AMTA

Australian Mobile Telecommunications Association

3 May 2026

Submission to the ACMA

Consultation on the draft Five Year Spectrum Outlook 2026-2031

AMTA – Draft FYSO 2026-31 submission

The Australian Mobile Telecommunications Association (AMTA) is the peak industry body of Australia's mobile telecommunications industry. Our purpose is to be the trusted voice of industry, promoting the adoption, monetisation and sustainability of mobile telecommunications technology for the benefit of all Australians.

AMTA members include the mobile network service providers, handset manufacturers, network equipment suppliers, retail outlets and other suppliers to the industry.

AMTA welcomes the opportunity to provide this submission to the ACMA on their consultation on the draft Five Year Spectrum Outlook 2026-2031.

Contents

1. Executive Summary 4

2. Mobile spectrum strategic imperatives 5

2.1 Three national spectrum strategic issues 5

2.2 6G Spectrum 5

2.3 UOMO 6

2.4 Spectrum for rural and regional capacity 7

3. FYSO work plan feedback and requests 9

3.1 Background 9

3.2 Upper 6 GHz Band 10

3.3 600 MHz key to improved rural and regional services 11

3.4 Immediate changes to the 3.4-4.0 GHz band 12

3.5 Longer-term changes to the 3.4-4.0 GHz band 13

3.6 UOMO Workplan 13

3.7 Other issues 14

4. Conclusion 17

1. Executive Summary

There are over 30 million mobile devices active in Australia today that help to meet the daily connectivity needs of Australian citizens and businesses. Mobile connectivity is central to the way consumers and businesses connect with each other, access services, interact with government and participate in the economy.

Mobile connectivity underpins productivity across sectors as diverse as transport, health, education, agriculture, mining, logistics and emergency management, and is increasingly the default platform through which Australians experience digital services.

"While the ACMA's Five-Year Spectrum Outlook is a useful planning tool, long term Government strategic policy direction about how to prioritise competing uses is essential to ensure Australia has adequate spectrum to stay at the forefront of technological evolution and meet growing demand in regional and rural areas." This quote from a March 2026 report by Deloitte Access Economics entitled, Future of Mobile: Reforms to modernise Australia's telecommunications[1], called for a National Spectrum Strategy for Australia. Until a National Spectrum Strategy is developed, AMTA will use this submission as the basis of its advocacy for the strategic spectrum imperatives required by the mobile industry.

The Draft Five-Year Spectrum Outlook 2026-31 (FYSO) rightly emphasises the final stage of the expiring spectrum licences (ESL) process, satellite direct-to-device (D2D) connectivity and the proposed Universal Outdoor Mobile Obligation (UOMO), 2 GHz mobile-satellite service (MSS), and preparations for WRC-27, as key priorities.

While AMTA supports this overall direction, we consider that the FYSO 2026-31 should do more to:

- articulate a credible spectrum pipeline for terrestrial and non-terrestrial 6G;
- move the 600 MHz band beyond passive monitoring;
- more explicitly connect UOMO implementation to realistic spectrum availability and timeframes; and
- continue optimisation of existing mobile broadband bands so Australian operators can deploy globally harmonised 5G and 6G technologies as efficiently as possible (particularly in the 3.4-4.0 GHz).

[1] Deloitte Access Economics, Future of Mobile: Reforms to modernise Australia's telecommunications, March 2026. Page 24

2. Mobile spectrum strategic imperatives

The March 2026 Deloitte Access Economics report called for a National Spectrum Strategy, similar to other leading economies such as the UK, US and the EU. A National Spectrum Strategy would deliver significant benefits for Australia by providing investment certainty, driving efficient allocation, and securing Australia's future digital technology and economic leadership. Setting a long-term spectrum vision for Australia would provide relevant signals and direction to all spectrum users to guide their planning decisions and would result in timely and efficient use of spectrum. Ahead of the creation of a National Spectrum Strategy, AMTA will use this submission to advocate for the strategic spectrum imperatives required by the mobile industry. Delivering on these imperatives will result in Australia continuing to provide an innovative and robust mobile sector to ensure Australia remains globally economically competitive.

2.1 Three national spectrum strategic issues

AMTA recommends three strategic imperatives to guide spectrum planning over the next five years and beyond:

- 6G Spectrum: Adequate spectrum to support the successful launch of competitive 6G networks in Australia around 2030, including low-band and mid-band pathways alongside continued optimisation[2] of existing 5G holdings.
- UOMO: Flexible spectrum solutions for all three Primary Universal Outdoor Mobile Providers (PUOMPs) to support the Universal Outdoor Mobile Obligation (UOMO), noting that direct-to-device (D2D) technology is still emerging and that spectrum constraints are real.
- Rural and regional capacity: Sufficient spectrum to support the growing capacity demands of rural and regional Australia, where propagation characteristics and network economics make spectrum decisions especially consequential.

