

Response to submissions Draft FYSO 2025–30

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Response to submissions

The ACMA invited comments on the draft *Five-year spectrum outlook 2025–30* (FYSO 2025–30) published in March 2025. This included the 5-year outlook and future demand for spectrum, and the priorities outlined in our annual work program.

Engagement with our spectrum users on the annual work program is a valuable way in which we get contemporary advice about the technology environment and international harmonisation activity. It gives us insights into the ongoing market changes that affect current and future demand for spectrum. It also helps us to shape our work program to help ensure we continue to deliver valuable spectrum management outcomes.

We thank all stakeholders who responded to our consultation.

We received 35 public submissions from industry operators, representative and peak bodies, government agencies and the public.

Our draft 2025–30 work program proposed a diverse range of projects. Feedback largely supported our draft 2025–30 work program priorities. It also included suggestions for different prioritisation of specific band planning and licensing activities, as well as additional activities to include in the work program.

We have considered all suggestions and indicate in the FYSO 2025–30 where we have adjusted the work program. While we have not been able to accommodate all suggestions, the feedback we received will inform our future work program development.

This document focuses on the major themes raised in submissions and our response to them.

Acknowledgement of the use of artificial intelligence (AI)

This document was developed with the assistance of Microsoft Copilot, an Al-based tool that provided support with summarising received submissions. To ensure accuracy, ACMA staff reviewed the outputs and cross-checked these against the original submissions, before we responded to submissions.

Part 1: Five-year spectrum outlook 2025–30

The policy environment and regulatory reform

Regional connectivity

Two submitters were supportive of our policy focus to improve regional connectivity through our mid-band spectrum allocations and support of satellite communications.

Submitters provided suggestions on how we could further enhance regional connectivity.

A submitter asked the ACMA to ensure that spectrum policy supports Wi-Fi access to the full 6 GHz band to improve broadband affordability and performance in regional areas.

Our response

Our planning decisions and the way we design licensing and allocation processes facilitates a range of use-cases in various locations. For instance, we are aware of the demand for mid-band spectrum to support a range of different services. For our allocations in the 3.4–4.0 GHz band, we have made planning decisions and designed allocation processes to facilitate a diversity of use-cases via the spectrum licence auction and administrative allocation processes for apparatus licences, including area-wide licences (AWLs).

Since we consulted on the draft FYSO, we have released our <u>stage 3 consultation – preliminary views</u>, a critical stage of our <u>expiring spectrum licence (ESL) process</u>, and conducted a 3-week reply-to-comment period to give stakeholders the opportunity to provide informed commentary and new perspectives on the views raised in submissions.

Outcomes for regional, rural and remote Australia were a key consideration in forming our preliminary views. We are currently favouring renewal of many of these licences, including those relied upon by Australians in hard-to-connect places who use the fixed wireless component of the NBN. Other licences are key inputs into the Optus/TPG spectrum sharing arrangement, which Optus/TPG say will boost coverage and competition outside of metropolitan areas. We are also favouring renewal of national licences to maximise options for mobile network operators to deploy low earth orbit satellite services, which have the capacity to offer connectivity in parts of Australia that are under-served or unserved by terrestrial networks. In forming these views, we had regard to communications policy objectives in the Radiocommunications (Ministerial Policy Statement – Expiring Spectrum Licences) Instrument 2024, which include connectivity and investment in regional and remote areas to deliver improved services to end users.

We also want to do more for Australians in the regions by exploring reform options. Following consideration of advice we provided in December 2024, the former Minister for Communications asked that we explore the merits of a secondary licensing framework that retains the current and future benefits of the national licensing model. The former minister also flagged that we should make better use of unused or under-utilised spectrum for

place-based services in regional areas. We are exploring this work with the Department of Infrastructure, Transport, Regional Development, Communications, Sports and the Arts (the Department).

In our recent decision paper <u>Future use of the upper 6 GHz band</u>, we outlined expansion of radio local area network (RLAN) provisions (6425–6585 MHz). We address other comments on the <u>6 GHz</u> band later in this paper.

We continue to encourage all parties to engage in our consultation processes to foster discussion of licensing and allocation of particular spectrum bands.

Closing the Gap

One submitter expressed support for the ACMA's policy objective to help close the gap on digital inclusion and support the Australian Government commitment to Target 17 of the National Agreement on Closing the Gap – to achieve equal levels of digital inclusion for Aboriginal and Torres Strait Islander people by 2026.

This submitter suggested that the ACMA expand the Radiocommunications (Low Interference Potential Devices) Class Licence 2015 (the LIPD Class Licence)¹ to provide spectrum access for Wi-Fi in First Nations communities. It also suggested that we allocate spectrum particularly in the 6 GHz band to allow community Wi-Fi networks to operate with greater capacity and efficiency.

Our response

Our <u>stage 3 – consultation preliminary views</u> on expiring spectrum licences have considered outcomes achieved by spectrum licensing arrangements in regional area, and how these arrangements could continue to facilitate opportunities for regional, rural and remote connectivity. This allows us to contribute to connectivity outcomes for First Nations Australians. Place-based outcomes, including outcomes for First Nations communities, are a key focus of the secondary licensing framework that the Minister has asked us to continue to explore.

As discussed, changes in the 6 GHz band may assist in bridging the digital divide, in particular through providing additional Wi-Fi capacity. We address comments on the <u>6 GHz</u> band later in this paper.

Net zero emissions

Two submitters were supportive of our work to support the Australian Government commitment of achieving net zero emissions by 2050. One submitter provided several suggestions of further applications of efficient use of spectrum that could be leveraged to reduce emissions and electricity consumption, including fibre-to-the-home deployments and full, unlicensed access to the 6 GHz band for Wi-Fi.

Our response

We will continue to monitor international developments and technological advancements, as well as related spectrum arrangements that aim to support more efficient communications energy use and climate initiatives.

