6425 MHz**

The proposed draft of the 2025 edition of the LIPD class licences contains two sections that override (relax) some of the requirements in ETSI Standard EN 303 687. Sections 48 and 49, for low-power indoor (LPI) and very low-power (VLP) RLAN devices permit the OOB level below 5925 MHz to rise to 27 dBm/MHz EIRP and 37 dBm/MHz EIRP respectively (see sections 48(4) and 49(4)). This is different to the requirements specified in ETSI Standard EN 303 687 (Table 4 in section 4.3.4.1.2). The ACMA has not explained in the consultation paper why this is occurring. Table 2 in the consultation paper (p.5) shows that the ACMA's intention was to tighten the October 2022 proposal of -37 dBm/MHz to -45 dBm/MHz, but this is not how section 49 of the draft 2025 LIPD class licence has been written. It is possible this is a drafting error, although, it then seems odd that section 48 (for LPI) of the draft 2025 LIPD class licence seeks to tighten the ETSI EN 303 687 OOB level of -22 dBm/MHz to the ACMA proposed level of -27 dBm/MHz (i.e., 5 dB tighter).

As per our request in section 3.1 above, we ask that the ACMA reference ETSI Standard EN 303 687 in its entirety as the reference for all technical characteristics for frequency-hopping RLAN devices in 5925-6425 MHz, rather than attempting to transcribe individual values for a select set of characteristics.

### **3.3 Referencing EN 303 687 will also support compliance**

Another key benefit of specifying the full EN 303 687 standard in the 2025 LIPD class licence, is it makes it easier to check and enforce compliance. Manufacturers will normally ensure they comply with relevant international standards and will certify their devices comply with those standards. If Australia deviates from the international standard (e.g., by only specifying parts of the standard, and/or by setting bespoke Australian values for some parameters), it becomes far more difficult to determine whether a device complies or not.

Telstra estimates that among our customers today, there are already well over 2 million mobile phone handsets with Wi-Fi 6E (6 GHz band) capability. We expect these devices are compliant with international standards, and we encourage the ACMA to include Wi-Fi devices in its periodic compliance assessments (Priority Compliance Areas).

## **4 The ACMA should not allocate additional spectrum to RLAN in any part of the Upper 6 GHz band at this time**

We appreciate the ACMA made a formal decision with the release of its outcomes paper on the Upper 6 GHz band in December 2024.<sup>4</sup> However, we remain extremely concerned about the impact of the creation of a non-globally aligned boundary at 6585 MHz. The ACMA's proposed bespoke boundary between the two technologies in the middle of internationally standardised bands will result in inefficient use of the band. Absent globally standardised RLAN and IMT bands, users will have to accept higher levels of interference from devices on the other side of the boundary. This will result in inefficient use of very valuable mid-band spectrum.

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<sup>4</sup> Planning options in the upper 6 GHz band, Outcomes paper, 17 Dec 2024. Available at <https://www.acma.gov.au/consultations/2024-05/planning-options-upper-6-ghz-band>

This section of our submission sets out the justification for our position that the ACMA should pause implementation of its December 2024 decision to allocate additional spectrum to RLAN, and wait until the European Conference of Postal and Telecommunications Administrations (CEPT) coexistence studies have concluded, and global agreement on further subdivision of the 6 GHz band is reached. We commence this section explaining why RLAN and IMT adjacency *within* a band is different to adjacency *between* bands (e.g., at 2400 MHz), and then explain why Australia proceeding with implementing a bespoke boundary at 6585 MHz is also inconsistent with the ACMA's March 2022 decision to allocate the Lower 6 GHz band (5925-6425 MHz) to RLAN.