2.2 6G Spectrum

The GSMA's November 2025 publication, Vision 2040: Spectrum for the Future of Mobile Connectivity,[3] paints the vision for the period through the 2030s, which it expects to be called "the 6G era". As the GSMA Director General notes, "*Careful planning is essential to ensure that 6G is not just available everywhere, but available to everyone*." This should be our goal for Australia. Importantly, the report also notes that "*Regulators should seek to assign spectrum in 3.8-4.2 GHz and upper 6 GHz to mobile by around 2030 to meet demand and consider 4.4-4.99 GHz and 7-8 GHz beyond that*."[4]

We agree. Initial 6G network infrastructure is expected to be available from around 2029, with devices and commercial launches expected in 2030. Australia has a strong track record of being a

---

2 Examples of optimisation include: improving the useability, for example by removing long-term power restrictions related to radio altimeters; defragmentation to create larger contiguous blocks; improving technical coordination to improve coexistence with adjacent (frequency and/or geographically) services; and alignment with international standards where possible to avoid unnecessary costs of bespoke solutions for Australia.

3 GSMA. **Vision 2040: Spectrum for the Future of Mobile Connectivity**, November 2025. Available at https://www.gsma.com/newsroom/press-release/6g-mobile-networks-will-need-up-to-three-times-todays-spectrum-to-meet-surging-data-demands-new-gsma-report-shows/

4 Ibid, p.7.

global early adopter of mobile technology, and it is in our economic interest to maintain this position. This requires spectrum to support the initial launch of 6G by 2029, and for mobile operators to have spectrum certainty well ahead of that launch date so they can plan for it.

Unlike 5G, where no minimum contiguous bandwidth was specified, 3GPP's early 6G work explicitly considers contiguous channels of at least 200 MHz to meet IMT-2030 performance objectives.[5] For an effective launch of competitive 6G networks in the 2029-2030 timeframe, early access to at least three lots of 200 MHz of contiguous harmonised spectrum is required to keep Australia at the forefront of mobile technology.

There are limited options to provide this; the Upper 6 GHz band expanded from 6585 MHz through to 7250 MHz, as proposed as an option in Europe, would represent the clearest pathway to meeting this goal.

Other mid-band options that could support 6G include future spectrum options such as the Upper C-band (4.0-4.2 GHz), 3.3 GHz, 4.4-5.0 GHz, 7250-8400 MHz, 14.8-15.35 GHz and mmWave bands, in particular at least 3 GHz of spectrum within 37.5-43.5 GHz.

To avoid unnecessarily early closure or reduction of 4G wide-area coverage, additional (new) low-band spectrum is also required for 6G. The 600 MHz band is the obvious candidate, but it requires more momentum and should be moved from the Monitoring stage to the Initial Investigation stage. Given the long lead times required for the transition of terrestrial television broadcasting and the importance of low-band spectrum to rural capacity, coverage and future 6G, we urge the ACMA and Government to take a leadership position and actively work to progress the transition and reallocation of this band.

2.3 UOMO

On 25 February 2025, the Government announced[6] its intention to introduce a universal outdoor mobile obligation (UOMO), following which a Bill was drafted, and is currently before the Senate. The Bill places obligations on MNOs to provide a base-level of outdoor coverage across the entire nation and external territories of Christmas Island and the Cocos (Keeling) Islands (except the Australian Radio Quiet Zone Western Australia (ARQZWA)).

Fundamental to the success of the UOMO is an adequate quantity of nationwide licensed, quality spectrum. We propose all potential 3GPP NTN bands should be considered by the ACMA as candidates for spectrum for UOMO. 3GPP Release 19 contains seven bands across L- and S-Bands designated for NTN, as specified in 3GPP TS 38.101-5 Table 5.2.2-1, NTN satellite bands in FR1-NTN[7]. We propose the ACMA introduce a work item into the FY2026-27 work plan that commences an investigation into the potential suitability of MSS spectrum candidate bands for UOMO. The investigation should review L-band, extended L-band and S-band, especially those frequencies for designated 3GPP NTN bands. This review should consider the likely support in device and satellite eco-systems and whether repurposing the spectrum to D2D and UOMO better serves the public interest.

---

5 Nokia. Widening the highway: a once-in-a-decade opportunity. Dec 2024. Available at https://www.nokia.com/blog/6g-to-be-optimized-for-upper-mid-band-spectrum/

6 https://minister.infrastructure.gov.au/rowland/media-release/albanese-labor-government-building-australias-mobile-future

7 3GPP specification TS 38.101-5, Ver 19.3.0, Feb 2026. Available at: https://www.etsi.org/deliver/etsi_ts/138100_138199/13810105/19.03.00_60/ts_13810105v190300p.pdf

AMTA also encourages the ACMA to continue providing frank, evidence-based advice into broader government and parliamentary processes on UOMO. In AMTA's view, before imposing a UOMO on MNOs, the government should take it upon itself to ensure MNOs have access to[8] sufficient, quality spectrum that can realistically support the services government expects to be delivered. At present, that spectrum pathway is yet to be determined.