¹ Note that the Radiocommunications (Low Interference Potential Devices) Class Licence 2015 sunset on 1 October 2025. The Radiocommunications (Low Interference Potential Devices) Class Licence 2025 is now in effect.

In our recent decision paper <u>Future use of the upper 6 GHz band</u>, we outlined expansion of RLAN provisions (6425–6585 MHz), which will increase Wi-Fi capacity in the 6 GHz band.

Resilient communications

One submitter recognised the importance of the ACMA's work to ensure that communications networks maintained resilience during natural disasters. This submitter suggested that expanding access to the 6 GHz band for Wi-Fi networks would improve network resilience during natural disasters.

Our response

We will continue to consider ways to ensure that our spectrum management activities, including our consideration of <u>expiring spectrum licences</u>, take into account issues of resilience and temporary disaster responses.

We address comments on the 6 GHz band later in this paper.

Universal service arrangements and new Universal Outdoor Mobile Obligation

Several submitters were supportive of the government's announced Universal service arrangements and the new Universal Outdoor Mobile Obligation (UOMO). One submitter suggested that industry should be closely consulted on the implementation of the UOMO to ensure that technical and spectral requirements enabled direct to device services.

Another submitter warned of the possibility that dependence on satellites to meet coverage obligations could result in regions where services are only available outdoors.

Our response

The government recently consulted on draft legislation to support the introduction of the UOMO, and is working to introduce legislation as soon as possible. The government is also liaising closely with industry to monitor the rollout of technology to enable the obligation to commence as soon as possible.

We will continue to collaborate with government on spectrum management aspects of the UOMO, including examining how the provision of direct-to-device (D2D) services covered by the UOMO might work in the external territories that are not subject to spectrum licensing. In its <u>response to the 2024 Regional Telecommunications Review</u>, the government noted that while the UOMO is the first step towards the modernisation of Australia's universal services framework, broader universal services reform is important. The government also stated that it has consulted on and is carefully considering potential approaches to improve delivery and funding of baseline fixed services provided to homes and businesses.

International Influences

One submitter urged us to provide the entire 6 GHz band for Wi-Fi – similar to Canada, the US and South Korea. Another submitter encouraged us to remain harmonised with global satellite trends, specifically referring to international standardisation activities.

Our response

Harmonisation of domestic planning arrangements with international arrangements and standards is a key input to our planning process. With WRC-23 outcomes, while some of our

planning processes have regard to certain outcomes (e.g. IMT identifications in the 6 GHz band), as outlined in the consultation on <u>updating the spectrum plan</u>, many outcomes (especially those related to satellite services) are dependent on Australia's adoption of the Final Acts of WRC-23 as party of Australia's domestic treaty ratification process. That process is being managed by the Department. The Partial Revision of the 2019 Radio Regulations, as incorporated into the Final Acts of the World Radiocommunication Conference 2023 (WRC-23) was tabled in Parliament on 29 July 2025. The Joint Standing Committee on Treaties (JSCOT) tabled its report on the treaty on 3 September 2025. The report contains JSCOT's recommendation to take binding treaty action. We updated the Australian Radiofrequency Spectrum Plan 2021 (ARSP) in October 2025. We will consider further updates to reflect WRC -23 outcomes over the coming years.

We address comments on the <u>6 GHz</u> band later in this paper.

Broadcast spectrum developments

One submitter noted international momentum for the allocation of the 600 MHz band, currently used by television broadcast services, for mobile services.

Our response

We are monitoring global interest and developments in the 600 MHz band. Future domestic consideration of the band will be informed by global developments, as well as any considerations arising out of the Department's work on the future delivery of terrestrial television services.

² Report 227 is available on the Parliament of Australia website.

Market and technology drivers

Satellite communications

Submitters were largely supportive of the ACMA's regulatory approach to satellite communications. They identified a variety of emerging technologies and their potential to cause interference.

One submitter emphasised the growing importance of the Q/V bands (37–43.5 GHz and 47.2–48.2 GHz) for satellite communications particularly for feeder links and Earth stations in motion (ESIM). This submitter supported the developments of D2D services, leveraging bands standardized by 3GPP (e.g. S, L, Ka and Ku bands) and noted that Australia is well positioned to benefit from these services due to its geography and absence of land borders. This submitter also stated that the protection of the C-band spectrum particularly above 4 GHz is essential to provide regulatory certainty to long standing media and broadcast customers.

Our response

We are aware of the satellite industry's interest in these bands to support upcoming new satellite services. While we do not intend to undertake a full review of the Q/V bands at this time, we acknowledge that the satellite industry is seeking greater certainty in access to the spectrum to assist long-term planning (particularly for gateway earth stations), with a number of operators looking to deploy new satellite systems in the coming years.

To support this, we developed an interim licensing process for licence applications for gateway satellite earth stations in these bands. These are recorded in <u>spectrum embargo</u> 80.

In our <u>Response to submissions: Draft FYSO 2024–29</u>, we advised that we were open to considering whether additional guidance could be provided for remote areas, and considered at the time that this work was unlikely to occur before 2025. As we are yet to commence that work, we are open to considering changes to provide greater certainty in all areas of Australia. However, commencement of that work is dependent on consideration of impact on our existing work program.

We acknowledge the use of C-band spectrum by broadcast customers and have no current plans to change arrangements for earth receive services in 4000–4200 MHz, after having completed the 3.4–4.0 GHz allocation processes.

Spectrum for government requirements

One submitter advocated for a major change to bands to allow access to spectrum for essential government services, with a cost recovery model applied for use of the spectrum.

Another submitter suggests we should follow the US's National Spectrum Strategy where it will pursue expanded opportunities for shared access between wireless broadband (WBB) and government-held spectrum, particularly in the 3.3–3.4 GHz, 4.4–5.0 GHz and 14.8–15.35 GHz bands.

Our response

Our overall approach to management of the radiofrequency spectrum focuses on promoting the long-term public interest derived from the use of spectrum.