#### 4.1 Adjacent *channel* coexistence at 6585 MHz is not the same as adjacent *band* coexistence at 2400 MHz

##### 4.1.1 Coexistence at 2400 MHz is defined through adjacent *band* technical standards

IMT and RLAN coexist as adjacent *band* services at 2400 MHz. IMT operates in 2300-2400 MHz, and RLAN is immediately adjacent, at 2400-2485 MHz. In large part, the reason the two service types can coexist adjacent to each other is because of the standardised unwanted out-of-band emission (OOBE) limits, and receive filtering requirements to prevent receiver blocking on IMT and RLAN. For example, Telstra's 2.3 GHz band licence,<sup>5</sup> core condition 7 requires us to ensure OOBE above 2400 MHz commence at -7 dBm/100 kHz, with a glide down to -14 dBm/100 kHz by 2405 MHz. Similarly, the 2.3 GHz band Receiver RAG<sup>6</sup> section 4 defines receiver filtering requirements to prevent receiver blocking at the IMT receiver (base station or user equipment) in accordance with 3GPP TS 38.104.

Similarly, on the RLAN side of 2400 MHz, ETSI specification EN 300 328<sup>7</sup> section 4.3.1.9 defines the transmitter unwanted OOBE limits, and section 4.3.1.12 defines the receiver blocking characteristics.

Together, these standards optimise the ability of the two technologies to co-exist as adjacent-band partners (either side of 2400 MHz) by ensuring: 1) that emissions outside the operating band are minimised; and 2) that receivers are less susceptible to interference caused by in-band emissions of the technology on the other side of the boundary.

##### 4.1.2 Coexistence at 6425 MHz is also defined through adjacent *band* technical standards

In June 2023, ETSI released the Wi-Fi technical standard for RLAN devices operating in 5945-6425 MHz, ETSI EN 303 687, Ver 1.1.1. As with EN 300 328 for the 2.4 GHz RLAN band, EN 303 687 defines out-of-band emissions, receiver filtering capabilities to reduce blocking, etc, for RLAN devices operating in 5945-6425 MHz, thereby allowing them to coexist with adjacent band technologies.

In June 2022, 3GPP released TS 38.101 and TS 38.104 Version 17.6,<sup>8</sup> which included for the first time, technical characteristics for band n104, including out-of-band emissions, receiver filtering to reduce blocking, etc, for IMT devices operating in band n104 (6425-7125 MHz), thereby allowing them to coexist with adjacent band technologies.

<sup>5</sup> Licence 10388332, available at: [https://web.acma.gov.au/rrl/licence\\_image.extract\\_pdf?pLICENCE\\_NO=10388332](https://web.acma.gov.au/rrl/licence_image.extract_pdf?pLICENCE_NO=10388332)

<sup>6</sup> Radiocommunications Advisory Guidelines (Managing Interference to Spectrum Licensed Receivers – 2.3 GHz Band) 2024, aka "Receiver RAG", available at: <https://www.legislation.gov.au/F2024L00258/asmade/text>

<sup>7</sup> ETSI EN 300 328 V2.2.2, July 2019. Available at: [https://www.etsi.org/deliver/etsi\\_en/300300\\_300399/300328/02.02.02\\_60/en\\_300328v020202p.pdf](https://www.etsi.org/deliver/etsi_en/300300_300399/300328/02.02.02_60/en_300328v020202p.pdf)

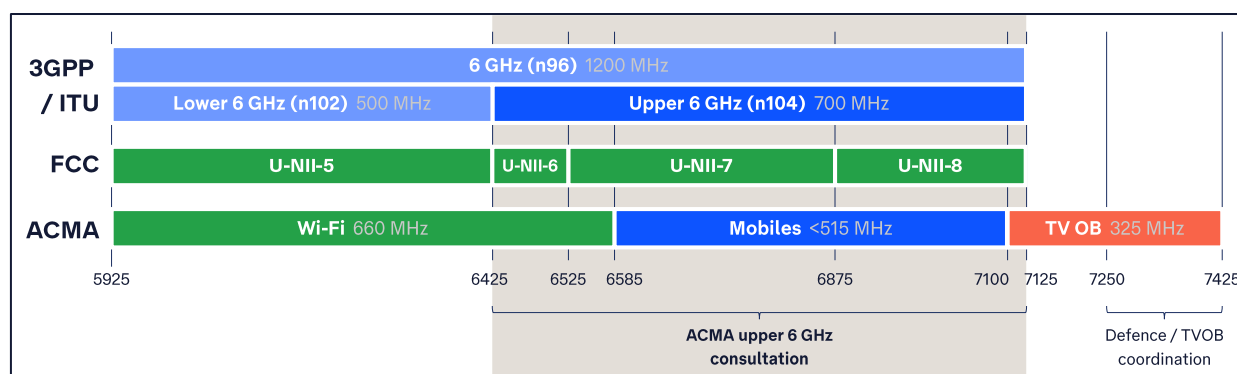
<sup>8</sup> ETSI TS 38.101, **User Equipment (UE) Radio Transmission and Reception**, Version 17.6, 30 June 2022 (developed at 3GPP RAN#96). Available at: [https://www.3gpp.org/ftp/Specs/archive/38\\_series/38.101-1/38101-1-h60.zip](https://www.3gpp.org/ftp/Specs/archive/38_series/38.101-1/38101-1-h60.zip). Similarly for base stations, ETSI TS 38.104, **Base Station (BS) Radio Transmission and Reception**, Version 17.6, 30 June 2022, available at [https://www.3gpp.org/ftp/Specs/archive/38\\_series/38.104/38104-h60.zip](https://www.3gpp.org/ftp/Specs/archive/38_series/38.104/38104-h60.zip).