The ACMA would obviously have a key role in supporting the government in the provision of spectrum. As a first step, the ACMA should use the FYSO to more clearly recognise that spectrum availability is a precondition to delivery, not an implementation detail that can be resolved later.

Recent industry commentary has also highlighted several practical risks in this area, including unresolved commercial models, device constraints and reliance on foreign-owned infrastructure. These matters reinforce the need for realism in both the design and the timetable of the proposed obligation.

From a regulatory perspective, there is a need to ensure alignment between spectrum access rights and commencement of the UOMO. Accordingly, any rights to the relevant spectrum should be tied to legal responsibilities to deliver the UOMO.

Even if the Government prefers to proceed on the current timetable for the purposes of delivering benefits to rural and remote areas earlier, the reality is that D2D for UOMO *cannot* be delivered without the necessary spectrum, technology, regulatory and commercial settings, and the final FYSO should acknowledge this implementation reality. Our view is that these settings will not be sufficiently mature under the current proposed government schedule.

The implementation issues extend to the provision of D2D services in the external territories, where the ACMA is due to release a workplan to consider licensing, planning and allocation initiatives that may support the UOMO in external territories. The UOMO Workplan and some spectrum options are discussed further in this submission in section 3.6.

2.4 Spectrum for rural and regional capacity

As the Draft FYSO recognises, mobile connectivity is central to the way Australians access services, interact with government and participate in the economy. That is particularly true in rural and regional Australia, where mobile networks are often the primary digital access platform for households, businesses, transport and emergency management. Regional capacity therefore deserves greater prominence in the final FYSO than a simple monitoring posture implies.

The 600 MHz band is central to that challenge and should be moved beyond the Monitoring stage. It is one of the few realistic future low-band options capable of materially improving capacity and coverage economics in rural and regional Australia, while also forming part of the long-term low-band pathway to 6G.

There was some initial movement with the release of a Media Reform Green Paper in 2021, halted by a subsequent change in Government the following year. Prior to the last federal election, in 2024, the then Minister announced broad review of broadcast spectrum. However, little progress has

[8] Not necessarily direct (licensed) ownership of.

been made on this review and would have essentially resulted in revisiting the policy work done in developing the Green Paper in 2021.

Given the time it will take to migrate broadcast services to DVB-T2 and restack the broadcast TV bands, unless this work starts soon it will be well into the middle of the next decade before this band will be made available to assist regional and rural Australians. It should be noted that for the original Digital Dividend, there was at least five years between the definition of the TV planning rules (2005-2007) and work on "early access" arrangements for MNOs in the 700 MHz (2012). Five years from now under a comparable undertaking would put us well beyond the 2030 6G target.

AMTA stands ready to work constructively with the ACMA, government and the broadcasting sector on a practical roadmap for the future use of the 600 MHz band, including reform options that preserve broadcasting objectives while progressively creating a pathway to future IMT use.

3. FYSO work plan feedback and requests

3.1 Background

It is useful to take a brief backwards glance at how government and industry arrived at the current set of priorities. Between 2015 and 2019, the mobile industry focused on securing the spectrum foundations for 5G, bookended by two major IMT-centric World Radiocommunication Conference (WRC) agenda items:

- WRC-15 Agenda item 1.1 focused on bands below 6 GHz, ushering in the 600 MHz, 1.5 GHz, 3.3 GHz and 4.8 GHz bands, along with further work on C-band.
- WRC-19 Agenda item 1.13 focused on bands above 6 GHz and successfully identified the 26 GHz, 40 GHz and 70 GHz bands for IMT, along with other millimetre-wave bands around 45-48 GHz in certain countries.

In Australia, the 2.3 GHz and 3.6 GHz bands were progressively transformed from bands used by proprietary fixed wireless technologies into true cellular mobile network bands using TDD LTE and 5G NR. Millimetre-wave (mmWave) spectrum was cast into the spotlight by the advent of adaptive antenna systems (AAS) capable of dynamic beamforming introduced with 5G New Radio (NR), although practical implementation and propagation challenges remain and more work is needed to allow mmWave to realise its full potential.