We aim to deliver efficient spectrum planning, allocation and licensing arrangements to support the use or uses that best promote the long-term public interest. Our allocation program and licensing processes are intended to support a wide range of spectrum use-cases and a diverse set of spectrum users.

A balanced application of market and regulatory mechanisms means that government spectrum users usually operate within the same spectrum management framework as other users, although some government spectrum needs warrant additional considerations and regulatory arrangements.

In assessing the impact that a regulatory proposal has on the public interest, we consider the overall effects on individuals, businesses, government users of spectrum and community organisations, as well as the broader economic, social and competition impacts.

Spectrum sharing

Three submitters cautioned against the use of spectrum sharing and indicated their views that these mechanisms should not be imposed where mobile operators are already providing services.

One submitter encouraged us to proactively study and trial automatic frequency coordination (AFC) enabled spectrum sharing to optimise spectrum efficiency.

Our response

The ACMA has been proactively monitoring and researching AFC developments in other regulatory regimes and is currently preparing a paper to discuss how AFC might be implemented into the Australian regulatory regime. We are open to proposals on AFC implementation models, noting our current position on broader spectrum sharing. It should be noted that we are releasing a discussion paper in Q4 2025 with regards to the deployment of AFC in the 6 GHz band.

In March 2025, we provided advice to the Minister on the use of certain approaches to licensing and spectrum utilisation, including use-it-or-share-it (UIOSI) frameworks. We identified that while actual implementations of UIOSI frameworks was uncommon in international practice, there are early, but promising uses of demand-driven secondary access frameworks for WBB spectrum. We are undertaking further work to better understand what role such a framework could have in Australia.

Part 2: 2025–26 annual work program

Monitoring stage

600 MHz (617-698 MHz)

The 600 MHz band received comment in some submissions. One submitter supported continued monitoring of the 600 MHz band and encouraged us to undertake long-term planning for the allocation of the band to WBB. Another submitter advised that this band will be required by WBB industry to assist in meeting their likely UOMO obligations.

Two submitters suggested that the band be moved to the 'initial investigation' stage of our planning process to facilitate reallocation of the band for WBB use. Both submitters emphasised that this band would be required by 2030 for 6G deployment.

Our response

We are monitoring global interest and developments in the 600 MHz band. This includes the outcomes of WRC-23 agenda item 1.5, which allocated the 614–694 MHz band to the mobile service in Region 1 in the Radio Regulations and identified it for IMT in specified countries in the Middle East. The EU Radio Spectrum Policy group *Opinion on the ITU-R World Radiocommunication Conference 2023* paper supported this outcome, with a WRC-31 agenda item to further study mobile use in the band and possible regulatory action.

Future domestic consideration of the band will be informed by global developments as well as any considerations arising out of the Department's work on the future delivery of terrestrial television services. Until then, we will retain the 600 MHz band in the monitoring stage.

3.3 GHz (3300-3400 MHz) and 4 GHz (4400-4990 MHz)

One submitter commented on the importance of the 3.3 GHz and 4 GHz bands to support aviation and defence capabilities. Conversely, 2 other submitters noted that the 4 GHz band was of great value for use in WBB and suggested that the ACMA progress this band to the initial investigation stage for this purpose.

One submitter suggested that the ACMA make the 3.3 GHz available for AWLs in regional and rural areas.

Another submitter suggested that if compatibility issues can be resolved then this could create a genuine opportunity for additional WBB spectrum in this band.

Our response

Inclusion of bands in the monitoring stage reflects that there is interest and/or action being taken internationally for those bands. We consider this transparency important to retain, regardless of whether there is any current or future policy intent to progress planning of an included band. We acknowledge the ongoing requirement for access to these bands by Defence.

13 GHz (12.75-13.25 GHz)

One submitter supported the allocation of ESIMs in the 13 GHz band for aviation and maritime use and recommended a licensing framework be developed for ESIM use aligned with ITU Resolution 121.

Another submitter encouraged the ACMA to keep these bands in the monitoring stage of the planning process until WRC-27 and the clear emergence of a suitable ecosystem develops.

Our response

The ARSP made in October 2025 reflects changes to the ITU Radio Regulations at WRC-23. We will continue to monitor developments in this band.

Q/V band - 40 GHz, 46 GHz, 47 GHz

Three submitters encouraged us to consider progressing this band from monitoring to initial investigation in our planning process. Two of these particularly emphasised the satellite applications being developed and currently deployed in these bands.

One submitter emphasised the importance of these bands in the 5G and 6G mobile ecosystems.

One submitter requested that when considering use of these bands for WBB operations the bands remain available and unrestricted for NGSO FSS use.

One submitter requested that we preserve Q/V bands for space services and other services that successfully share these bands. This submitter suggested that the high gain, narrow beamwidth directional nature of Q/V band antenna beams, together with high elevation angles for transmitting to satellites, results in small coordination zones that facilitate sharing with fixed services.

Another submitter considered that further investigation of additional mmWave spectrum, such as the 40 GHz band, was not a short-term priority for industry and agreed that no work needed to be carried out in this band in the 2025–26 work program. This submitter suggested that if the ACMA were to progress planning in these bands it should be considered in the context of coexistence between FSS and WBB because the mobile industry remains interested in these bands for supporting long term future growth.

Our response

We are aware of the satellite industry's interest in these bands to support upcoming new satellite services. While we do not intend to undertake a full review of the Q/V bands, we acknowledge that the satellite industry is seeking greater certainty in access to the spectrum to assist long-term planning (particularly for gateway earth stations), with a number of operators looking to deploy new satellite systems in the coming years.

To support this we developed an interim licensing process for licence applications for gateway satellite earth stations in these bands, which are recorded in <u>spectrum embargo</u> 80.

In our <u>Response to submissions: Draft FYSO 2024–29</u> we advised that we were open to considering if additional guidance could be provided for remote areas, and advised at the time that this work was unlikely to occur before 2025. As we are yet to commence that work, we are open to considering changes to provide greater certainty in all areas of Australia,

however commencement of that work is dependent on consideration of impact on our existing work program.