Note, the previous version, Ver 17.5 of both TS 38.101 and TS 38.104 (both dated 1 April 2022 and developed at RAN#95e) included band n102, but not n104. See: [https://www.3gpp.org/ftp/Specs/archive/38\\_series/38.101-1/38101-1-h50.zip](https://www.3gpp.org/ftp/Specs/archive/38_series/38.101-1/38101-1-h50.zip) and [https://www.3gpp.org/ftp/Specs/archive/38\\_series/38.104/38104-h50.zip](https://www.3gpp.org/ftp/Specs/archive/38_series/38.104/38104-h50.zip) respectively.

Like the adjacent 2300 MHz IMT and 2400 MHz RLAN bands, Wi-Fi 6E operating in Unlicensed National Information Infrastructure (U-NII) band U-NII-5 and 3GPP band n104 are globally standardised bands, harmonised to operate next to one another with a minimum of interference.

## 4.2 6585 MHz is not a standardised band edge – this forces in-band adjacency

Figure 1 below shows the ACMA's proposal for allocating 6425-6585 MHz to RLAN (bottom row of the figure), versus the globally defined 3GPP bands and the Unlicensed National Information Infrastructure (U-NII) structure.<sup>9</sup> As can be clearly seen, the ACMA's proposal does not align with any currently defined 3GPP bands or with the U-NII ranges.



**Figure 1:** Comparison of 3GPP/ITU, FCC and ACMA plans

The implication is that if the ACMA proceeds with its proposed allocation and creates a bespoke Australian boundary at 6585 MHz, industry (RLAN and IMT) is forced to consider in-band coexistence between RLAN and IMT. Unlike adjacent-band co-existence, where there are strongly defined OOB and receiver filtering requirements related to *the edge of the band*, RLAN and IMT standards will not be able to specify strong OOB and receiver filtering requirements, because the boundary is in *the middle of the band*.

Until globally standardised RLAN and IMT bands (not an IEEE channel raster) are created that operate with their band edges at 6585 MHz, the result will be inefficient use of the band. Absent globally standardised RLAN and IMT bands, the adjacent users must accept that interference will degrade (or deny) use of the spectrum close to the boundary. It is important to remember that class licensed devices will not be afforded protection from interference caused by other radiocommunications devices, nor are they allowed to cause interference to other radiocommunications devices. Because the class licensed RLAN device will likely have impaired performance close to the boundary, it will need to back away from the band edge to comply with the obligations in the LIPD class licence.

## 4.3 The allocation of 5925-6425 MHz was premature

The ACMA was fortunate when it allocated the lower 500 MHz of the 6 GHz band (Lower 6 GHz band) to RLAN in March 2022.<sup>10</sup> At the time, ETSI had not issued EN 303 687 (it was released 15 months later in June 2023), and 3GPP had not released Ver 17.6 of technical standards TS 38.101 and TS 38.104 (see section 4.1.2 for details). As such, there were no technical standards for RLAN or IMT defining band-edge technical characteristics at the time the ACMA amended the LIPD class licence.

