Wireless Institute of Australia response to the

Australian Communications & Media Authority Consultation

“Five-year spectrum outlook 2026–31 and 2026–27 work program”

April 2026

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Executive Summary

The Wireless Institute of Australia submission to the Australian Communications and Media Authority outlines a clear case for strengthening the effectiveness, accessibility, and future readiness of the amateur service in Australia. It highlights that while the service delivers significant national benefits across STEAM capability, innovation, and emergency communications, recent regulatory and administrative changes have introduced barriers that are impacting participation, confidence, and operational efficiency.

Key concerns identified include declining assessment service outcomes, gaps in licensing documentation and systems, inequities in callsign arrangements, and broader issues with communication and service delivery. The submission also presents a forward-looking reform agenda, including the development of an EME competence framework to enable safe access to increased power, modernisation of repeater and beacon regulation, and targeted improvements to spectrum access aligned with international developments and emerging technologies.

Importantly, the WIA positions itself as an active partner in delivering these reforms, offering existing capability, community insight, and technical expertise to support the ACMA. Through structured collaboration, clear timelines, and evidence-based policy development, the submission argues that both organisations can improve regulatory outcomes, foster innovation, and ensure the long-term sustainability and public value of the amateur service in Australia.

1. Introduction

The Wireless Institute of Australia (WIA) thanks the Australian Communications and Media Authority (ACMA) for the opportunity to provide feedback on the public consultation titled *"Five-year spectrum outlook 2026–31 and 2026–27 work program – Draft for consultation, March 2026."*

The WIA recognises the Amateur Service as a vital contributor to Australia's innovation, education, and skills ecosystem, closely aligned with national Science, Technology, Engineering and Maths (STEM) priorities[1][2]. Through hands-on experimentation, citizen science, and community engagement, it builds practical capability in telecommunications, electronics, and emergency communications. As a uniquely intergenerational activity, it supports participation from students through to experienced professionals, contributes to community health and wellbeing outcomes and societal benefits including improved technical literacy, innovation in wireless technologies, and strengthened national resilience during emergencies.

Given these benefits, we are keen to see the ACMA maintain a dedicated and active work program that continues to support the Amateur Service. This includes ensuring ongoing access to relevant spectrum, enabling flexible licensing and regulatory frameworks that encourage participation, and recognising the public value derived from the service. These actions are essential to ensuring that the Amateur Service can continue to deliver outcomes in the national interest. For more detail on the amateur service, refer to Appendix 1.

In 2025 the WIA undertook a baseline survey following one year of operation of the new class licence arrangements. The results were statistically significant with a confidence level of 95% and included amateurs from all call areas.

In high level summary, the themes included - consistent breakdown in communication, service delivery, and trust between the ACMA and the amateur community. Respondents reported limited direct engagement, low awareness and usability of the ACMA Assist portal, and significant gaps in the provision of essential licence documentation, impacting their ability to demonstrate operating credentials. These operational issues, combined with dissatisfaction in support responsiveness and concerns around callsign policy and equity, point to a need for clearer communication, improved systems, and more inclusive, transparent policy development to restore confidence in regulatory processes.

Some of the survey results have been included in this response in support of the WIA position.

[1] https://www.education.gov.au/australian-curriculum/support-science-technology-engineering-and-mathematics-stem
[2] https://www.chiefscientist.gov.au/sites/default/files/STEM_AustraliasFuture_Sept2014_Web.pdf

2. Licensing, Assessment and Callsign Framework Issues

2.1. Re-sit examination delay - a poor outcome

The WIA is concerned that a candidate who sits for an amateur radio assessment, but is unsuccessful, is prevented from reattempting an assessment for a further three months.

This is a new requirement that came into effect when the assessment process was transferred from the previous provider to the ACMA. In the past, candidates were able to re-sit an assessment shortly after further instruction.

This represents a significant drop in service outcomes under the ACMA compared to the previous assessment provider, and is causing considerable concern within the amateur community. It is an issue that warrants urgent review during this work program.

The WIA has a working system that it used to deliver fully randomised, on-demand and uniquely registered assessments during the time it held the assessment deed with the ACMA. This system is currently being used to deliver randomised trial Foundation Licence assessments through the WIA website using the WIA developed and owned question bank. The WIA is prepared to work with the ACMA to deliver a similar fully randomised, on-demand and uniquely registered assessment system to overcome these assessment delays.

