

# Response to submissions Draft FYSO 2024–29

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# Response to submissions

Thank you to all stakeholders who responded to our consultation on the draft *Five-year* spectrum outlook 2024–29 (FYSO) published in March 2024.

The Australian Communications and Media Authority (ACMA) invited comments on the draft FYSO including factors affecting the 5-year outlook and future demand for spectrum, and the priorities outlined in our annual work program.

We received 48 public submissions from industry operators, representative and peak bodies, government agencies and the public.

In accordance with section 28F of the *Radiocommunications Act 1992*, we consulted with the Minister for Communications on the FYSO 2024–29.

Our draft 2024–25 work program proposed a diverse range of projects. Feedback largely supported our draft 2024–25 work program priorities, along with suggestions for different prioritisation of specific band planning and licensing activities as well as additional activities to include.

We have considered all suggestions and indicate in the FYSO 2024–25 where we have adjusted the work program. While we cannot accommodate all suggestions, your feedback will inform our future work program development.

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

# Part 1: Five-year spectrum outlook 2024–29

### Our approach to spectrum management

Our approach to determining the long-term public interest derived from the use of the spectrum was of interest to several submitters. One submitter suggested that the ACMA demonstrate transparency in how it determines the 'optimal use of any spectrum band'. Another has recommended that it is timely to update our guidance document on approaches to licensing.

#### Our response

In line with the object of the Radiocommunications Act, we aim to facilitate efficient spectrum planning, allocation and licensing arrangements in each band for the use or uses that best promote the long-term public interest derived from the use of that spectrum. We promote the object of the Radiocommunications Act and relevant government policy through a balanced application of market and regulatory mechanisms.

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 of a proposal. This approach aligns with the government's <u>Policy Impact Analysis Framework</u>.

Through the FYSO and other <u>consultation processes</u>, we openly identify and consult on our work program priorities. We discuss issues and propose options relating to specific planning and allocation processes. We seek input through a range of mechanisms and provide outcome statements that explain the basis for our decisions. This is often an iterative process involving multiple rounds of consultation.

In June 2024, we released a revised information paper <u>Our approach to</u> <u>radiocommunications licensing and allocation 2024</u> for comment. The paper provides an overview of the ACMA's licensing and allocation approach. The FYSO, ACMA website and band/allocation-specific consultation documents also provide guidance and transparency on our approach.

# The policy environment and regulatory reform

#### Regional connectivity

Several 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 the ACMA could further enhance regional connectivity. One submitter suggested that the ACMA should consider implementing area-focused licensing arrangements for underserved locations as providing smaller licences or geographically fragmenting existing licences could enhance connectivity in regional, rural, and remote areas.

Other submitters reiterated the potential for wi-fi operating in the 6 GHz band to improve regional connectivity. Regarding satellite communications, the ACMA was urged by a submitter to continue to consult Australian satellite operators and consider the capabilities of

low earth orbit (LEO) satellites and consider their potential, taking into account the possibility of interference.

#### 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 midband spectrum from a range of different parties. 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).

In addition, as noted in our body of work on the expiring spectrum licences (ESLs) process, examining use of ESLs will assist in considering options for the future use of the spectrum and whether changes to planning arrangements, technical frameworks and/or licence conditions are needed to optimise this use. Since we consulted on the draft FYSO, the minister has consulted on and made the Radiocommunications (Ministerial Policy Statement – Expiring Spectrum Licences) Instrument 2024 (the ESL MPS). Connectivity and investment in regional and remote areas to deliver improved services to end users is one of the 5 communications policy priorities set out in the ESL MPS.

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

The benefits of changes in the 6 GHz band and the ability for new advances in LEO satellites to enhance regional connectivity are being considered. We address comments on <u>satellites</u> and 6 GHz later in this paper.

#### **Closing the Gap**

Submitters were supportive of the ACMA's policy objective to help close the gap on digital inclusion and support the Australian Government commitment to Target 17 of the <a href="National Agreement on Closing the Gap">National Agreement on Closing the Gap</a> – to achieve equal levels of digital inclusion for Aboriginal and Torres Strait Islander people by 2026.

Other submitters pointed out that wi-fi, as a market and technology-based driver of spectrum demand, will assist in bridging the digital divide and encouraged facilitating wi-fi expansion in the 6 GHz band and other potential bands in the future. Other submitters highlighted the potential of LEO satellite services to help address the digital divide and close the gap.

#### Our response

We will continue to support initiatives to help close the gap on digital inclusion.

As noted in our <u>Expiring spectrum licences: finalised framework and response to submissions paper</u> (December 2023), spectrum, along with communications technologies, is an enabler of digital inclusion. Considering how incumbent or alternative uses for and users of the spectrum can facilitate opportunities for regional, rural and remote connectivity allows us to contribute to connectivity outcomes for First Nations Australians.

As discussed above, benefits of changes in the 6 GHz band and new advances in LEO satellites that may assist in bridging the digital divide are being considered. We address comments on <u>satellites</u> and <u>6 GHz</u> later in this paper.

#### Net zero emissions

Several submitters were supportive of the ACMA's work to support the Australian Government commitment of achieving net zero emissions by 2050. Submitters provided several suggestions of further applications of efficient use of spectrum that could be leveraged to reduce emissions and electricity consumption, including low-power and self-coordinated wi-fi networks.

#### Our response

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

#### Other services

Submitters suggested the inclusion of specific text in the FYSO on their service or application, and the importance of spectrum in enabling that service. Some also argued that commercial services are given preference over other services.

#### Our response

We have not included text on the importance of spectrum for a particular application in this section of the FYSO as its purpose is about identifying trends and drivers that may shift demand for spectrum or effect how spectrum is managed in the future. In addition, the spectrum requirements of existing services are taken into account as part of our normal planning activities.

We disagree with the view that commercial services are given preference over other services. In managing the access to spectrum for different types of uses, we are guided by the object of the Radiocommunications Act, which includes promotion of the long-term public interest derived from the use of the spectrum, including for non-commercial purposes.