<sup>9</sup> Unlicensed National Information Infrastructure (U-NII). See [https://en.wikipedia.org/wiki/Unlicensed\\_National\\_Information\\_Infrastructure](https://en.wikipedia.org/wiki/Unlicensed_National_Information_Infrastructure)

<sup>10</sup> The LIPD Class Licence commenced on Thu 3 March 2022 (see: <https://www.legislation.gov.au/F2022L00249/latest/text>) allocating the lower 500 MHz of the 6 GHz band to RLAN, and the ACMA released its outcomes paper the following week, on Thu 10 March 2022 (see: [Outcomes Paper Proposed updates to the LIPD Class Licence for 6 GHz RLANS.pdf](#)).



The ACMA's decision to prematurely allocate the lower 500 MHz to RLAN in March 2022 did not pose significant risk. At the time, U-NII-5 existed because it is part of the Wi-Fi 6E (802.11ax) protocol, released in May 2021,<sup>11</sup> well before March 2022. While 3GPP had not yet defined band n102 (Version 17.5 of TS 38.101 and TS 38.104 was released on 1 April 2022 – see Footnote 8 above), the pre-work for 3GPP RAN#95e (held between 17-23 March 2023) would have largely been done, and 3GPP RAN#96 would have been well underway developing characteristics for n104. In short, RLAN bands existed, and 3GPP had all but completed the work to define the IMT bands. The ACMA's decision to allocate the Lower 6 GHz band (5925-6425 MHz) to RLAN was more “co-incidental” with standards development, rather than significantly preceding the standards work.

However, the ACMA's decision to create a new boundary at 6585 MHz is well ahead of CEPT studies and any work to create standardised RLAN and IMT bands. With significant uncertainty about what global standards will emerge, the ACMA risks setting a bespoke standard for Australia, that will not realise global device economies of scale or efficient use of the Upper 6 GHz band. As there are no globally defined bands with edge(s) at 6585 MHz, it cannot be assumed that technical standards will emerge in the fullness of time. Unlike allocation of the Lower 6 GHz band, this time, the ACMA is taking a significant and uncalculated risk.

Reports we have received from the most recent CEPT PT1 meeting (5-9 May 2025 – Budapest) on the topic of Upper 6 GHz note that there is still no resolution on, or even whether, to introduce an MFCN/RLAN split in the Upper 6 GHz band. Work on coexistence is to continue under “Task 2” of the EC Mandate to CEPT, which is not scheduled for completion until November 2026 (with public consultation commencing in June 2026).<sup>12</sup>

#### **4.4 Any LIPD changes to accommodate RLAN should be decided after the outcome of CEPT sharing studies is known**

The ACMA should wait for the outcome of CEPT sharing studies. If, in the fullness of time, CEPT in conjunction with 3GPP and the IEEE define a new band edge at 6585 MHz, it would then be reasonable to assume that technical standards will be developed that will allow for adjacent-band coexistence that does not result in significant wastage of valuable mid-band spectrum.

The worst possible outcome would be for the ACMA to proceed with this allocation, and 6585 MHz is not adopted globally as a band edge in the RLAN and IMT protocols. We return to this point in section 4.5.

It is possible Europe may not even choose a frequency split in the Upper 6 GHz band, let alone define a band edge at 6585 MHz. Last week, twelve of Europe's biggest operators called on regulators to make the entire Upper 6 GHz band available for mobile services.<sup>13</sup> The following is an update on the status of CEPT work to study coexistence in the ‘upper’ 6 GHz band, which we also referenced in our FYSO submission lodged in April 2025:

- CEPT understand that, to achieve an efficient allocation outcome, both RLAN and IMT must be studied together. RLAN and IMT impact one another, and it is not possible to study or allocate them in isolation;
- CEPT is studying RLAN and IMT use of the Upper 6 GHz band scheduled for completion in 2027, and that no allocation decision for either RLAN or IMT will be made ahead of completing the studies; and