2.2. Syllabi Refreshing

The WIA supports the continuation of the current practice of assessment reviews being undertaken by Specialist Assessors.

The WIA has recently made available to the ACMA - drafts of revised syllabi developed by the WIA Education committee and the WIA is supportive of a joint ACMA-WIA syllabi review committee. These syllabi include a new Regulations syllabus which fills a gap that has been identified by a recent Assessor Survey that was undertaken by the WIA Education Committee.

The Assessor survey undertaken by the WIA Education Committee has provided some relevant Assessor observations and areas for further review:

1. There is a change in emphasis in the number of questions for each syllabus section.
2. There is now a greater expectation for formula understanding and some formulas are more appropriate to professional qualifications.
3. There is an absence of a publicly verifiable peer-review process for assessment questions.
4. There is now a strong similarity between Standard and Advanced level questions with some questions being inappropriate for their particular licence level.

The WIA believes these changes result in increased access barriers to amateur radio for individuals who left school early, as well as those with learning or physical disabilities. The WIA believes these issues warrant attention during this work program.

2.3. Proof of Licence Documentation

The WIA continue to have concerns about the operation of ACMA Assist portal and the treatment of legacy licence holders post the class licence transition. We request the ACMA allocate some effort to at the very least making pre-class licence transition documentation accessible electronically via the ACMA Assist Portal for this cohort. This would reduce the amount of work the ACMA Customer Service Centre has to undertake and would establish the foundation for pre-class licence transition recognition and call-sign certificates to become available via the ACMA Assist portal in future workplans. The recent ACMA Performance Survey (April 2025) results supports this request.

2.4. Equity for VK9 Licence holders

The WIA supports equity and a focused support approach for VK9 permanent residents who are being treated differently to mainland amateur radio operators. The recent ACMA Performance Survey (April 2025) results supports this position.

2.5. Further work required on Island Callsigns

The WIA in the last FYSO response (25/26 Work Year) supplied a comprehensive response to the Island callsign issues following the transition to the Class Licence.

The WIA has undertaken a comprehensive ACMA Performance Survey (April 2025) and this provides clear evidence from the amateur radio community who support restoration of the callsign allocation for the following Islands:

48.5% disagree / 11.5% agree - Lord Howe Island going from VK9 to VK2
43.2% disagree / 11.8% agree - Heard Island going from VK0 to VK9
44.4% disagree / 11.8% agree - Macquarie Island going from VK0 to VK9

The WIA requests that consideration be given to returning these islands to original callsign designation as outlined in the FYSO (25/26 work year) and this 26/27 work year.

3. EME Competence Suite

Probably the most pressing matter of interest to a large proportion of Australian radio amateurs is to see a proper pathway and timeline defined to develop a suitable framework to support access to increased transmitter power. The WIA is concerned that the ACMA is holding back this work while the rest of the world continues to develop frameworks that support it. In the last year, OFCOM has for example relaxed conditions to allow UK amateurs to finally access more than 400W Px with suitable Electro Magnetic Energy (EME) controls. Meanwhile the ACMA has still not set a timeline beyond the phrase ‘long term’ in this year’s draft FYSO.

Given that we have been seeking access to increased power since 2013, and during the Class License conversions some discussions were raised by ACMA in consultations considering increased power access, to still be left without a proper timeframe and opportunity to address this issue of interest to Australian radio amateurs is most disappointing.

The WIA acknowledges that the ACMA has clearly linked EME risk with high power operation. The issue the WIA sees is that beyond just stating a set of standards to be met, no additional support or framework has been established linked to training and education of amateur radio operators in EME safety. The amateur syllabus barely covers this topic. As a result, it is also clear that there is a lot of work to do to establish a suitable framework that is acceptable to the ACMA and that can be used to train amateur radio operators in EME safety. This is why the WIA is seeking establishment of a multi-year multi-step process aimed at understanding the risk, developing suitable frameworks to control the risk and then delivering that as a training package so that compliance levels can meet community expected standards..

- Step 1 - Broaden the current Scientific Licensing Amateur High Power framework to open opportunities for more investigative and training development work to take place.