WRC-19 was followed by an intense domestic replanning process for the 26/28 GHz bands, which led to the establishment of the Area Wide Licence (AWL) licensing approach in 2020. AWLs were also a key component of the 3.4-4.0 GHz replanning project, which culminated in 2024 with the 3.4/3.7 GHz spectrum licence auctions and the 3.8 GHz metro and regional AWL allocation process. During this 2019-2024 phase, industry priorities were focused closer to home and on consolidating existing spectrum holdings so they were fit for purpose for 5G networks. Internationally, the big-ticket item was identification of the Upper 6 GHz band (6425-7125 MHz) for IMT in Region 1 under WRC-23 Agenda item 1.2, with the top 100 MHz of this range identified in all three ITU Regions as an important global marker for IMT in this part of the band. Mid-way through this period, the mobile industry started sounding the alarm on a potential "spectrum crunch", amplifying calls for ensuring sufficient spectrum for 6G. GSMA estimated that an average of 2 GHz of mid-band spectrum is needed per jurisdiction[9], while an AMTA-commissioned Coleago Report[10] which identified that in the order of 400-700 MHz of *additional* mid-band spectrum was required by 2030 in Australia's largest capital cities.

Since 2024, the mobile industry's top priority has been the ESL process. The ACMA's preferred view that renewing spectrum licences used for public cellular mobile networks is likely to promote the long-term public interest has provided welcome certainty and relief for industry, and the focus is now shifting to implementation. At the same time, another major technology development has emerged: the ability for standard mobile phones to maintain a connection to public telecommunications networks via satellite D2D services. This is an exciting prospect, but it also creates a new policy and spectrum challenge in the context of the proposed UOMO, particularly

---

9 GSMA, February 2022, *The Socio-Economic Benefits of Mid-Band 5G Services*, available here: https://www.gsma.com/connectivity-for-good/spectrum/gsma_resources/mid-band-5g-spectrum-benefits/

10 Coleago, Nov 2021, *Demand for mid-band spectrum in Australia*, available here: https://amta.org.au/wp-content/uploads/2021/12/Coleago-Report-Demand-for-mid-bands-spectrum-in-Australia.pdf

where statutory obligations may be imposed before spectrum, technical and commercial settings are settled. In the background, 6G looms large and will need both low-band and mid-band spectrum support, acknowledging that there is already substantial high-band spectrum available when needed—re-planning the Upper 6 GHz band for wireless broadband (WBB), securing an IMT identification of 7125-7250 MHz under WRC-27 Agenda item 1.7 are top priorities in this regard, along with building momentum on 600 MHz.

3.2 Upper 6 GHz Band

Upper 6 GHz band: On the Upper 6 GHz band ("U6"), AMTA welcomes the ACMA's updates in the draft FYSO, including the recognition that international developments such as the European RSPG Opinion[11] and Ofcom's consultation outcomes[12] provide greater comfort that there will be a satisfactory ecosystem for WBB devices in the band. We also agree with the ACMA's preliminary views that spectrum licensing within defined areas makes the most sense, that a spectrum re-allocation declaration within the next 12 months would provide valuable certainty to both aspirant licensees and incumbents, and that focusing first on arrangements *within* defined areas is a sensible priority. In response to the ACMA's question in the draft FYSO, AMTA's response is that spectrum to support the initial launch of 6G will be required by 2029.

7100-7250 MHz: The 7100-7250 MHz range is, however, essential to supporting 200 MHz contiguous channels for 6G in U6 and should receive stronger support in the FYSO and in Australia's preparations for WRC-27 Agenda item 1.7. In particular, the FYSO should explicitly reflect Australia's preliminary support for IMT identification in 7125-7250 MHz[13]. This would also align with the logic of the European RSPG Opinion: the adoption of a 6585 MHz RLAN/IMT boundary is only truly validated if 7125-7250 MHz is also made available for IMT.[14] For that reason, AMTA sees a compelling reason to move 7125-7250 MHz from the Monitoring stage to the Initial Investigation stage and incorporated into the ACMA's imminent work on U6. From there, it should be fast-tracked to Implementation.

- If, for some reason, 7125-7250 MHz is ultimately not identified for IMT at WRC-27, it would be relatively straightforward to withdraw that frequency range from the replanning exercise at a later stage. By contrast, attempting to bolt that spectrum onto Upper 6 GHz arrangements after WRC-27 would be significantly more complex and is likely to lead to delay and poorer planning outcomes. Learning from the experiences of the collection of re-planning exercises within 3.4-4.0 GHz, it is important to try to consider frequency ranges holistically to the greatest extent possible and avoid piecemeal allocations.
- We acknowledge that our request represents a reduction in the 7.2 GHz Television Outside Broadcasting (TOB) band. However, we believe that this band is currently used lightly or

---

11 EC RSPG, November 2025, *Opinion on Long-term vision for the upper 6 GHz band*, available here: https://radio-spectrum-policy-group.ec.europa.eu/document/download/3301c2fd-7bff-4ecf-bfcd-cfb572a5972f_en?filename=RSPG25-031final-RSPG-Opinion-Upper_6GHz_band.pdf