<sup>11</sup> IEEE 802.11AX (“Wi-Fi 6” and “Wi-Fi 6E”), released May 2021. See [https://en.wikipedia.org/wiki/IEEE\\_802.11](https://en.wikipedia.org/wiki/IEEE_802.11) and scroll down to the table for IEEE 802.11AX release date. U-NII-5 to U-NII-8 within the U-NII structure must have also existed in April 2020, because the FCC Report and Order that gives effect to the (then) forthcoming allocation of the entire 6 GHz band to RLAN mentions U-NII-5 through U-NII-8. See <https://docs.fcc.gov/public/attachments/FCC-20-51A1.pdf>

<sup>12</sup> CEPT response to EC Mandate on upper 6 GHz band - Task 2, PT1\_59. See: [https://eccwp.cept.org/WI\\_Detail.aspx?wiid=896](https://eccwp.cept.org/WI_Detail.aspx?wiid=896).

<sup>13</sup> **Europe giants issue 6G spectrum warning**, MobileWorldLive, Wed 7 May 2025. <https://www.mobileworldlive.com/operators/europe-giants-issue-6g-spectrum-warning/>



- Studies are deliberate, detailed and comprehensive, and have the current status:
  - A mandate<sup>14</sup> was issued by the European Radio Spectrum Policy Group (RSPG) to the CEPT in December 2024 to study coexistence options between adjacent RLAN and IMT, and if options can be identified, develop technical parameters to maximise the efficient use of spectrum. The mandate identifies three tasks to be delivered in a phased approach, with the final deliverable scheduled for July 2027.
  - Spectrum sharing between RLAN and IMT has been studied.<sup>15</sup> The study shows that, while theoretically possible, implementation realities make sharing practically infeasible because extensive adaptation to both RLAN and IMT equipment, 3GPP / IEEE specification work and standards harmonisation are required;
  - ECC PT1 meeting #81 occurred in Budapest in the week of 5-9 May 2025<sup>16</sup> to continue working through IMT/RLAN sharing;
  - Importantly, it is the intention of the RSPG that implementation decisions are not made until at least Task (2) on identifying options is completed and Report B has been sent from the CEPT to the European Commission.

While Ofcom is contemplating a different approach in the UK (their consultation<sup>17</sup> on introducing RLAN up to 6585 MHz that closed on 8 May 2025), we note that Ofcom is ultimately subject to CEPT decisions and depends upon the standardised European ecosystem harmonised by ETSI. Brexit means Ofcom is no longer a member of the European Radio Spectrum Policy Group (RSPG), and appears to be using its public discourse and CEPT membership to attempt to influence RSPG decisions in Europe. We urge caution in interpreting Ofcom commentary as definitive, particularly where it differs significantly from CEPT / RSPG positions. Ultimately, Australia and the UK are reliant on the outcomes the EU implements in global standards, as these will drive global supply chains for devices.

#### 4.5 Proceeding ahead of global technical standards will result in poorly utilised spectrum

We appreciate that coexistence studies are still being conducted in Europe and elsewhere. Nevertheless, it can be reasonably predicted ahead of completion of the studies, that where very different technologies are operating immediately adjacent to each other (frequency-adjacent), and that adjacency is occurring in-band, rather than adjacency of different bands, there is very likely to be interference between the two technologies.

In the event global standards do not emerge that define a band-edge at 6585 MHz for both RLAN and IMT, it seems unlikely that mass-market RLAN devices will be manufactured with the unique Australian requirements, given the relatively small size of the Australian market. This will result in RLAN APs (indoors) that cannot “hear” the IMT Base station (outdoors) and as a result will very likely cause harmful interference to an IMT UE (either indoors near the AP, or even outdoors where it is far from the base station), because at the edge of mobile coverage, the AP signal strength immediately outside the house (including building exit loss) will be stronger than the signal from the base station. Note that this doesn’t account for people who install low-power indoors (LPI) Wi-Fi devices outdoors (e.g., under a veranda).