Bands being studied under WRC-27 agenda items

One submitter encouraged the ACMA to keep the 4400–4800 MHz, 7125–8400 MHz and 14.8–15.35 GHz bands firmly in the monitoring stage until after WRC-27 and after the clear emergence of a suitable ecosystem develops.

Another submitter supported WRC-27 agenda item 1.1 to harmonize the parts of the frequency bands 47.2–50.2 GHz and 50.4–51.4 GHz (Earth-to-space), for ESIM on aircraft and vessels communicating with GSO and non-GSO space stations of the FSS.

Four submitters noted interest in bands being considered under WRC-27 agenda item 1.7 being used for wireless broadband services, in particular 7125–8400 MHz. Two of these suggested that some of these bands should be progressed to the initial investigation stage.

Our response

We have noted the views regarding the items studied under WRC-27 agenda items and will maintain these bands at the Monitoring stage. We note that the Department leads the development of Australian positions on WRC-27 agenda items. Stakeholders can engage further on this issue via the usual international preparatory processes – also led by the Department – to assist in the development of Australian positions on WRC-27 agenda items.

We further note that progression of a frequency band to the initial investigation stage would be the subject of a domestic planning decision. Being within the scope of a WRC-27 agenda item is not a trigger for progression and would usually simply warrant listing in the monitoring stage, as is the case with the bands being considered under agenda item 1.7.

5030-5091 MHz

One submitter stated that this band should be protected for future requirements for UAS and, if demand exceeds the current 10 MHz interim access, the ACMA should move expeditiously to free up more of the frequency band. The submitter encouraged us to take a lead in drafting spectrum regulations that can support future BLoS radiocommunication for UAS.

Our response

We are currently monitoring the development of a key ITU-R recommendation that will eventually help in shaping the future arrangements for RPAS in this frequency band. We will move towards establishing a permanent arrangement when the relevant ITU-R recommendation is finalised

We have not seen any significant increase in domestic interest in the 5030–5091 MHz band that would warrant us to consider releasing more spectrum or introducing a permanent arrangement at this stage.

Initial investigation

2300-2302 MHz

Three submitters noted an interest in this band for WBB to support more efficient use of services in the adjacent 2.3 GHz spectrum licensed band and requested the ACMA to progress with replanning this band.

One submitter sought continued access to this band by the amateur service.

Our response

We note comments on this issue. However, we do not intend to proceed with a review of the 2300–2302 MHz band in 2025–26.

Preliminary replanning

1.5 GHz (1427-1535 MHz)

Two submitters were supportive of the band being further considered for use of WBB. One of these submitters indicated that the FYSO stated that there would be a consultation on options for use of the 1427–1535 MHz frequency range in Q1 2025, however there was no consultation of this kind.

Our response

Consultation on options for use of the 1427–1535 band has been delayed until Q1 2026. In September 2025, we <u>decided to allow</u> the Radiocommunications 1.5 GHz Frequency Band Plan 2015 to sunset in October 2025 and maintain the current band arrangements in a spectrum embargo until our review of the broader 1427–1535 MHz frequency range has been completed.

1800 MHz (1710–1785 MHz and 1805–1880 MHz) and 2 GHz (1920–1980 MHz and 2110–2170 MHz) outside of spectrum-licensed areas

We received 2 submissions relating to our ongoing planning work for these bands (in areas not subject to spectrum licensing). These submissions indicated support for a planning arrangement where mobile network operator (MNO) networks are consolidated in the 1800 MHz band and non-MNO networks are consolidated in the 2 GHz band. This planning option was also presented by stakeholders in response to the ACMA's Q3 2024 consultation into options for this band.

Our response

We are currently considering submissions to our Q3 2024 consultation, including the submissions that presented new planning options for the band. The release of our outcomes has been delayed and is now planned for Q1 2026.

Implementation

1.9 GHz (1880-1920 MHz)

Submitters were broadly supportive of the ACMA's consultation into use of this band and on our decision to formalise rail services in this band. One submitter recommended close consultation with government and other impacted stakeholders into the formalisation of technical arrangements.

Our response

We note these submissions and welcome input during the implementation phase of the band review.

While this work has been delayed, we have now undertaken informal discussions with the rail sector and we plan to publicly consult on proposed technical arrangements in Q4 2025.

2 GHz MSS (1980-2010 MHz and 2170-2200 MHz)

One submitter broadly supported the ACMA's approach to spectrum in the 2 GHz MSS band.

Our response

We will address any further matters related to technical design and allocation in the 2 GHz MSS band in considering the responses received to our Q3 2025 consultation paper.

3.4-4 GHz band

There continues to be interest in our work on mid-band allocations.

Three submitters suggested further consideration be undertaken to discuss moving the boundary for spurious and non-spurious emission domains. Two of these recommended that we convene a technical liaison group to introduce a mechanism to exceed the unwanted emissions limit and confirm that renewal will not be offered to urban excise licensees. One of these submitters asked the ACMA to consider delaying new highly localised wireless broadband (HL WBB) arrangements in this band until a more holistic consideration for the 3.4–4.2 GHz band can be undertaken. One submitter suggested that we should explore options to modify the registration exemption threshold to include higher-power user equipment anticipated to be used for fixed wireless access services.

One submitter noted the importance of mitigation measures to protect safe operation of aircraft radio altimeters in nearby frequency range of 4200–4400 MHz from 5G macro base stations.

One submitter highlighted the importance of the band for fixed satellite services (FSS) and the preference for FSS earth stations to be authorised using location specific apparatus licences instead of AWLs, and raised concerns about the need for robust protections against interference from wireless broadband services in this band, including consultation on radiocommunications assignment and licensing instructions (RALIs) MS47 and MS50.

Our response

The 3.4–4 GHz mid band series of allocations are designed to support a wide range of use cases, from 'highly localised' applications through to local-area and wide-area applications.