- Step 2 - Develop the necessary processes and protocols to be followed, and turn them into training and educational materials

- Step 3 - take those protocols and materials and turn them into regulations under the Class License to support normalisation of increased power access for the amateur service in Australia.

These three steps could form the basis for a 3 year program that results in normalisation of increased power access for advanced class radio amateurs in Australia. Note we are proposing a 3 year program as an acknowledgement of ACMA’s constrained resources.

Our ask, therefore, is that items be included in each of the next three year FYSOs to support such a regulatory development program, where we will seek engagement from the ACMA with the amateur service to solve the problems we know will be presented.

3.1. Year 1 - FYSO 26 - Scientific Licencing Expansion

In FYSO 26-27 - the WIA is requesting the ACMA accept applications for Amateurs to use increased power for any type of amateur communications, lifting the current restrictions. This small change will enable us to have the opportunity to sample a wider range of candidate use cases where amateurs are seeking increased power, whilst under the close scrutiny of the ACMA to ensure EME compliance. It will assist in the amateur service developing proposals for ACMA consideration for what steps amateurs need to be trained to take to manage their EME environments effectively particularly at increased power, following industry best practice along the way.

3.2. Year 2 - FYSO 27 - Framework Development

In FYSO 27-28 we are looking for workshops/consultations to take place with the amateur service to improve the ACMA understanding of how the amateur service can operate successfully within the framework defined by AS2772.2 at accessing increased power. The objective being to reach agreement on a framework for delivering increased power to the amateur service - including how training and certification can be used to support EME safety within the amateur service. That should lead the ACMA to be able to issue a consultation at the end of the year that outlines how the amateur service can meet its increased power EME obligations based on evidence and a jointly developed understanding of what training is required.

3.3. Year 3 - FYSO 28 - Increased Power added to Class Licence

In FYSO 28-29 we are looking for the full release of a general increased power access framework, backed by training, certification and communications industry best practice applied to the amateur service context.

4. Amateur repeater & beacon administration

We are seeking the ACMA commit to these timeframes and this works program:

4.1. RALI LM8

The amateur service continues to lobby for amendments to RALI LM8 to better protect our repeater services from intermodulation based interference caused by the current RALI LM8 technical standard short-coming identified in our submission to the ACMA consultation on the draft RALI review program 2025-26 that was conducted in February 2025.[3] We are looking for a positive outcome for the amateur service from ACMA in response to the request to amend the intermodulation coordination considerations during 2026.

4.2. Repeater Tone Control Standards

The WIA in 2025 responded to the consultation “Remaking the Amateur Licence Conditions Determination” [4]with a range of reforms that we sought to improve flexibility of operation of the amateur repeater and beacon service stations.The WIA was disappointed to see that ACMA refused to address or even discuss most of those reforms.

We contend that the level of regulatory control over the operation of these types of stations today is out of step with industry norms and that the nature of some of the regulations is excessive given the stance taken in other areas of amateur service as well as general radiocommunications regulation. Therefore, we ask that the ACMA reconsider their decision to not investigate reforming repeater and beacon license conditions and add an item accordingly to the 2026 FYSO works program.

[3] https://www.acma.gov.au/consultations/2025-02/draft-rali-review-work-program-2025-26
[4] https://www.acma.gov.au/consultations/2025-04/remaking-amateur-licence-conditions-determination

5. Amateur Radio spectrum access

The WIA Technical Advisory Committee has undertaken an extensive review of the amateur service band plans, the first in over 10 years and several outstanding matters have been highlighted. Band plans are an element studied under the relevant syllabi for the amateur service. The WIA continue to seek improved spectrum access in the following cases:

5.1. 6m Bandwidth Limitations

We thank the ACMA for granting standard licensees access to the whole 50-54 MHz band. The next step for this band that we are seeking is a lifting of the emission bandwidth restrictions in the segment 51-52 MHz given that the band is no longer used for broadcasting in this country. There is interest in experimenting with "narrowband" fast scan digital television transmissions on this band with emissions that are ~500-700 kHz in bandwidth. The current unrestricted segment of 52.000-54.000 is insufficient to support these experiments due to other amateur use of the band above 52.5 MHz. Removing the bandwidth limitation above 51 MHz will enable these ground breaking experiments more room to grow and develop, which is aligned with the fundamental aims of the amateur service, while having no measurable impact on any other spectrum user. We would like to see the ACMA make this administrative change in FYSO26