# 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.

Two submitters commented that the ACMA should maintain a 'light-touch' regulatory approach rather than adopt policies that require the ACMA to act as intermediary in private coordination discussions. One submitter encouraged the ACMA to ensure any regulatory gap that may hinder the transparent and accountable supply of satellite services within the Australian market can be readily overcome. Another submitter expressed concerns regarding the light-touch regulatory approach for allowing LEO satellites to operate in international mobile telecommunications (IMT) bands.

One submitter noted the increased interest in optical (infrared) communications and satellite laser ranging capability for space-based applications. They indicated that stakeholders in this area are seeking clarity on the licensing process required for establishing their ground equipment in Australia.

Another submitter recommended that the ACMA be proactive in its approach to licensing and regulating direct-to-handset services with existing terrestrial mobile spectrum bands. With

commercial services now in place, they would like to see the work prioritised and accelerated.

One submitter encouraged the ACMA to investigate the impact of major Non-Geostationary Orbit (NGSO) and LEO satellite operators on Ku/Ka-band operations in Australia, citing the increasing potential for interference in the band due to higher levels of activity. They requested that the ACMA continue to consult Australian satellite operators on licence applications from prospective NGSO/LEO satellite operators.

#### Our response

We are supportive of the innovations that infrared communications systems bring and have been monitoring interest in infrared communication systems for several years.<sup>1</sup>

So far, we have issued apparatus licences for the use of a small number of infrared space communication systems on a case-by-case basis. We may consider regularising those arrangements if uptake continues, however, no further work is planned at this stage. Our general view is that system coordination should be self-managed (due to narrow beam size in such systems) and besides ensuring an appropriate authorisation arrangement, there is no need for the ACMA to develop coordination procedures for such systems.

We welcome information from industry to inform any further development of arrangements to authorise the use of infrared communication systems if they are required.

We are closely monitoring developments that enable consumer mobile smartphones to communicate directly with satellite systems (direct-to-mobile services), as well as developing supporting regulatory frameworks. In the FYSO 2023–28, we put forward our initial view that satellite direct-to-mobile systems can be operated under the current spectrum licensing framework (subject to the handset complying with all applicable licence conditions) without the need for explicit approval from the ACMA. In the FYSO 2023–28, we also committed to seeking stakeholder views on the suitability of Australian regulatory arrangements and spectrum access for satellite direct-to-mobile services. In October 2023, we held an online stakeholder forum (known as a 'spectrum tune-up'), where stakeholder views were canvassed on regulatory challenges and opportunities. We followed this with a formal consultation that closed in in February 2024. In our September 2024 response paper, we confirmed our view that International Mobile Telecommunications-based satellite direct-to-mobile services can be operated under Australia-wide spectrum licences without the need for further approval from the ACMA. We also published a Regulatory guide: Operation of an IMT satellite direct-to-mobile service.<sup>2</sup>

Facilitating opportunities for new entrants and use-cases, including for LEO satellites, is one of the communications policy objectives contained in the ESL MPS, and this objective is reflected in our finalised ESL framework. In March 2024, as part of our ESL Stage 2 consultation, we sought detailed information from incumbent and prospective alternative licensees about how their current and proposed use of the spectrum could facilitate opportunities for new entrants and use-cases, including for LEO satellites, that may reduce

<sup>&</sup>lt;sup>1</sup> The infrared portion of the electromagnetic spectrum is part of the spectrum between microwaves (300 GHz) to below visible red light (around 430 THz) (1 millimetre to 700 nanometres). Under the Radiocommunications Act, radio emissions are any emission of electromagnetic energy of frequencies below 420 THz. As such, under current radiocommunication regulatory arrangements, the operation of an earth station or earth receive station on frequencies below 420 THz requires an apparatus, class or spectrum licence. Note that systems using visible light operating at frequencies above 420 THz are outside the scope of the Radiocommunications Act and not subject to regulation administered by the ACMA.

<sup>&</sup>lt;sup>2</sup> See our consultation on <u>Satellite direct-to-mobile services: regulatory issues</u> and <u>Regulatory guide: Operation of an IMT</u> satellite direct-to-mobile service.

barriers to entry, and create entry points for new or emerging users or use-cases. We also asked stakeholders how LEO satellites could contribute to promoting the long-term public interest, including how spectrum can support inter-operability between terrestrial and satellite services.

### Wireless broadband (WBB)

#### 5G/6G

Access to spectrum to support 5G use-cases, including 5G WBB and the recent mid-band spectrum allocations, was the focus of many submitters. Furthermore, arrangements to support the future deployment of 6G was of interest across a range of bands, from 410/450 MHz, upper 6 GHz (5925–7125 MHz) through to the upper mid-bands 7–16 GHz.

The rollout of 5G technology is well underway. Several submitters commented on the role of 5G in the ACMA's workplan and broader government policy, as well as the applicability of devices being developed to enhance connectivity through 5G.

One submitter noted the growth in major industries including agriculture, energy, smart cities and transport through advances in 5G technology. Another submitter expressed concerns that the <u>Government's Statement of Expectations</u> and the <u>ACMA's Statement of Intent</u> do not specifically identify the economic and productivity benefits of 5G to the broader economy as a policy priority.

Regarding 6G technologies, submitters endorsed ACMA's recognition of 6G as key market and technology drivers of change in spectrum demand. One submitter expressed the view that mobile network operators need to have access to large contiguous blocks of spectrum to ensure effective competition and efficient supply of mobile services. They also warned against assuming that future demand for 5G and 6G can be met by existing spectrum holdings.

#### Our response

We continually evaluate bands through an ongoing review process and update the technical frameworks as appropriate to support new generations of technologies. As noted in our *Terahertz use-cases and regulatory models* information paper, we are aware of developing interest in the terahertz range for the future deployment of 6G technologies. We are undertaking activities to prepare for this technology development, noting that 6G is very much at the early stages of its development cycle.

We have progressed the upper 6 GHz band in our work program to the 'preliminary replanning' stage and released a <u>consultation paper</u> in June 2024 seeking views on options for the introduction of radio local area networks (RLAN) and/or wide-area wireless broadband services in the upper 6 GHz band. Given the frequency range of operation, the potential bandwidths available and likely timing of availability around the world, we are aware that the 6 GHz band is a likely global candidate for early 6G deployments.