We have allocated, or are in the process of allocating, AWLs in remote areas across 3.4–4.0 GHz, as well as spectrum licensing in 3.4/3.7 GHz bands and AWLs in the 3.8 GHz band, both outside of the remote areas.

In September 2025, we <u>finalised arrangements</u> for HL WBB services. These include provisions to support coexistence with FSS earth stations and align the terms of HL WBB licences with the expiration of spectrum licences and AWLs in the frequency range 3750–3950 in metropolitan and regional areas.

We are aware of the comments about the boundary for spurious and non-spurious emissions and a mechanism to exceed the unwanted emissions limit by agreement. We are in the process of identifying both short term and longer-term solutions. In September 2025, we agreed to apply <u>conditional regulatory forbearance</u> to support the operation of transmitters that are authorised by 2 licences – this forbearance may help to alleviate issues in some circumstances in the short term.

As outlined in the WBB and radio altimeters coexistence <u>outcomes paper</u>, we will review all new evidence on the issue when it becomes available and may conduct a review of the mitigations. We encourage submitters to present evidence to the ACMA.

Upper 6 GHz (6425–7125 MHz)

Several submitters had interest in our work in the upper 6 GHz band and presented a range of views.

Three submitters recommended that the ACMA hold off on further allocation or investigation of the bands use until coexistence studies were completed. One submitter encouraged us to adopt international arrangements for the upper 6 GHz band in full and align with international standards to ensure simplicity and efficiency. This submitter indicated that Australia should not make any licensing decision in the band until Europe had finalised its position.

A submitter was concerned that the <u>6 GHz outcomes paper</u> and the draft FYSO 2025–30 did not provide guidance on the timing or process for resolving the impacts for existing licensees of any future band clearing required for the introduction of wide-area wireless broadband (WA WBB). This submitter noted that the draft FYSO 2025–30 proposes to consult on apparatus licensed WBB arrangements in 6585–7100 MHz outside defined population areas in Q3 2025, and that this process will also seek feedback on the scope and coverage of the defined population areas for WA WBB. Given that reservation for WA WBB is subject to the establishment of international equipment markets, the submitter considered that the proposed Q3 consultation was premature.

Another submitter suggested that use of this band outside of defined population areas could be made available via an AFC, rather than AWLs.

One submitter also indicated concerns with the potential use of wireless broadband in the entire upper 6 GHz band, which it considered had led to the spectrum remaining unused and the economic use of the spectrum being lost. The submitter also highlighted that the ACMA's proposed 6 GHz band designation allows for 2 contiguous 320 MHz channels, while the full 5925 MHz–7125 MHz band would support 3 such channels, which it sees as crucial for high-throughput applications like real-time extended reality (XR), robotics, and industrial automation. The submitter considered that this spectrum was essential for dense residential environments and scaling enterprise and industrial applications.

Another submitter indicated that RLAN services require access to the entire upper 6 GHz band, and highlighted the model proposed by the UK regulator for shared access to the band for both RLAN and WBB services. It also noted that RLAN would be able to coexist with incumbent services.

Another submitter suggested that the ACMA reallocate the 7100–7125 MHz portion of the band to WBB if WBB constitutes highest-value use of the spectrum. This submitter stated that usage of this band is extremely low and mainly held for major sporting events.

Our response

A significant amount of input was focussed on already-made planning decisions such as which frequencies are to be used for which purpose. The FYSO, being a forward-looking instrument, is not intended to be a vehicle for reconsidering such matters. Rather, it is about seeking comments on implementation and timing aspects.

In making our recent planning decision for the <u>Future use of the upper 6 GHz band</u>, we considered the future spectrum requirements for WA WBB and RLAN services as well as incumbent users. We found that providing access for RLAN and WA WBB services in different portions of the band will result in the most optimal use of the band in Australia.

The <u>decision paper</u> acknowledged that while we try to align with equipment standards, sometimes our arrangements may differ to suit domestic uses. In this case, a WA WBB allocation that is smaller than 3GPP band n104 (not the entire upper 6 GHz band as indicated in one submission) is necessary to allow access to the upper 6 GHz band by other uses.

We acknowledge that our decision to split the band between RLAN and WBB use at 6585 MHz is currently unique to Australia, however we are of the view that this will not lead to an adverse outcome. RLAN equipment that can operate in the new spectrum allocation is already available internationally and no Australia-specific technical requirements are intended to be imposed for their use (other than prohibiting the operation on channels that are outside the permitted frequency range).

While WBB arrangements still need to be developed, as usual, we will consider 3GPP standards when developing licence conditions. Coexistence arrangements between WBB and RLAN will be considered further when we develop the WBB technical framework. We maintain the view that coexistence of these services across 6585 MHz will not likely lead to a degradation of the overall utility of the band.

We also outlined in our <u>decision paper</u> that we will not commence implementation of WA WBB arrangements in defined areas until we are confident there will be viable equipment markets. Unfortunately, this currently unknown implementation timeframe means that timeframes for when incumbent users may be impacted is also currently unknown. We will consider possible options to provide more certainty to incumbents in the 6585–7100 MHz range in the short-term, which may include seeking feedback on the scope and coverage of the defined population areas.

We do not necessarily need to delay the implementation of WBB arrangements in the frequency range 6585–7100 MHz outside the defined areas until viable IMT equipment markets materialise. This is because these arrangements are envisioned to support a wide range of use-cases and technologies (not just IMT) and some candidate technologies such as standard power Wi-Fi devices, are already available in the international market. Any future

access to those (non-defined) areas will be enabled on a coordinated basis, which will mitigate the interference risk to existing services such as fixed links. Due to resourcing priorities, we have decided to delay this work until Q1 2026, noting that exact timing may be linked to the implementation of WA WBB arrangements inside defined areas.

Forward allocation workplan

One submitter expressed support for the ACMA's plans to undertake consultation on allocation, licensing and technical matters in the 2 GHz band. This submitter urged us to undertake an auction in this band because they considered it likely that demand would outstrip supply in the band.