12 Ofcom, January 2026, *Expanding access to the 6 GHz band for commercial mobile and Wi-Fi services*, available at: https://www.ofcom.org.uk/siteassets/resources/documents/consultations/category-3-4-weeks/consultation-expanding-access-to-the-6-ghz-band-for-commercial-mobile-and-wi-fi-services/main-document/expanding-access-to-the-6-ghz-band-for-commercial-mobile-and-wi-fi-services.pdf?v=410329

13 The Department, February 2026, *Australian Preliminary Views on WRC-27 agenda items*, available here: https://www.infrastructure.gov.au/sites/default/files/documents/australian-preliminary-views-on-wrc-27-agenda-items-february-2026.pdf

14 EC RSPG, November 2025, *Opinion on Long-term vision for the upper 6 GHz band*. Section 5.3, p.26, Policy Recommendations 6 to 9 inclusive.

intermittently by TOB services, and therefore that there are other ways to ensure that the TOB service's needs are satisfied without having to carve out 200 MHz of ***exclusive*** TOB spectrum (in addition to the 125 MHz of TOB spectrum ***shared*** with Defence). We are willing to work with the broadcasting industry to find effective and efficient solutions to get the most out of this 325 MHz wide band. In this regard, we recommend that the ACMA have due regard to Ofcom's commentary in sections 5.5 to 5.14 of its recent consultation paper on the Upper 6 GHz band[15], in particular: *"Our assessment is that mobile use of upper 6 GHz is likely to bring large benefits to citizens and consumers (as set out in earlier Sections). Therefore, it would not be proportionate or justifiable to forego this use in order to maintain availability for very occasional "borrowing" by PMSE events"*.

Single allocation: To avoid fragmentation across the U6 and 7100-7250 MHz "bands", it is essential the ACMA bring this spectrum to market in a single allocation. As noted in section 2.2 above, an important design consideration for 6G is wide, contiguous channels, and we support moves for 200 MHz channels. 200 MHz contiguous channels will not be possible if this spectrum is allocated across multiple allocations. We strongly encourage the ACMA to plan for a single allocation, and for it to occur in time for the deployment of initial 6G network infrastructure (expected to be available from around 2029).

3.3 600 MHz key to improved rural and regional services

The 600 MHz band requires more momentum. It should not remain indefinitely in the Monitoring stage. Given the long lead times required for any reform of terrestrial television broadcasting and the importance of low-band spectrum to rural capacity, coverage and future 6G, a passive monitoring posture is insufficient. The final FYSO should indicate a more active program of policy development and preparatory work for future use of the band for wide-area cellular mobile networks. The European RSPG's recent work on the 470-694 MHz band is instructive. IMT end-users of spectrum argued that the 470-694 MHz band (or parts thereof) is fundamental to improving 5G, introducing 6G, expanding coverage in rural and indoor areas and addressing the ever-growing demand for IMT services. The RSPG material also refers to GSMA advocacy for 600 MHz in rural areas in particular, including scenarios under which digital terrestrial television remains in 470-614 MHz while 614-698 MHz is allocated to IMT.

Against that backdrop, AMTA considers the draft FYSO remains too reactive on the 600 MHz band. Statements that the future of television broadcasting will be examined under a Department-led initiative, that the ACMA will monitor the government's consideration of broadcasting reform, and that it will continue to monitor developments in Europe, the ITU and the APT do not amount to a sufficiently proactive mobile spectrum strategy for the band. The final FYSO should set out a stronger work program directed to preparing for future IMT use.

Europe has the GE06 Plan which led to a secondary mobile allocation at WRC-23. With this in mind, AMTA encourages the ACMA to broaden its lens to include the Americas, the Middle East and the Asia-Pacific, where developments on 600 MHz and adjacent broadcasting reform questions may offer more relevant lessons for Australia.

[15] Ofcom, April 2026, Expanding access to the 6 GHz band for mobile and Wi-Fi services—Our approach to future mobile use in high density areas and incumbent users in this band, available here: https://www.ofcom.org.uk/spectrum/innovative-use-of-spectrum/expanding-access-to-the-6-ghz-band-approach-to-future-mobile-use-and-incumbent-users

3.4 Immediate changes to the 3.4-4.0 GHz band

We note that the ACMA has completed four allocations in the frequency range 3.4-4.0 GHz—i.e. 3.4-4.0 GHz Remote AWLs, 3.4/3.7 GHz spectrum licence auctions, 3.8 GHz metro and regional AWLs, and finally, the highly-localised wireless broadband (HL WBB) services in 3400-3475 MHz (in "Urban Excise" areas only) and in 3950-4000 MHz (across all metro and regional areas). To improve the utility of the band for cellular mobile networks and to prepare the band for future optimisation and defragmentation, we have five requests which we believe can be carried out within the next 12 months, and which have already been raised in our response to the previous draft FYSO. These are:

A. For the 3.4 GHz SL unwanted emission limits, the frequency edge above which spurious emission limits apply (i.e. the "spurious domain edge") needs to move from 3840 MHz to 4040 MHz.[16]
B. Also, for the 3.4 GHz SL unwanted emission limits, the SLs need to define some allowance to be able to exceed these, for example, by agreement. If the same-area, adjacent-frequency AWL licensee agrees, then there should be no reason for the spectrum licensee to have to comply with the unwanted emission limit within the licensed frequency range of the licensee(s) with which the agreement was made.[17]
C. HL WBB apparatus licences—both those within the "Urban Excise" areas in 3400-3475 MHz and those in 3950-4000 MHz—are to expire no later than 13 December 2030.
D. With respect to Radio Altimeters (RAs): The EIRP limit of 72 dBm/5 MHz currently imposed on SLs in the range 3700-3800 MHz needs to be removed.[18]
E. Introduce Power Class 1 / Power Class 1.5 higher-powered devices into the band by lifting the registration exemption threshold.

Item B above may ultimately be supported by band-by-band introduction of provisions for ***'wideband amplifiers'***, as the ACMA has recently proposed for renewed 850 MHz and 1800 MHz spectrum licences. AMTA supports that concept but considers those provisions should be fast-tracked into other bands as well, at least the 2 GHz and 3.4-4.0 GHz bands. The current regulatory forbearance offered by the ACMA is too restrictive and administratively burdensome to be a durable long-term solution.

On Item C above, the ACMA has agreed with AMTA's request, and has made public statements that HL WBB licences (as well as AWLs) will generally not be issued with terms beyond 13 Dec 2030. However, the public statements around HL WBB expiry are made in consultation documents rather than in current ACMA policy documents. As such, RALI MS 50 should be amended to clearly signal to licence applicants and Accredited Persons (APs) that the expiry date shall be no later than 13 December 2030. Furthermore, RALI MS 50 should be amended to require the inclusion of an Advisory Note on the Point to Multipoint System (PMPS) licence that the expiry date shall be no later than 13 December 2030, and that licence renewal should not be presumed. We believe that this is a

---

16 AMTA first wrote to the Executive Manager of the ACMA's Spectrum Planning & Engineering Branch (SPEB) on this matter on 22 December 2023

17 Note: the ACMA's document *Know your obligations—Spectrum licensees* (available here: https://www.acma.gov.au/sites/default/files/2019-08/Know-your-obligations-Spectrum-Licensing.pdf) already states that outside-the-band emission limits *"may be varied through negotiated agreement with affected adjacent licensees"*. However, section 4.1.6 of this document clarifies that *"Agreements cannot be used to authorise the operation of devices: ... with emission limits outside a designated spectrum-licensed band greater than the limit specified in the spectrum licence".*

18 AMTA wrote to the Executive Manager of the ACMA's SPEB on this matter on 23 October 2023, and in addition to the request being made in previous FYSO responses, has also raised this issue as part of the recent consultation on RA coexistence measures.

relatively simple task that is administrative in nature only, given that it is consistent with existing ACMA statements on the matter.

On item E above, AMTA members anticipate a requirement to enable higher-powered user equipment (HPUE) in the 3.6 GHz band for fixed wireless access. We note the registration exemption threshold for user equipment is 28 dBm TRP, and we observe that 3GPP Power Class 1.5 (PC-1.5) is 29 dBm TRP and 3GPP Power Class 1 (PC-1) is 31 dBm TRP.

3.5 Longer-term changes to the 3.4-4.0 GHz band

As explained in the 2024 and 2025 FYSO responses, it is crucial that spectrum licences for 5G MNO wide-area networks are fit-for-purpose. The existing allocations are inefficient, and any defragmentation activities will require ACMA support. Changes that need to be made to support defragmentation include alignment of geographical licence areas across the band as a necessary precursor to industry-wide defragmentation, alignment of spectrum holdings to 10 MHz channels and the application of common licence conditions. Importantly, improved alignment across these dimensions would make industry-led exchanges and reconfiguration more feasible and practicable. These activities would be complex and AMTA strongly encourages the ACMA to consider including these items as part of the renewal of 3.4 GHz ESL, expiring 13 December 2030.

Recent developments in the US regarding potential use of spectrum within 4.0-4.2 GHz (discussed above) will likely complicate this exercise further, especially noting the recent introduction of apparatus-licensed services in 3.75/3.8-4.0 GHz—there may be too many different systems and services, held by too many different licensees, to be able to restack these services upwards.

3.6 UOMO Workplan

In this section we identify some key items in the ACMA's workplan that have the potential to significantly impact whether or not adequate and feasible spectrum bands and regulatory settings will be available to support UOMO, in addition to the higher-level issues already identified in section 2.3 above.