The World Radiocommunication Conference 2023 (WRC-23) outcomes provided an indication of what other bands between 7–24 GHz may become of interest globally for 6G. The bands 7125–8400 MHz and 14.8–15.35 GHz will be studied in the WRC-27 cycle for the possible terrestrial component of IMT. The Department of Infrastructure, Transport, Regional Development and Communications and the Arts (the Department) is leading the development of Australian positions relating to WRC-27 agenda items. We will continue to

engage in this process and monitor developments with a focus on relevant implications for spectrum management.

# Spectrum for government requirements/Public Safety Mobile Broadband (PSMB)

One submitter made suggestions about allocating spectrum for PSMB. They stressed the inadequacy of current prioritisation of public safety communications by the ACMA and the spectrum allocation for PSMB.

#### Our response

In 2023, the Australian Government released a response to the 2022 PSMB Review. The government is considering PSMB capability and we are prepared to respond to developments. Where relevant, we will consider PSMB-related proposals in other areas of the ACMA's work program. We have no plans to change the existing spectrum reservation for PSMB in the 800 MHz band.

Additionally, the Radiocommunication (Public Safety and Emergency Response) Class Licence 2023 was made in 2023, which supports the use of the latest 5G technologies as well as the applications currently used by public safety agencies (PSAs).

# Part 2: 2024–25 annual work program

# Monitoring stage

### 600 MHz (617-698 MHz)

The 600 MHz band received considerable attention in numerous submissions. Submitters held differing opinions on how the 600 MHz band could best be utilised.

One submitter stated that the 600 MHz band is ideal for IMT use in regional Australia, anticipating that additional low-band spectrum would be needed in metropolitan areas for deep indoor coverage, with consumer demand increasing over time.

Another submitter supported continued monitoring of the 600 MHz band and encouraged the ACMA to work with the Department to develop a program of work that would facilitate reallocation of the 600 MHz band to IMT by the end of the decade.

Conversely, various other submitters recommended progressing 600 MHz in the band-planning process to the 'initial investigation' stage. One submitter posited that other jurisdictions have issued licences for WBB use in the 600 MHz band, including for 5G. There is broader international momentum following WRC-23 for the allocation of the band to mobile services. Another submitter suggested that the ACMA should consider the feasibility and potential migration of existing services for the whole UHF spectrum and encouraged the ACMA to further investigate the potential use of these bands. A further submitter suggested that this should be done to complement related higher-level government processes and the ACMA's work under the Television Research and Policy Development Program.

One submitter asked the ACMA to provide details of the research objectives and methodology of the Television Research and Policy Development Program and upon completion, make the report public.

Finally, one submitter argued the importance of 470–698 MHz for audio program makers and the special events industry and stated that the industry requires continued access to the 600 MHz band to cater for increasing demand.

#### Our response

We are keeping abreast of 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 for the mobile service in Region 1 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 consideration of the band domestically will be informed by global developments as well as any further domestic considerations about future technology roadmaps for terrestrial television transmission. Until this time, we will retain the 600 MHz band in the monitoring stage.

We are conducting technical research that may support possible future work on television channel replanning and licensing. The research will also provide information to both government and industry about any potential future change to television planning arrangements.

The TV viewer antenna survey has been completed. The ACMA produced 5 reports about household TV antenna use in Sydney, Melbourne, Brisbane, Adelaide, and Perth, which were provided to the Future of Broadcasting Working Group in March 2023. TV receiver performance testing has also been completed. <u>Survey summaries and the final report</u> are available on the ACMA website.

Future arrangements for use of the 600 MHz band will depend on policy decisions by the government. Any changes will likely have flow on effects to existing users, including broadcasters (and their audiences) and class-licensed wireless microphones that share this spectrum.

### 3.3 GHz (3300–3400 MHz) and 4.0 GHz (4400–4990 MHz)

There was support for retaining the 3.3 GHz band in the monitoring stage and submitters commented on the importance of the 3.3 GHz and 4.0 GHz bands to support Defence capabilities.

For the 3.3 GHz band, the submitters expressed concern about possible introduction of 5G/IMT in this frequency range. One submitter emphasised the importance of maintaining the 50 MHz within the 4.9 GHz band for public safety purposes.

#### 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.

## 13 GHz (12.75-13.25 GHz)

There are differing views regarding how this band should be planned. One submitter supported retaining the planning status in the 'monitoring' stage, while another submitter encouraged the ACMA to consider moving this band into the 'Initial Investigation' stage. This is because WRC-23 has allocated in the 12.75–13.25 GHz band a new application under the fixed-satellite service (FSS) identification of Earth Stations in Motion (ESIMs) to communicate with geostationary space stations under Appendix 30B.

One submitter claimed that harmonised spectrum facilitates in-flight broadband connectivity and supports Australia's engagement in ESIMs in any preliminary studies in ITU-R Study Group 4, provisional WRC-31 agenda item 2.3.

#### Our response

Assessing the potential impact on incumbent users is a key part of the spectrum planning process undertaken before implementing any new arrangements. The Department is leading the development of Australian positions relating to WRC-27 agenda items – we will continue to engage in this process and monitor developments with a focus on relevant implications for spectrum management.

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

Submitters have generally acknowledged the importance of the Q/V bands to the future development of satellite services.

One submitter encouraged the ACMA to consider progressing the planning stage of the band from monitoring to initial investigation, considering satellite applications being developed and currently deployed, as well as the ACMA's intention to undertake a 'comprehensive review' thereby providing additional planning certainty for primary allocated services. Other submitters supported the proposed use of the 40 GHz band.

Two submitters urged the ACMA to prioritise potential arrangements for satellite use-cases in spectrum bands in the Q/V.

Another submitter suggested that when planning to progress these bands, they should be considered in the context of coexistence between FSS and IMT services, because the mobile industry has an interest in the 40 GHz band 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 bands and consider all potential interests, 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.

In last year's <u>Response to submissions: Draft FYSO 2023–28</u> paper, we developed interim guidelines regarding the assessment of licence applications for gateway earth stations in the Q/V bands. These are now recorded in spectrum embargo 80.

We are open to considering if additional guidance could be provided for remote areas; however, this is unlikely to occur before 2025.

## Bands being studied under WRC-27 agenda items

Many submitters have shown interest in the bands being studied under WRC-27 agenda items.