One submitter expressed concern about delay in the ACMA's consultation on the 2 GHz MSS band technical framework and allocation design.

Our response

The delay to the consultation has not caused a delay to the allocation timeline. The allocation method was addressed in the Q3 2025 consultation paper, and we are currently considering submissions.

Optimising established planning frameworks

Broadcasting

Submitters provided a variety of suggestions about the ACMA's broadcasting planning work, including AM–FM conversions and variations to LAPs.

One submitter suggested that we consider options for retaining and improving the mySwitch tool as it sees this as having a critical role in regional Australians accessing free-to-air TV. This submitter encouraged the ACMA to consider the implications of a second digital dividend on secondary users of TV spectrum, including program making and special events devices such as wireless microphones and in ear monitors.

One submitter stated that our priorities and resources should not be too focused on the AM to FM conversions to the detriment of other forward-facing radio broadcast outcomes for listeners. This submitter also raised concerns that our focus in rolling out digital radio was on commercial and national broadcasters, rather than community broadcasters. This submitter also expressed concerns about the impact of converting broadcasters on existing broadcasters in the AM to FM conversion process.

Our response

We plan to continue maintaining the mySwitch website in the short term, and to continue engaging with industry.

We are assisting the Department with its work on the future delivery of terrestrial television services.

We note the interest in digital radio rollout. As noted in our <u>future delivery of radio report</u>, and reflecting the legislative framework for digital radio that is predicated on the digital radio rollout being led by commercial and national broadcasters, we will make a digital radio channel plan when a commercial radio broadcasting licensee or national broadcaster is committed to starting digital radio services in a particular area.

We are continuing our AM to FM conversion program in regional areas to improve listener experience and support the radio industry. Improving coverage of national, commercial and community radio broadcasting services where spectrum is readily available remains one of ACMA's broadcast planning priorities. We recently published an update to our AM–FM conversion policy that clarifies how we are applying the principles to progress the conversion program. Planning of digital radio in regional areas remains one of ACMA's broadcast planning priorities, in those areas where a commercial radio broadcasting licensee or national broadcaster has committed to a rollout.

Satellite planning

We received 2 submissions relating to satellites and space communications.

One submitter highlighted recent development within the European Conference of Postal and Telecommunications Administrations (CEPT) regarding the enablement of satellite-to-SRD communication in the 862–870 band, which it sees as equivalent to 915–928 MHz band in

Australia. It also suggested that expanding short-range device (SRD) bands for satellite use could complement terrestrial low-power wide-area network operators (LPWAN) and extend coverage to underserved regions.

One submitter encouraged us to adopt a more flexible approach to our approach of requiring that the technical parameters of earth station (transmitters and receivers) specified in an apparatus licence must be completely within the 'envelope' of the parameters listed in the corresponding ITU filings for the satellite system with which communications would be authorised under the proposed licence. It considered that such a requirement makes Australia a relatively difficult place to license and operate earth stations compared to other countries.

Our response

The LIPD Class Licence currently covers earth station transmitters only, not earth station receivers. There are arrangements for transmitters in the 915–928 MHz band which could be used to facilitate earth-to-space communications. However, currently space-to-earth communications in the 915–928 MHz band are not facilitated. We also note that the 862–870 MHz band is subject to spectrum licensing in Australia to support mobile network operations.

The ACMA <u>consulted on a proposed variation</u> to the LIPD Class Licence between October and December 2022, which included a proposal for radiocommunications receivers communicating with satellites in the 915–928 MHz band. However, concerns were raised in submissions and no changes to the LIPD Class Licence were subsequently made.

Regarding the requirement for operation within a satellite filing envelope, if a station is operated outside the parameters of a ITU satellite filing, then in essence that station is operating without a satellite filing which would be in convention of the ITU Radio Regulations. Requiring earth stations to operate in accordance with parameters of an associated ITU satellite filing is an important aspect of the ITU satellite coordination process. It provides certainty to other satellite operators that information provided to the ITU can be used to assess coordination between satellite systems. It is also necessary to ensure that Australia is meeting its obligation under the ITU RR by only authorising earth stations that are supported by an ITU satellite filing.

In certain bands (for example for bands/services not subject to coordination),³ the ACMA already provides flexibility by allowing operation that is within the envelop of the combination of parameters in the filing rather than ensuring that each parameter meets the specific values specified in the filing.⁴ We consider that proper planning includes appropriate consideration of the characteristics of earth stations proposed to be used in a satellite system. We encourage earth station operators to ensure that any potential clients are well aware of the parameters of their earth stations by making them readily and publicly available.

³Specifically, ITU RR Article 9, Sub-Section IA – Advance publication of information on satellite networks or satellite systems that are not subject to coordination procedure under Section II.

⁴ For example, where combination of earth station transmitter power and antenna gain results in the same equivalent isotropically radiated power as derived would be using parameters of the ITU satellite filing.

Ongoing review of spectrum planning, assignment, and coordination requirements

Two submitters were supportive of the ACMA's ongoing work to review spectrum planning technical frameworks.

Another submitter was dissatisfied with the impact that 800 MHz apparatus-licensed services can have on 700 MHz spectrum licence device registrations.

Our response

We are aware of the coexistence issues between 700 MHz band spectrum-licensed transmitters and 800 MHz band apparatus-licensed receivers. In late 2023, we <u>consulted on</u> proposed changes to improve coexistence, and in May 2024 we introduced relaxed coordination requirements (further details are in our <u>outcomes paper</u>). While these reforms provided some improvements, we acknowledge that coexistence is still difficult in some situations.

With regards to spectrum licensed services, this may complicate the deployment of new transmitters (requiring more detailed coordination and/or negotiation with other licensees), noting that existing spectrum licensed transmitters are not impacted given coordination with apparatus licensed services are on a first-in-time basis. We do not intend to revisit this issue in our 2025–26 work program but may consider reviewing arrangements later (subject to the consideration of other priorities).