2 GHz MSS: If 2 GHz MSS is intended to form part of the UOMO toolkit, then the allocation process should tie in legal obligations to deliver the UOMO. Any allocation of the 2 GHz MSS band should be facilitated by a competitive process, regardless of whether an auction or administrative allocation is undertaken.

1800 MHz band: AMTA appreciates that the ACMA has held off on releasing a public discussion/consultation on the replanning of the 1800 MHz and 2 GHz bands outside of spectrum-licensed geographical areas, pending further consideration of whether and how these bands could support UOMO. We look forward to consultation on revised planning options in Q3 2026, and we hope that the proposal advanced in AMTA's submission to the original consultation paper is featured among those options: namely, consolidation of MNO operations into the 1800 MHz band and conversion of Remote areas to spectrum licensing, along with consolidation of non-MNO operations into the 2 GHz band.

- At present, the 1800 MHz band appears to be one of the strongest contenders for supporting UOMO because it shows the highest level of compatibility with radio astronomy observations associated with the Square Kilometre Array (SKA) at the Australian Radio Quiet Zone Western Australia (ARQZWA); all three MNOs hold spectrum in the band; and there is a

credible path to future bandwidth growth (i.e. if non-MNO localised networks and private LTE/5G systems are migrated to 2 GHz and rail services are migrated to 1.9 GHz).

- In the context of UOMO, the draft FYSO's current reference to *"interest in using these bands for IMT-based D2D services"* understates the issue. The framing should be strengthened to recognise that the 1800 MHz and 2 GHz bands outside spectrum-licensed areas may prove to be among the very few viable spectrum options that could allow MNOs to satisfy obligations the government is proposing to impose on them.
- Relatedly, AMTA has a strong interest in the 'long-term use of the 1800 MHz band' project and would welcome consideration of whether that work could be used to repurpose spectrum from rail services to facilitate an upward expansion of metro spectrum licensing arrangements (i.e. from 1865 MHz (1870 MHz in Adelaide) to 1880 MHz).

WRC-27 Agenda item 1.13: In Australia's preparations for WRC-27 Agenda item 1.13, an appropriate balance must be struck between facilitating D2D operations and protecting terrestrial IMT networks. AMTA considers that terrestrial IMT must retain primacy and that D2D should be complementary to terrestrial networks, limited to circumstances where terrestrial coverage is not available. Any MSS arrangements introduced in existing IMT bands should therefore operate on a no-interference, no-protection basis to incumbent IMT networks, consistent with the need to preserve the integrity of Australia's terrestrial mobile broadband framework.

3.7 Other issues

Optimisation of existing bands under the ESL process: AMTA welcomes the fact that, while the major standalone optimisation projects are nearing completion, similar work will continue to be undertaken through the ESL process. That ongoing work should ensure that spectrum licence conditions and the associated spectrum licence technical frameworks (SLTFs) support the latest 5G and emerging 6G technologies, including AAS, wideband amplifiers, wider channel widths, carrier aggregation and alignment with 3GPP wherever possible, to minimise the need for bespoke Australian solutions.

It is imperative that Australia avoid repeating the experience of the 3.4-4.0 GHz range, where piecemeal allocations have created inefficiency, fragmented spectrum and duplication of effort for both industry and the regulator. There should be no reluctance to revisit planning settings where new international developments materially change the picture. A willingness to adapt decisions as better information becomes available should be viewed as a strength, supporting effective, evidence-based spectrum management. Reviewing the upper boundary of the Upper 6 GHz band allocation of 7100 MHz is one clear example where this general guiding principle would be useful to apply.

Consistency of licence conditions: More broadly, consistency of licence conditions should be treated as a high-level objective in any band-planning exercise. Alignment of licence conditions within a band, and where possible across substitutable bands, facilitates trading, promotes more efficient network design and reduces unnecessary complexity for licensees and equipment ecosystems.

2.5 GHz band under the ESL process: The 2.5 GHz band should also remain in scope for meaningful optimisation under the ESL process. In AMTA's view, that should extend beyond the intentionally narrow issues covered in the recent 2.5 GHz Technical Liaison Group and include more substantial consideration of unwanted emissions below 2615 MHz and above 2690 MHz.

2300 – 2302 MHz: Converting the 2300–2302 MHz segment to spectrum licensing needs to be moved to the Preliminary Replanning stage. To accommodate growing 5G traffic demand, mobile network operators are progressively refarming spectrum from 4G to 5G services. AMTA members consider that spectrum licensing in the 2.3 GHz band should align with 3GPP standards that support contiguous 100 MHz channels. Alignment in this way enables operators to leverage the global 5G network and device ecosystem more efficiently, reducing complexity and accelerating service capability. Prioritisation also provides timely certainty ahead of expiring spectrum licences, supporting reinvestment decisions and more efficient use of existing national spectrum assets.