A number of submitters advocated for their interest in the 7125–8400 MHz band for agenda item 1.7. One submitter opposed any IMT designation within the 7125–8400 MHz band.

Another submitter supported agenda item 1.1 to harmonise the parts of the frequency band for ESIM on aircraft and vessels with GSO and non-GSO space stations of the FSS.

One submitter expressed interest in agenda item 1.3, which considers the use of the frequency band 51.4–52.4 GHz to enable its use by gateway earth stations transmitting to non-geostationary-satellite orbit systems in the FSS service (Earth-to-space).

Another submitter wanted the ACMA to incorporate agenda items 1.13 and 1.14.

#### Our response

We have noted the views regarding the items studied under WRC-27 agenda items and will engage in the study cycle as necessary. 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 develop Australian positions on WRC-27 agenda items.

#### Other bands

#### 5030-5091 MHz

One submitter has proposed that ACMA support ITU-R efforts to develop international radiocommunication for a regulations for both terrestrial and satellite remotely piloted aircraft systems (RPAS) communications in 5030–5091 MHz and other frequency ranges at ITU-R Study Group, and consider and facilitate access to the entire 5030–5091 MHz frequency range depending on user demand.

Another submitter noted that in the future there will be a proliferation of larger, highly automated passenger-carrying aircraft that will require the use of Detect and Avoid (DAA) radar systems that are classified as Advanced Air Mobility (AAM) systems. The submitter also noted increased drone operations and subsequent spectral requirements, including monitoring the development of the command and non-payload communications (CNPC) band from 5030 to 5901 MHz. They proposed that the 15.4–15.7 GHz frequency band could be used for these DAA radar systems and requested the ACMA to consider monitoring this band.

#### 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.

As per the Australian Radiofrequency Spectrum Plan 2021, the 15.4–15.7 GHz frequency band already allows the operation of aeronautical radionavigation services. Thus, there is a licensing solution in place under which we are currently able to issue a licence to authorise prospective DAA radar AAM systems operators, on a coordinated, case-by-case basis. We currently do not have any plans to introduce a new licensing framework exclusively for DAA radar in this frequency band; however, we will continue monitoring international developments and act if required.

# Initial investigation

#### 2300-2302 MHz

One submitter supported allocating 2300–2302 MHz band to spectrum licence format, recommending aligning licence emission requirements with 3GPP 36/38 series wide-area base-station standards.

Another submitter welcomed ACMA's recognition that the current 98 MHz of spectrum available in the 2.3 GHz band is not operating over a standard 5G bandwidth (100 MHz). They suggested consideration of 2300–2302 MHz as a band priority should be maintained to support the inclusion of the bottom 2 MHz of the 2300 MHz band to mobile so that a contiguous 100 MHz can be deployed to increase the overall 5G efficiency and utility of the 2.3 GHz band. They also advocated for progressing this band to the 'preliminary replanning' stage as part of this year's FYSO work program.

#### Our response

We do not intend to progress a review of the 2300–2302 MHz band in 2024–25 but will review our position in the next FYSO development process. Use of the band by the amateur service will be considered in any future review of the band.

We note that the 2302–2400 MHz band is subject to spectrum licensing Australia-wide, and access to this spectrum can be negotiated with relevant licensees in a given area.

# Preliminary replanning

#### 6 GHz

A wide range of submitters support the progressing of upper 6 GHz band to preliminary replanning stage. These submissions demonstrated that there is continuing diverse interest in potential (often competing) uses of the 6 GHz band. These include proposals for RLAN class-licensing arrangements, wi-fi, IMT, FSS, and deployment of Automated Frequency Coordination (AFC) capabilities.

#### Our response

The availability (both current and future) of spectrum for various uses alongside the issues raised regarding upper 6 GHz band are all part of our ongoing consideration of the band's future use as we progressed this band from 'monitoring' to 'preliminary replanning' for the 2024–25 work program.

We are aware of the views on the current and potential future uses of the upper 6 GHz band and expanding RLAN arrangements to support higher power devices. The ACMA released a consultation paper in June 2024 that set out planning options in the upper 6 GHz band and additional consideration of the potential for the use of higher power RLAN devices in the broader 6 GHz band. Feedback to that consultation process will be considered in forming our planning decisions for the band. An outcomes paper is planned to be released Q4 2024; further consultation will depend on those outcomes.

# 1.5 GHz and extended mobile-satellite service (MSS) L-band (1518–1525 MHz and 1668–1675 MHz)

Submitters outlined a variety of proposals for the use of the 1.5 GHz and extended MSS L-band. A submitter voiced their support for replanning the 1.5 GHz band. Another submitter proposed that the ACMA explore options to accommodate uncrewed aircraft systems control and non-payload communication (UAS CNPC) and general payload communications in the band. They supported a discussion paper to further this issue. They also reiterated the need to retain the priority status of aeronautical mobile service for telemetry over other uses by the mobile service, in accordance with ARSP footnote AUS3.

#### Our response

We decided to progress the review of both the 1.5 GHz and extended L-band to the 'preliminary replanning' stage, with consideration of the extended L-band to be progressed before the 1.5 GHz band. In August 2023, we consulted on options for use of the extended MSS L-band. We published the outcomes of that process on 20 December 2023. This included updating arrangements in the Radiocommunications (Communication with Space Object) Class Licence 2015 to support MSS use of the extended MSS L-band.

We aim to release an options paper in Q1 2025 to progress the review of terrestrial services in the 1427–1535 MHz band. This paper will also consider the sunsetting of the 1.5 GHz Frequency Band Plan 2015. We note that the consideration of coexistence issues with incumbent uses and users is a key part of the spectrum planning undertaken before implementing any new arrangements.

# Implementation

### 1.9 GHz (1880-1920 MHz)

Submitters were broadly supportive of the ACMA's decision to progress the 1.9 GHz band to the 'implementation' stage, enabling operation of various WBB applications.

Three submitters supported the ACMA's decision on 1.9 GHz to implement DECT 2020 Australia-wide and rail mobile radio. One of these submitters recommended a review of 1.9 GHz band to ensure no additional restrictions are placed on 1800 MHz base stations, and that base station repeaters in 2 GHz band are protected from interference by 1.9 GHz transmitters.