Low interference potential devices

Two submitters supported the proposed power increase for low power RLANs in the new LIPD Class Licence. One submitter provided cautious support for proposed higher power levels for low-power RLANs, provided the changes did not compromise future mobile broadband spectrum.

Our response

We released a consultation paper in May 2025 that proposed facilitating the use of the 6425–6585 MHz band for low power RLANs in the new LIPD Class Licence. These changes were finalised in September 2025.

Review of spectrum licence technical frameworks

Three submitters were supportive of further work to commence the modernisation of the technical framework for the 2.5 GHz band.

Another submitter suggested that a review of the 2.5 GHz band would need to ensure co-existence between dual polarised radars in their fleet operating in the S-band (2700–2900 MHz) and other spectrum users, including 2500 MHz mobile services transmitters.

Another submitter supported the use of Technical Liaison Groups (TLGs) and suggested there may be opportunities to streamline TLGs to enable the ACMA to vary technical parameters for spectrum licensees in a timely manner.

Our response

Our ongoing program of reviewing technical frameworks seeks to ensure they remain fit-for-purpose to accommodate new spectrum uses that arise in response to technological

developments. In reviewing technical frameworks, we seek to balance potential efficiency increases with managing the risk of interference between new and incumbent users. This includes balancing the desires of those seeking changes to frameworks with the interests of nearby licensees who may be impacted by any changes to the interference environment resulting from updates to technical frameworks.

The duration and operation of each TLG is determined on a case-by-case basis and depends on the issues being considered and broader project timelines. We note that TLGs are an ACMA-initiated exercise to provide additional opportunities for informal industry consultation and input before the formal consultation phase for technical frameworks.

We note the interest in the review of the 2.5 GHz band spectrum licence technical framework, and we created the 2.5 GHz band TLG in September 2025 that has commenced considering changes to the 2.5 GHz band spectrum licence technical framework.

Consideration of higher-power 6 GHz band RLAN

Several submitters commented on the issue of permitting higher-power RLAN devices in the 6 GHz band.

Three submitters urged the ACMA to ensure that any changes that allow higher-power RLAN devices consider the impacts of any interference on existing users.

One submitter stated that higher-power RLAN devices in 5925–6585 MHz will amplify benefits of Wi-Fi 6E and 7, enabling outdoor enterprise-grade wireless connectivity. This submitter also encouraged us to consider expanding power limits for RLAN operations and introducing Automated Frequency Coordination (AFC) for responsible spectrum sharing. They also recommended that the ACMA consider the 6585–7125 MHz band for the use WAS/RLANs to help achieve connectivity policy goals.

Our response

For information on future AFC implementation, see the response to the <u>Spectrum sharing</u> section of this paper.

Licensing and regulatory development

Expiring spectrum licences (ESLs)

Our current ESL process was of interest to several submitters and most considered it to be a top priority for the ACMA.

One submitter suggested that inclusion of mandatory roaming requirements in renewed spectrum licences would drive innovation and greater infrastructure sharing between mobile operators. Two submitters raised concerns about the timeframes for renewal of the expiring spectrum licences and noted that the first application windows for renewal of expiring licences open in June 2026.

Two submitters suggested that they would like to understand the secondary licensing proposal outlined in our advice to the Minister as part of stage-2 in further detail.

Our response

ESL is a key priority for the ACMA and its stakeholders. The process has been designed to be iterative and consultative, with stakeholders having multiple opportunities to shape the policy and decision-making framework in which decisions on applications for licence renewal will be made.

As part of stage 2 of the ESL process, we provided advice to the Minister on a range of regulatory approaches to coverage and more efficient spectrum use. As part of that advice, we noted that roaming regulation is principally managed under the regulatory framework administered by the ACCC.

In our draft FYSO 2025–30, we proposed that stage 4 of the ESL process start in the second half of 2025, with preferred views and a response to stage 3 submissions released in Q3. In response to stakeholder feedback and in recognition of both the importance of the ESL process and the diversity of views expected from the stage 3 consultation, we added a 3-week reply-to-comment period to our process. The reply-to-comment period gave stakeholders the opportunity to provide informed commentary and new perspectives on the views raised in submissions. As a result of this extended engagement, and noting the detailed submissions received, we deferred stage 4 to Q4 2025.

We are currently working with the Department to future explore the merits of a secondary licensing framework. The framework would likely be enabled by targeted changes to the Act, principally to allow the ACMA to issue apparatus licences into spectrum covered by spectrum licences on a more flexible basis. We will consult with stakeholders on this framework as it develops.

Emerging aviation technologies spectrum regulation

One submitter offered strong support for enabling aeronautical ESIMs use in the 13 GHz band following new regulatory arrangements made at WRC-23, noting the technical and regulatory protections specified in Resolution 121.

One submitter suggested that the ACMA should explore the use of FSS allocations for command and non-payload communications (CNPC) and payload access to spectrum for medium to large RPAS, continue to support trial licences to enable access to frequencies

outside of the LIPD and industrial, scientific and medical (ISM) bands, and continue to support government and industry consultation and cooperation on frequency bands that may accommodate medium/large drone communications.

One submitter strongly urged us to consider licensing arrangements that allow access to the 5030–5091 MHz band (the '5030 MHz band') for direct Aircraft-to-Everything (A2X) communications.

Our response

We continue to work closely with the Department, the Civil Aviation Safety Authority (CASA), the Australian Space Agency (ASA) and relevant aviation industry representatives to support a coordinated approach to spectrum policy for drones and related aviation technologies. We will also continue to monitor international regulatory and technology developments.

In August 2022, we released interim licensing arrangements for line-of-sight CNPC links in the 5055–5065 MHz band (see RALI MS48). In addition, scientific licences may be a suitable pathway for trialling or demonstrating technology on a short-term basis. We encourage interested parties to engage with an accredited person (AP) for scientific licence applications. The use of existing FSS allocations to support long-range CNPC is a matter for the aviation sector and industry, given that the regulatory arrangements under which the relevant FSS networks operate are already established.