Standard power RLAN using AFC: AMTA is comfortable with the ACMA delaying consideration of WBB outside 'defined areas' in U6 while it focusses on arrangements within defined areas. However, AMTA reiterates that RLAN above 6585 MHz should not be permitted, even outside defined areas. More broadly, standard-power RLAN should not be authorised above 6425 MHz at all. To ensure a sufficient guard band and avoid unintended consequences that may squeeze U6 WBB further above 6585 MHz, and so that there remains clean spectrum for VLP/LPI RLAN without undue impact from standard-power transmissions, the upper boundary for standard-power RLAN should sit somewhere **below** 6425 MHz.

The ACMA also makes claims about the WISPAU AFC trial and that "there have been no interference issues with other licensed services". AMTA members do not consider that this is a sound or sufficient conclusion when assessed against accepted principles for evaluating coordination requirements between two systems.

The absence of reported interference by incumbent users is not evidence of non-interference from standard power RLAN systems unless incumbent operators were actively engaged in the trial. Interference to incumbent systems can only be identified and quantified by the operators of those systems, using their own operational measurements and service level performance indicators.

This is especially critical for services such as fixed point-to-point links, where interference may manifest as subtle and intermittent degradations, such as reduced fade margin or increased error rates, rather than complete link failure. These impacts are often invisible to systems external to the incumbent network but can nevertheless compromise service reliability.

AMTA considers that a credible trial must deliberately test corner cases and loading conditions. Coexistence assessments should not be limited to nominal or lightly loaded scenarios. They must include worst case scenarios between RLAN devices and incumbent receivers including maximum permitted EIRP and antenna gains, different propagation environments, and stress testing both systems under peak traffic conditions.

As the WISPAU AFC trial did not include structured tests addressing these scenarios with incumbent participation, then claims of "no interference issues" are inherently incomplete and potentially misleading.

Conclusions drawn from trials where incumbents were not engaged risk normalising a flawed evidentiary standard. Accepting "no reports of interference" from parties who were not part of the trial sets a precedent that undermines the protection framework for licensed services. This approach effectively shifts the burden of proof away from proponents of new uses and onto incumbents, despite incumbents lacking both visibility and opportunity to observe interference outcomes under trial conditions.

That said, we do not object to the continuation of the trial as per its current setup, provided that participants do indeed notify fixed link licensees (as we understand is actually required by the trial

methodology). However, we do suggest that a more collaborative trial process (involving elements such as those described above) be set up in the near future—involving aspirant users of AFC-enabled SP WiFi, aspirant AFC providers and fixed link licensees—before any further conclusions on coexistence can be made by the ACMA. We welcome further engagement.

Embargo 80: Any review of Embargo 80 should continue to preserve spectrum options for mmWave 5G and 6G, in particular at least 3 GHz from within the range 37.5-43.5 GHz. Australia has substantial long-term interest in ensuring that enough high-band spectrum remains available for future IMT use as technology and commercial demand mature.

AWL geographic discontinuity policy: AMTA also seeks clarity on the ACMA's AWL geographic discontinuity policy. That policy was introduced late in the piece, after the most significant AWL allocation processes had already occurred. The final FYSO should indicate whether the ACMA intends to undertake a retrospective review of existing AWLs to align with this policy.

Secondary licensing framework: We noted that the ACMA is still working with the Department on the merits of place-based secondary licensing framework (SLF). As AMTA had stated in our response to the ESL Stage 3 consultation, "*The SLF is a pivotal component for consideration in the renewal of ESLs, as it speaks to a licensee's ability to use spectrum they are not using today but plans to in the future*." Given the imminent release of Stage 4 outcomes papers, and the impact an SLF would have to incumbent licensees' valuation of the spectrum, we assume the ACMA will now discontinue any work on the SLF and remove this item from its work program.

4. Conclusion

AMTA supports the ACMA's work in the draft FYSO 2026-31 and welcomes the stronger emphasis on ESL implementation, UOMO-related D2D issues and WRC-27 preparations. To maximise the long-term public interest derived from spectrum, however, the final FYSO should be more ambitious on the mobile spectrum pipeline, it should:

- Move 600 MHz beyond monitoring,
- Explicitly support IMT planning for 7100-7250 MHz alongside Upper 6 GHz,
- Ensure UOMO settings are matched with realistic spectrum and technology timeframes, and
- Continue the optimisation of existing mobile broadband bands.

AMTA looks forward to continued engagement with the ACMA on these matters.

PO Box 1057, North Sydney NSW 2059 | + 61 2 8920 3555
amta.org.au | ABN 98 065 814 315

AMTA
Australian Mobile Telecommunications Association