Another submitter supported harmonising with international allocations and noted this spectrum will be important for accessing standard equipment.

#### Our response

We welcome input during the implementation phase of the band review.

In Q2 2024, as part of the sunsetting process, we consulted on remaking the Radiocommunications (Cordless Communications Devices) Class Licence 2014. We took this opportunity to reflect planning decisions made as part of our review of the 1.9 GHz band. Changes were implemented in June 2024, however, after reviewing submissions to that consultation process, we decided to undertake an additional consultation to consider broadening use-cases for digital enhanced cordless telecommunications (DECT). We released a <u>consultation paper</u> on service usage criteria for all devices, including DECT devices, in the CCD Class Licence in July 2024.

We also intend to undertake the following work to support the outcome of the review of the 1.9 GHz band:

- In Q4 2024, start developing draft technical framework for rail services in the 1900–1910 MHz band and short-range WBB in the 1900–1920 MHz band.
- In Q2 2025, publicly consult on technical arrangements.

# 2 GHz MSS (1980 – 2010 MHz and 2170 – 2200 MHz)

Two submitters welcomed ACMA's outcomes on our 2 GHz MSS consultation.

Some submitters urged the ACMA to consider allocation methods other than auction in this band. One of these submitters advocated for other approaches such as a hybrid one that combines elements of auctions with other mechanisms.

A submitter acknowledged they are not directly affected by the replanning options in this band, but heavily uses the adjacent band 2200–2290 MHz for aeronautical mobile services (AMS) and satellite services. They are therefore concerned about any collateral effects of spectrum replanning.

Another submitter recommended that 15 MHz of paired spectrum in the lower half of the band should be granted to the direct air-to-ground communication service on an exclusive basis, to harmonise with the European Aviation Network.

For the current 2 x 5 MHz that is already set aside for IoT uses, one submitter supported this approach and pointed out that it aligned with the Ministerial Statement of Expectations, as it promoted long-term public interest and supported policies related to regional development.

#### Our response

Given the diversity of views about the allocation of spectrum in the 2 GHz band for MSS, we expect to undertake further consultation on technical and allocation design matters in late Q4 2024 or Q1 2025. Subject to the findings of that consultation, we anticipate consulting on draft allocation instruments, and starting an allocation process in the first half of 2026.

We maintain the view expressed in the 2 GHz outcomes paper (January 2021) that there is a high level of uncertainty surrounding the potential benefits of direct air-to-ground communications services, as future uptake and viability is unclear in Australia. In some circumstances, the same functionality can be provided by satellite systems, which are already in operation providing gate-to-gate connectivity to commercial airlines. Rather than support an exclusive allocation to Direct Air to Ground Communications (DA2GC), we envisage that the technical framework supporting complementary ground component (CGC) infrastructure will be designed to also support DA2GC, allowing such a service to be deployed if desired by the licensee.

#### 3.4-4 GHz band

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

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.

Four submitters recommended that the ACMA align spectrum licensed and area-wide licensed (AWL) spurious domains (that is, above 4040 MHz). One of these submitters is interested in the opening of allocation for remote 3.4–4.0 GHz AWLs, as well as the process and timing by which 'unsold lots' in the 3.4/3.7 GHz auction will be made available.

Five submitters had concerns about the interim and permanent mitigations to manage coexistence with radio altimeters on aircraft, adding that the EIRP limit on use above 3700 MHz should be removed as it will hinder future deployments.

#### Our response

The 3.4–4.0 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, area-wide licences in remote areas across 3.4–4.0 GHz, as well as spectrum licensing in 3.4/3.7 GHz bands and area-wide licences in the 3.8 GHz band, both outside of the remote areas.

In November 2023, the ACMA formed a technical liaison group (TLG) to provide advice on the development of arrangements to support the introduction of the highly localised WBB (HL WBB) services in the 3400–3475 MHz (in defined urban areas) and 3950–4000 MHz (in metro and regional areas) frequency ranges. The TLG is expected to complete its work in Q3 2024. We plan to publicly consult on proposed technical and licensing arrangements for HL WBB services in Q4 2024. Subject to the completion of this process, we plan to issue licences in this band in calendar year 2025.

We note the request to revise the spurious emissions boundary for 3.4 GHz spectrum licences. We may consider the feasibility of reviewing the boundary in FY 2024–25, as well as potentially other aspects of the framework, subject to protection levels for existing stations being maintained.

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

Our initial view is that allocating 'unsold lots' is not an immediate priority but we will give greater consideration to it in the next FYSO.

# Forward allocation workplan

A submitter made general comments about ACMA's forward allocation workplan including work on identifying new mid-band spectrum but reiterated that all forward allocation priorities, other than Radiocommunications assignment and licensing instructions (RALI) updates, should remain secondary to the ESL process and considered in the broader context of the market to ensure that the supply of spectrum meets market demand.

#### Our response

We acknowledge the importance of the ESL process for our stakeholders. We are progressing our forward allocation work program in parallel with the ESL process and our spectrum planning functions.

# Optimising established planning frameworks

### **Broadcasting**

Submitters were generally supportive of the ACMA's work in AM to FM conversion in competitive markets. Submitters also provided a variety of suggestions about the ACMA's broadcasting planning work, including adjustments to processes for conversions, variations to LAPs and sunsetting instruments.

Two submitters highlighted delays in the AM to FM conversion program. A submitter asked that the ACMA include making digital radio channel plans (DRCPs) in the current work program for several locations around Australia to speed up the rollout of digital radio in regional areas.

One submitter requested that, when the ACMA develops and consults on radio LAP variations for AM to FM conversion for a particular licence area, the ACMA also consults on and publishes the relevant DRCP for that area, with a view to declaring a foundation digital radio multiplex transmitter licence.

#### Our response

We are continuing our AM to FM conversion program in regional areas to improve listener experience and support the radio industry. There has been a number of competing broadcast planning tasks over the last 12 months, such as planning for coverage improvements to existing services, which has led to delays in processing and finalising conversion requests. We are looking at ways to improve our processes and communication with industry.