6. Conclusion

The Wireless Institute of Australia acknowledges the Australian Communications and Media Authority ongoing work in modernising the amateur service, but notes that recent changes have, in several areas, resulted in reduced accessibility, efficiency and equity for operators. Issues including assessment resit delays, syllabi design, legacy licence documentation, and callsign arrangements are creating unnecessary barriers and administrative burdens that risk undermining participation and confidence in the service. These matters are supported by evidence from recent community consultation and warrant timely and structured review.

At the same time, the WIA sees a clear opportunity to partner with the ACMA to deliver practical, evidence-based improvements. This includes leveraging existing WIA capabilities in assessment delivery, contributing to a jointly governed syllabi review process, and collaborating on the development of an EME competence framework that enables safe progression toward increased power operation. A staged, consultative approach—supported by trial environments, training, and certification—will ensure regulatory objectives are met while aligning Australia more closely with international practice.

More broadly, the WIA seeks to work constructively with the ACMA across repeater administration, spectrum access, and technical standards to support innovation and experimentation within the amateur service. By committing to clear timelines, open consultation, and collaborative design, both organisations can achieve better regulatory outcomes, reduce unnecessary constraints, and strengthen the long-term sustainability and public value of amateur radio in Australia.

Appendix I - Introducing the Amateur Service

The International Telecommunications Union recently updated their Handbook on Amateur and amateur-satellite services - Edition of 2026[5].

Amateur radio is a science-based technical activity enjoyed by over three million people worldwide. It is a recognised radiocommunications service by the International Telecommunication Union (ITU) and is listed in the ITU Radio Regulations as the 'Amateur Service' and the 'Amateur-Satellite Service'.

The International Amateur Radio Union (IARU) is the global sector representative body for the Amateur Service. It is recognised by the United Nations as a Non-Governmental Organisation (NGO) by virtue of its consultative status with other United Nations bodies, i.e. International Telecommunication Union (ITU). The ITU recognises the IARU as an international organisation (CV/Art.19, No. 231). IARU has worked with the ITU for nearly a century and is a Sector Member of the Radiocommunication Sector (ITU-R), playing a full part in the work of ITU-R as it affects amateur radio spectrum, and also of the Development Sector (ITU-D), relating to developing countries and emergency communication.

The Wireless Institute of Australia (WIA) is one of the founding member societies of the IARU Region 3 branch. WIA representatives are frequent members of Australian delegations to ITU-R Working Party meetings and World Radiocommunication Conferences. The WIA is also the sole representative member of the International Amateur Radio Union (IARU) in Australia.

The ITU Radio Regulation Article 25[6] define the amateur service and amateur satellite service as:

- The Amateur Service is a radiocommunication service:
    - for the purpose of self-training,
    - Intercommunication and technical investigations carried out by duly authorised amateurs,
    - persons interested in radio technique solely with a personal aim and without pecuniary interest.
- And the Amateur-Satellite Service is:
    - A radiocommunication service using space stations and earth satellites for the same purposes as those of the Amateur Service.

Areas where the Amateur Services brings value to the community with no cost to the Government and community include:

1.1 Inter-communication

- **Inter-communication** - facilitating the exchange of ideas, wellbeing, connectedness and understanding across Australia's multicultural community.

  In particular, using the idea of self reliant communication, the Amateur Service supports the health and wellbeing of the Australian community through events such as:

[5] https://www.itu.int/dms_pub/itu-r/opb/hdb/R-HDB-52-2026-PDF-E.pdf
[6] https://life.itu.int/radioclub/rr/art25.pdf

- Scout & Guide Radio Jamboree[7] held globally each year.
- Community sporting events[8] such as canoe marathons, car rallies, cross country cycling, equine endurance, fun run events and more.
- Radio Sport activities enable physical fitness and activity through (for example) the ARDF international competitions which combine orienteering with radio direction finding, as well as the Summits on the Air program (mixing mountaineering with amateur radio).