We will monitor developments in the A2X space and consider regulatory arrangements if demand for that use emerges.

Body scanner class licensing

Many submitters requested that the ACMA modify the existing licensing arrangements for body scanners at airports to provide for a specific model of body scanner, which operates in the 20–40 GHz band.

Other submitters also requested that the ACMA consider authorising the use of certain body scanners in sectors and environments beyond aviation security.

Our response

We recognise the importance of body scanners in aviation security. Over 2017–18, we undertook a large body of work to implement class-licensing arrangements for body scanners to support major government aviation security reform. When we made these arrangements, we considered a range of technical, operational and policy issues, as well as the views of radiocommunications stakeholders.

We acknowledge industry's requests to expand the sectors in which body scanners can be used. We note that there have been no significant policy developments regarding the use of body scanners in sectors beyond aviation. However, we are in discussions with relevant government policy areas as to the capability need to expand body scanner use beyond airports and/or in a broader frequency range.

At this point in time, the ACMA does not have capacity in 2025–26 to consider expanding existing technical arrangements under the Radiocommunications (Body Scanning – Aviation Security) Class Licence 2018, including to allow for operation in the 20–40 GHz range. If there are changes to policy settings from relevant government policy areas, we will consider

the implications of diverting resources from other priorities to assist in meeting the revised objectives. Otherwise, we will consider this again as part of the FYSO 2026–31 process.

Amateur radio

One submitter requested that the ACMA consider further work on the transition to the Radiocommunications (Amateur Stations) Class Licence 2023 (the Amateur Class Licence), including the documentation the ACMA provides to amateur radio operators, examination processes, and the call sign policy related to Australian external territories. The submitter also recommended that the ACMA include a further staged transition to high power in the work program. The submitter made recommendations related to amateur access to the 5 MHz band and 2300 MHz–2302 MHz band.

Our response

We will continue to work on amateur radio reforms, but their complexity and potential to impact a broad number of stakeholders mean we will not be consulting on any amateur radio reforms in 2025–26. Our focus remains on embedding the amateur radio arrangements that commenced in 2024. We have also recently made the Radiocommunications Licence Conditions (Amateur Licence) Determination 2025, which replaced the Radiocommunications Licence Conditions (Amateur Licence) Determination 2015 that was due to sunset on 1 October 2025.

On the documentation under the amateur class licensing arrangements, we provided a letter of confirmation to amateurs operating immediately before the Amateur Class Licence commenced. Amateurs issued with an amateur qualification and/or a call sign after that time will have an ACMA Recognition Certificate and/or call sign certificate. These documents are recognised for international reciprocal agreements,⁵ and most amateur internet-linking services. If there are specific instances where the documents have not been recognised for an amateur operator, we welcome the amateur operator providing us with relevant information and evidence for us to work with them to resolve the recognition issue.

Amateur operators seeking to undertake activities requiring high power should consider applying for a <u>scientific licence</u>.

Relating to amateur access to additional bands, we note the 5 MHz recommendation and maintain that there is no intention to make that band available for amateur use in Australia. We also note the 2300–2302 MHz recommendation, however, to allow us to focus on other issues, this band will stay at initial investigation and be reassessed in the FYSO 2026–31.

⁵ Such as the European Conference of Postal and Telecommunications Administrations (CEPT) Recommendations T/R 61-01 (CEPT Radio Amateur Licence) and T/R 61-02 (Harmonised Amateur Radio Examination Certificate).

Pricing

Spectrum pricing review implementation

One submitter commented that spectrum for railways should be provided at a price that reflects the public interest because market-based pricing allocation is a barrier for government spectrum users. It also advocated for spectrum charges to be paid in annual instalments, for simplicity for state governments to integrate costs into their budgets.

One submitter suggested that we review our apparatus licence tax with consideration against international benchmarks. The submission noted that Australia's licence fees were significantly more expensive than other countries.

Our response

We expect references to 'market-based' pricing and annual instalments in submissions are related to the ESL process, as apparatus licence taxes are administrative, only change by population-based updates each year, and can be paid in annual instalments.

For the ESL process, we proposed two pricing options for rail in our stage 3 preliminary views. We are endeavouring to provide early certainty regarding potential licence renewal and pricing to all incumbent licensees. This includes 1800 MHz rail communications users. Our stage 3 preliminary views favour transitioning rail communications users to apparatus licensing arrangements. Pricing arrangements for apparatus licences would be reflected in the transmitter licence tax determination, under which payment in annual instalments is available by default.

We acknowledge continued engagement from the broader space sector regarding pricing, and note that we have identified spectrum between 520 MHz and 5 GHz for a broad upcoming pricing review in 2025–26. Our proposal is limited to spectrum under 5 GHz, as spectrum above 5 GHz received discounts of 50 to 90% as part of tranche one of Spectrum Pricing Review implementation.

Compliance

Submitters were supportive of the ACMA's ongoing compliance efforts. One submitter noted its support for our efforts to prevent harmful interference, especially those aimed at protecting the integrity of licensed mobile broadband services.

Our response

Our <u>2025–26 ACMA compliance priorities</u> continue the focus on the supply of dodgy devices via online platforms. Radiocommunications devices that do not comply with Australian rules and safety standards may cause interference to communications, GPS and emergency services, which can put Australians at risk. A focus of previous ACMA compliance priority programs has been licensing integrity. We will continue to enforce compliance with licence conditions and relevant technical frameworks, including in relation to licensees' regional coverage obligations.

Incidents of interference, whether attributable to banned equipment or other radiocommunications devices, are dealt with in accordance with our approach to <u>compliance and enforcement</u>.

We will maintain close collaboration with international regulators and actively engage in global forums to deliver the optimal outcomes for Australians and the domestic communications industry.