We note the strong support for digital radio rollout. As also noted in our <u>Future delivery of radio report</u>, we will make a DRCP when a commercial radio broadcasting licensee or national broadcaster is committed to starting digital radio services in a particular area.

Subject to spectrum availability, we are generally supportive of digital radio trials, as they facilitate acquiring information relevant to industry business decisions about new broadcasting technologies for digital radio rollout in regional areas. Given the length of time since DAB+ was introduced, we generally will not permit broadcasting services to be transmitted as part of digital radio trials. Our view is that the technical aspects of the trial are generally able to be tested and assessed by the transmission of a test signal or looped audio content. Last year we issued a scientific licence for a trial of digital radio in Launceston, and we are continuing to engage with all industry sectors on possible further trials of digital radio and the rollout of digital radio in regional Australia.

## Satellite planning

We received a number of submissions relating to satellites and space communications.

A submitter supported the ACMA's work to optimise arrangements for satellite services, while continuing to afford sufficient priority to the long-term benefits of terrestrial mobile networks. Similarly, another submitter also supported the ACMA's commitment to monitor international and domestic developments that may prompt variations to the Radiocommunications (Low

Interference Potential Devices) Class Licence 2015 (LIPD class licence), as well as further assessing the authorisation of IoT earth station receivers in the 900 MHz band.

One submitter suggested that the ACMA consider replicating interim satellite arrangements in the E-band in other frequency ranges. They supported the use of interim arrangements while permanent rules are considered for new use-cases and plans to introduce permanent arrangements for satellite use in the E-band in 2024. They also agreed with the focus on existing, deployed technologies in the E-band when considering the risk of harmful interference to incumbents (particularly in higher frequency ranges).

Another submitter requested that the ACMA begin preparing for an allocation of the 17.3–17.7 GHz frequency in ITU Region 3. They requested that the ACMA update the 'Satellite planning' section in the FYSO to include investigation of this band. They claimed this will allow sufficient time to undertake the necessary steps to utilise this frequency at, or before, WRC-27.

A submitter asserted that there is high demand for S- and X-Band space science allocations and argued that the ACMA should create new earth station protection zones (ESPZs) for these services beyond Mingenew, Western Australia. They also requested RALI FX 3 be amended to require an 8 GHz fixed link, and 8.2 GHz television outside broadcast (TOB) transmitters to protect earth station receivers in 8025–8500 MHz. Similarly, they advocated for coordination rules for new fixed point-to-point assignments in the 6.7, 7.2 and 22 GHz bands.

#### Our response

We are considering arrangements to support E-band (71–76/81–86 GHz) satellite services on a coordinated basis with point-to-point links operating under RALI FX20 (potentially requiring updates to this RALI). This work is expected to continue across Q4 2024 and Q1 2025.

The use of the LIPD class licence for earth receive station is being considered as part of our work on satellite direct-to-mobile.

We are aware of possible future activities in the S- and X-band; however, beyond considering whether specific coordination arrangements<sup>3</sup> are required between X-band earth receive station and fixed links, no additional work is required.

Arrangements in the S-band (2025–2100 MHz, 2200–2300 MHz) support a number of objectives including providing long-term certainty for TOB services. We note that various parties have developed coordination arrangements with TOB licensees to support a small number of new earth receive station sites in the S-band. While complex, our view is that this industry-led approach is working well, and we encourage its continuation rather than investigating the development of a prescriptive regulatory approach, considering the small number of sites involved. Unlike Mingenew in Western Australia, we note that the existing ESPZs in eastern Australia are yet to be utilised so the need to develop more ESPZs in eastern Australia is yet to be demonstrated.

As detailed in the <u>Spectrum planning framework: Frequency coordination requirements</u> <u>review work program 2023–24</u>, we are currently considering expanding the scope of RALI

<sup>&</sup>lt;sup>3</sup> Noting that by default if there are no ACMA-specific coordination arrangements, ITU requirements should be used.

MS45 to include coordination arrangements for earth receive stations and additional frequency bands shared between fixed services and earth receive stations.

For Ka-band downlinks, RALI MS46 already has provisions for earth receive stations at Tidbinbilla, New Norcia and Mingenew. While we encourage organisations looking to support earth station receivers in the 25.5–27 GHz band to discuss their plans with us, we recommend that they consider these locations first, noting that there are now AWLs held within the 25.5–27 GHz band in a number of areas. The <u>ACMA website</u> also contains further information for prospective Ka-band earth receive station operators.

We also note that positions on WRC agenda items, including agenda item 1.4 that concerns 17.3–17.7 GHz allocations in Region 3, are a matter for the Department.

### Intelligent transport system (ITS)

One submitter indicated their support for the introduction of the Radiocommunications (Intelligent Transport Systems) Class Licence 2017 (ITS class licence) to support interfaces between rail and road infrastructure, such as level crossings. They encouraged the ACMA to conduct further investigation of the ITS class licensed band, subject to international developments. They also highlighted the difficulties in interference protection as part of the ITS class licence and cautioned against its use for systems with a safety function that has no backup communications. Another submitter pointed out that in addition to 5.9 GHz spectrum available for ITS, other spectrum considerations, including those for e-calls and vehicular communication systems, will be essential.

#### Our response

We will continue to monitor international developments related to ITS.

We note that additional non-radiocommunications-specific regulations may be required. It may be possible for other regulatory criteria to be set out by other regulatory bodies, including the Department or state-based agencies.

### Spectrum licence and other technical frameworks

Two submissions suggested that the ACMA should progress work on the harmonisation and technical optimisation of spectrum-licensed bands for 5G and finalise the review of the spectrum licence technical frameworks in the 700 MHz and 2.5 GHz bands to allow deployment of 5G. They also noted the ongoing TLG for the 700 MHz band and the proposed Q2 2024 consultation on any changes to the technical conditions on licences, and encouraged the ACMA to adopt a long-term view in seeking to maximise the utility of this low-band spectrum.

Another submitter believed that review of Spectrum Licensing Technical Framework (SLTF) for the 2.5 GHz band needs to be included in the current FYSO 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. They also suggested that a discussion between interested stakeholders will facilitate co-existence of the systems, and migration of LTE systems to 5G.