The value of these community based, community delivered communications capabilities via radio are hard to calculate in dollar terms, but are nonetheless invaluable to the function of such events. Indeed, during this

COVID19 pandemic, more and more people have turned to, or returned to, amateur radio as a way of keeping in touch with community, friends and family across town or across the world.

1.2 Self-training

- **Self-training** - promotion of Scientific, Technology, Engineering, Arts and Mathematics (STEAM) accessibility throughout Australian society, not just through formal education channels. This delivers value through:
  - School science programs[9] through, for example, communicating with the International Space Station (ARISS)[10] or flying and tracking high altitude balloons (Project Horus[11]).
  - Engineering professional development through self training on advanced communications techniques particularly on the VHF/UHF/Microwave bands.
  - Citizen science programs such as wildlife tracking, National Science Week - Festival of Bright Ideas[12], space weather monitoring[13], radio propagation studies[14] and many more
  - Advanced Communications Techniques Developments are being undertaken by individuals and groups across the country are facilitating new advanced communications techniques including developing new modes and methods of communication via radio (for example the development of HF digital voice communications using the Codec2 based FreeDV[15] modulation or advanced weak signal communications using modes (using the WSJT-X software suite)[16] such as FT4, FT8, JT65, WSPR, MSK144 and many more.
  - Building practical skills within graduate professionals and helping bridge the gaps that have appeared in formal radiocommunications educational pathways (eg the loss of the BOCP and TVOCP certifications) through self training undertaken within the Amateur Service.
  - Recommendation ITU-R M.1043-2[17] addresses the use of the amateur and Amateur-Satellite Services in developing countries. It recommends that administrations encourage and facilitate the amateur and Amateur-Satellite Services in order to develop radio operator skills, train engineers and technicians to design, construct and maintain radio equipment and systems, assist in forming groups capable of providing local support, exchange technical and operational information, experiment with new technology, and establish stations in rural and remote areas, among several other objectives.

[7] https://www.jotajoti.info/
[8] https://www.areg.org.au/archives/category/activities/rpm200
[9] https://www.sarcnet.org/
[10] https://www.ariss.org/
[11] https://www.areg.org.au/archives/category/activities/project-horus
[12] https://festivalofbrightideas.com.au/
[13] https://www.solarham.net/
[14] http://wsprnet.org/drupal/wsprnet/map
[15] https://freedv.org/
[16] https://wsjt.sourceforge.io/wsjtx.html
[17] http://www.itu.int/rec/R-REC-M.1043/en

1.3 Disaster relief communications

- **Disaster Relief Communications** - where, in Australia organised self-training obtained within the Amateur Service facilitated by groups such as the Wireless Institute Civil Emergency Network (WICEN)[18] has enabled operators from the Amateur Service to act for the direct benefit of the community. For example:
    - Relief Operators in disasters - WICEN operators played roles as relief operators in disaster communications centres during the Summer 2019/20 bushfires.
    - Secondary backup communications - WICEN trained amateur radio operators also provided communications networks to the community on the NSW south coast last year when the public and government communications networks failed.
    - Primary disaster communications channels - amateur radio was one of the first means of communications re-established in Darwin in 1974 after Cyclone Tracy - being used to establish vital links and information from Darwin to Police and other services, including broadcasters such as the ABC and 2GB, and later, evacuation information.
    - International Disaster communications[19]- the Amateur Service is recognised as a vital source of skilled operators able to enter disaster areas and set up communications networks with limited support. It was the amateur service that stepped in during several of the Caribbean hurricanes in the last couple of years. This capability of the Amateur Service is in fact recognised and encouraged in the ITU Radio Regulations through ITU-RR 25.9A.
    - Recommendation ITU-R M.1042-3[20] addresses disaster communications in the amateur and Amateur-Satellite Services. It is recommended that administrations encourage the development of Amateur Service and Amateur-Satellite Service networks capable of providing radiocommunications in the event of natural disasters, that such networks be robust, flexible and independent of other telecommunications services and capable of operating from emergency power, and that amateur organisations be encouraged to promote the design of robust systems capable of providing radiocommunications during disasters and relief operations.

[18] https://wicen.org.au/

[19] https://www.iaru.org/on-the-air/emergency-communications/

[20] http://www.itu.int/rec/R-REC-M.1042/en