<sup>14</sup> European Commission, RSPG. Dec 2024. *Mandate to the CEPT to study feasibility of, and develop least restrictive harmonised technical conditions for the potential shared use of, the 6425-7125 MHz frequency band*. Available at: <https://cept.org/files/1412/Mandate%20to%20CEPT%20upper%206%20GHz%20band.pdf>

<sup>15</sup> CEPT, January 2025, Draft ECC Report 366, Feasibility of a potential shared use of the 6425-7125 MHz frequency band between Mobile/Fixed Communications Networks (MFCN) and Wireless Access Systems including Radio Local Area Networks (WAS/RLAN) <https://cept.org/files/2099/Draft%20ECC%20Report%20366%20.docx>

<sup>16</sup> See <https://www.cept.org/ecc/groups/ecc/ecc-pt1/news/ecc-pt181-schedule-and-access-information>

<sup>17</sup> Ofcom, February 2025. *Consultation: Expanding access to the 6 GHz band for commercial mobile and Wi-Fi services*. Closed, 8 May, 2025. Available at: <https://www.ofcom.org.uk/spectrum/innovative-use-of-spectrum/consultation-expanding-access-to-the-6-ghz-band-for-commercial-mobile-and-wi-fi-services/>

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We also note that if Australia proceeds with its own bespoke boundary at 6585 MHz, the ACMA will need to enforce the LIPD class licence conditions to ensure compliance with the obligations of the LIPD class licence, which are that class licensed devices are not permitted to cause interference to licensed services.

Importantly, should the ACMA proceed ahead of global technical standards and harmonised equipment ecosystems by allocating 6425-6585 MHz to RLAN, the spectrum either side of the 6585 MHz boundary will be poorly utilised due to high levels of interference causing channels not to be selected, or there will be higher cost for Australian consumers because bespoke equipment is expensive (assuming the ACMA enforces importation of devices that meet the bespoke Australian 6585 MHz boundary).

International studies will continue over the coming years to assess the coexistence possibilities and potentially define new bands. If a new band or bands are defined, it is possible they will have a band edge at 6585 MHz, in which case, it would be appropriate for the ACMA to proceed with the allocation of 5425 – 6585 MHz to RLAN at that time.

## 5 WMAS should be restricted to below 612 MHz

In the consultation paper, the ACMA notes “... the government proposes to explore options for the future of television broadcasting. This may include considering its future spectrum needs”, which is a reference to the 600 MHz UHF band. The ACMA also states “We do not propose to pre-empt that government consideration in any way by restricting the frequency range for WMAS.”

We consider that allowing a new device type is pre-empting an outcome of the government’s deliberations, by assuming the band will continue to be used as it currently is today, i.e., that it will not be reallocated.

Usually, where there is uncertainty about a band’s future, the ACMA introduces an embargo. Embargo 81<sup>18</sup> on the upper 6 GHz band is a case in point. Embargo 81 prohibits new assignments in the frequency range 6425-7125 MHz Australia-wide. It is unlikely that the entire Australian landmass will be designated for IMT using either AWL or Spectrum Licences; the more likely scenario in the near-term is that capital cities, and possibly some regional areas will be designated. Yet, the ACMA’s approach is to embargo the full Upper 6 GHz frequency range across the entire country.

The government is still deciding the future of the 600 MHz UHF band so allowing WMAS to be introduced in the portion of that band that could conceivably be reallocated for low-band IMT spectrum will create another use case that would have to be “cleared”<sup>19</sup> from the band.

We have no objection to WMAS being introduced below 612 MHz but strongly recommend that to avoid having to “clear” devices from ongoing use above 612 MHz, it would be better to restrict WMAS to below 612 MHz from the outset.

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<sup>18</sup> Embargo 81, 4 June 2024. Available at: [https://www.acma.gov.au/sites/default/files/2024-05/embargo\\_81\\_4\\_june\\_2024.pdf](https://www.acma.gov.au/sites/default/files/2024-05/embargo_81_4_june_2024.pdf)

<sup>19</sup> We appreciate these are LIPD devices, used on an ad hoc basis, most likely for large concerts or other events where a significant number of wireless audio devices are required. As such, the devices do not have to be “cleared” in the same way as other licensed devices must be cleared. Nevertheless, should the band be redesignated to IMT, operators of WMAS systems will need to be educated to cease using frequencies above 612 MHz. This takes time and effort. It would be better to restrict WMAS to below 612 MHz from the outset.