Two submissions supported the progression of the 1800 MHz and 2 GHz outside of spectrum-licensed areas. One of the submitters suggested the ACMA consider reallocating part or all of the areas for spectrum licensing.

#### 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 review of the 2.5 GHz band SLTF is noted in FYSO 2024–29 and will begin after the review of the 700 MHz band SLTF.

We released the <u>1800 MHz and 2 GHz outside of spectrum-licensed areas options paper</u> in Q2 2024. It does not consider the expansion of the use of spectrum licensing in these bands.

### Spectrum sharing

Numerous submitters provided differing opinions about spectrum sharing.

One submitter suggested that the ACMA adopt a progressive approach to spectrum planning and promote innovative spectrum-sharing methods for more efficient and dynamic use of the spectrum. Similarly, one submitter supported spectrum sharing through a 'use it or share it' clause in (presumably spectrum) licences, allowing other providers to use that spectrum if usage levels are not met.

Conversely, another submitter rejected the suggestion of a 'hybrid' or shared access model in the context of the upper 6 GHz, as they considered that segmentation between use-cases will cause inefficient fragmentation of the band. Other submitters shared concerns that spectrum licensed under a spectrum licence is for exclusive use by the licensee and not intended for a prescriptive sharing model. One of these submitters argued that sharing between 2 systems in the same band and having overlapping areas may compromise the performance of one/both systems.

#### Our response

We are currently monitoring international developments on broader spectrum-sharing initiatives and welcome proposals for future trials of dynamic spectrum access technologies. The consideration of coexistence issues with incumbent users is a key part of the spectrum planning undertaken before implementing new arrangements.

We released a consultation paper in June 2024 that sought views on planning options in the upper 6 GHz band. This included discussion on potential 'hybrid' sharing options and the risks and benefits of implementing more complex arrangements. These issues will be considered further, and an outcomes paper is planned for release in Q4 2024. The June 2024 consultation paper also continued the discussion on the potential introduction of an AFC for the 6 GHz band – along with potential operational specifications for any such system.

# Licensing

### **Expiring spectrum licences (ESLs)**

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

One submitter suggested that licensees should be provided as much certainty as possible before the renewal application period, particularly when spectrum licences are to be renewed or re-allocated via auction. Another submitter supported early consultation and developing and undertaking processes well in advance of expiry timeframes.

Two submitters shared the view that mobile broadband, in the context of broader economic objectives, will continue to be the most efficient and effective allocation, and optimal use of the spectrum. One submitter recommended that licences should be renewed rather than reauctioned. They stated that the success of the ESL process will be measured on its delivery of key priorities including continuity of service, market competition, regional connectivity and digital inclusion. They urged the ACMA to avoid the short-term benefit to public finances of higher renewal charges in favour of supporting the broader long-term economic and competition benefits that will flow from lower renewal charges They also strongly cautioned against any changes to existing arrangements designed to support new market entry without clear evidence of current mechanisms of spectrum access failures and the potential success of prospective licensees.

Regarding 1800 MHz spectrum licences, 2 submitters supported the consultation process for the 1800 MHz band and suggested that the ACMA should recognise that the band is vital for critical communications for transport operations.

#### Our response

The ESL 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.

Our finalised ESL framework was published ahead of schedule in Q4 2023, and we set out how we would incorporate a range of communications policy objectives proposed by the minister in December 2023. The minister consulted on, and confirmed, those policy priorities in the ESL MPS in April 2024, enabling stakeholders to lodge submissions to our ESL Stage 2 process with reference to the confirmed policy objectives.

As noted in our framework and in the ESL MPS, we will balance a range of objectives and considerations when forming preliminary and preferred views for ESL spectrum, and when deciding on individual licence applications.

We also extended the Stage 2 consultation window and, responding to stakeholder requests, amended the process to include a reply-to-comment period. This additional step allowed stakeholders to engage with each other's submissions and offer additional perspectives on them.

To provide greater levels of confidence to stakeholders, we will consult on preferred views on arrangements for ESL spectrum in Q1 2025. Stakeholders will have the opportunity to make

submissions on our preliminary views, including on any dispositions about changes to existing arrangements.

In regard to pricing, we note that maximising prices paid for spectrum is not an object of the Radiocommunications Act, or a communications policy objective of the minister. We use spectrum pricing, along with other planning and allocation tools and processes, to manage the spectrum in a way that promotes the long-term public interest derived from use of the spectrum. Our views on renewal charges will consider the value of spectrum in balance with the criteria and policy objectives of our ESL framework.

We note the views on potential changes to existing arrangements and understand the impact that these changes may have on spectrum licensees. The ESL process is guided by objectives set out in the ESL MPS, which have also been incorporated into our public interest criteria. The ESL MPS states that the ACMA should have regard to the importance of existing service coverage and consider where there may be scope to strengthen service offerings. As we progress with the development of preliminary views, we will consider the importance of continuing existing service arrangements alongside other policy objectives, our public interest criteria, and the merits of individual licence applications.

### **Drone spectrum regulation**

Submitters have recognised that the uncrewed aircraft systems (UAS) industry is expanding rapidly. A submitter suggested 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 class licence 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.

#### 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 <u>RALI MS48</u>). In addition, <u>scientific licences</u> 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.

# Radionavigation-satellite service (RNSS) retransmission technologies

Submitters supported the continued development of suitable licences for RNSS retransmission technologies. One submitter considered work related to RNSS to be of interest in rail control communications and encouraged the ACMA to continue efforts in developing standards and suitable licences for operation of RNSS retransmission technologies in rail tunnels and underground stations.

Another submitter supported the introduction of long-term licensing arrangements for RNSS repeaters following consultation, for use in tunnels to enable communications for emergency

management and public safety purposes. They also expressed support for trials of RNSS repeaters to be continued under scientific licences.

#### Our response

We proposed long-term licensing arrangements for RNSS retransmission technologies and <u>consulted on the proposed arrangements</u> during June and July 2024. As outlined in the FYSO 2024–29, we plan to implement a long-term licensing solution in Q2 2025.

### **Body scanner class licensing**

Several 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. A submitter 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. We previously undertook a large body of work over 2017–18 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 are inclined towards including a review of the existing arrangements under the Radiocommunications (Body Scanning – Aviation Security) Class Licence 2018 in our 2025–26 work plan. This review may include consideration of whether to expand existing technical arrangements, including to allow for operation in the 20–40 GHz range, subject to advice on capability requirements from relevant policy areas within government. This will be considered when developing our draft 2025–26 work plan as part of the FYSO 2025–30 process.

We welcome engagement from industry and relevant government policy areas on additional amendments that might be required to improve body scanning capabilities.

#### Maritime radio

A submitter has advocated for a number of updates to maritime regulatory instruments by including the VHF Data Exchange System (VDES) satellite channel arrangements and clarifying the use of certain channels in the VHF maritime mobile band.

#### Our response

Updates to the VHF channel plan and related instruments were made in Q1 2024. Updates include revised VDES details according to WRC-19 revisions to the ITU Radio Regulations.

In 2018, we consulted maritime stakeholders about how we should specify channel use in our regulatory framework. We do not propose to revisit these matters in the short term.

We plan to consult on the remake of several sunsetting maritime-related instruments in 2 tranches in Q4 2024 and Q1 2025. Due to the timing of sunsetting processes, it is unlikely that WRC-23 revisions will be consulted on at that time. We will look at the timing for implementing WRC-23 changes when preparing our 2025–26 work program.

### Approaches to consultation

Submitters all supported a 'reply-to-comment' period in consultations to enhance diverse perspectives in licence allocation and expand avenues for stakeholder participation in the spectrum allocation process.

Two submitters commented on the effectiveness of the TLG process in developing technical arrangements.

### Our response

We will consider including reply-to-comment periods on a case-by-case basis, noting that they may be more valuable for some consultations than others, and that these periods consume additional time and resources for stakeholders and the ACMA. In May 2024, in recognition of stakeholder views, we amended our Stage 2 ESL consultation process to include a reply-to-comment period.

We note the comments on TLGs. The use and processes of TLGs are made on a case-by-case basis.

# **Pricing**

#### Licence tax for satellite licences

Two submitters have requested that the ACMA consider a reduction in licence tax as it represents a major barrier to growing the space economy in Australia. One of these submitters cited New Zealand as an example of a country that does not impose a licence tax on licensees to receive satellite services. Another submitter urged the ACMA to encourage long-range, low-power communication technology, with pricing updated accordingly.

Another submitter expressed their support for the ACMA's ongoing implementation of the recommendations of the Spectrum Pricing Review. They also noted the importance of any future proposals to consider the impact that the proliferation of devices may have on existing spectrum-licensed services, including the additional cost to licensees of managing interference.

#### Our response

We use a mix of planning, licensing and pricing to promote the efficient use of spectrum.

We compare Australian prices with international jurisdictions, particularly in the context of space services. As part of implementing Spectrum Pricing Review recommendations, we made changes (including tax cuts in high frequency bands) to bring pricing more in line with other countries. Our understanding is that New Zealand has a cost recovery regime and its economy is of a size that may justify that approach. Australia's incentive pricing approach involves prices above cost recovery to help manage demand and the potential for interference. The suggestion to reduce taxes for fixed earth and earth receive licences in the ESPZ may be considered in future pricing reviews.

### Commercial broadcasting tax

One submitter claimed that commercial broadcasting tax (CBT) places a disproportionate cost burden on commercial radio broadcasters. They suggested that a full examination of the appropriateness of the *Commercial Broadcasting (Tax) Act 2017* (the CBT Act) should be undertaken as it was introduced in 2017 as a 5-year interim arrangement.

#### Our response

The imposition and amount of commercial broadcasting tax and related rebates is considered a matter for government rather than the ACMA. For example, the ACMA will implement the Commercial Broadcasting (Tax) (Transmitter Licence Tax Rebate) Rules 2024, which were made by the Minister for Communications in February 2024 and included a 12.5% increase in rebate amounts to reflect the compound effect of inflation over the past 2 years.

In addition, we conducted a review of commercial broadcasting tax arrangements and reported to the then Minister for Communications in March 2021. In the review, we made several recommendations, including retaining a price on the use of spectrum by commercial broadcasters, but maintained that amounts of CBT were a matter for government.

# Compliance

Submitters were supportive of the ACMA's ongoing compliance efforts. One submitter noted its support for the ACMA's leadership and involvement in compliance and international regulatory activities and urged the ACMA to minimise the risk of interference to spectrum-licensed services by continuing compliance activities for licence conditions and relevant technical frameworks.

Another submitter signalled its support for the ACMA's ongoing compliance focus on 5G electromagnetic energy (EME) compliance and interference. Additionally, it noted an increased potential for interference to existing spectrum-licensed services and urged the ACMA to ensure that interference management arrangements and resourcing are continued. It noted its concern for interference that may arise from the revised banned equipment and exemptions framework and encouraged the ACMA to monitor compliance of exempt parties with new notification and record-keeping requirements.

#### Our response

Our 2024–25 ACMA compliance program continues 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.

Given the implementation of the updated banned equipment and exemption framework, we do not expect an increase in incidents of interference to radiocommunications. The renewed framework ensures that high-risk equipment that may cause interference is subject to a comprehensive ban. Anyone authorised to conduct small-scale operational testing of banned equipment under the Innovation and Industry Development Exemption Framework is subject to mandatory notification arrangements, and law enforcement use of banned equipment continues to operate as intended.

Incidents of interference, whether attributable to banned equipment or other radiocommunications devices, are dealt with in accordance with our approach to <a href="mailto:compliance">compliance</a> and <a href="mailto:enforcement">enforcement</a>.

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.

# Sunsetting instruments

There are a range of instruments due to sunset in 2024–25. Of particular interest to submitters was the sunsetting instrument relating to citizen band (CB) radio.

Submitters shared views on the Radiocommunications (Citizen Band Radio Stations) Class Licence 2015 (the CB Class Licence), specifically about transitioning CBRS repeaters to 12.5 kHz channels. They posited that the current requirements are not fit for purpose and suggested adjusting the telemetry channels of repeaters to 12.5 kHz. They also suggested the ACMA update the CB Class Licence as it includes the geographic location of CB stations.

#### Our response

We plan to consult on a sunsetting review of the CB Class Licence in Q2 2025.