

Australasian Railway Association

ACMA Submission

Draft Five-year spectrum outlook
2025–30 and 2025–26 work
program

17th April 2025

ABN: 64 217 302 489



The ARA

The Australasian Railway Association (ARA) is the peak body for the rail sector in Australia and New Zealand, and advocates for more than 220 member organisations across the industry.

Our membership covers every aspect of the rail industry, including the:

- passenger and freight operators that keep essential rail services moving;
- track owners, managers, and contractors that deliver a safe and efficient rail infrastructure network; and
- suppliers, manufacturers, and consultants that drive innovation, productivity, and efficiency in the rail industry.

Our members are driven to support vibrant, sustainable and connected communities through greater use of rail across Australia and New Zealand. We bring together industry and government to help achieve this ambition.

Our advocacy is informed by an extensive research program to ensure we offer solutions that are grounded in evidence and focused on delivering tangible value in our daily lives.

The rail industry has a crucial role to play in the region's sustainable development and growth, and offers meaningful and rewarding careers for tens of thousands of people in the regions.

Our significant program of work is focused on supporting a strong advocacy agenda, and creating opportunities for the rail industry to network, collaborate and share information, and maximise the benefits we have to offer the wider community.

The ARA thanks the Australian Communications and Media Authority for the opportunity to make this submission, which has been developed in consultation with ARA member organisations.

Any questions regarding this submission should be directed to [REDACTED], General Manager Passenger Rail and Safety via [REDACTED]

Australia's Rail Industry

Rail is a significant industry in Australia, creating economic activity through its operations and capital investments. It is an industry with activities across every major metropolitan and regional area and is supported by the full spectrum of skills in the Australian workforce.

In 2019, the rail industry contributed around \$30 billion to the Australian economy and employed more than 165,000 workers (directly and indirectly in full-time equivalent terms, FTE). The industry is made up of around 900 businesses that are located in approximately 20 major hubs.

Railway response

We welcome the opportunity for ARA to provide the following information in response to the matters for feedback presented in the ACMA document “Five-year spectrum outlook 2025–30 and 2025–26 work program, Draft for consultation”.

Allocations and licensing

The railway considers Radio Navigation-Satellite Services (RNSS) of high importance. ARA contributed to the ACMA consultation in July last year and supports the ACMA in continuing efforts in developing standards and suitable licences for operation of this class of systems.

International influences

The railway supports the ACMA maintaining a horizon scan for international developments, and leveraging technical specifications / standards for radiocommunications technologies (e.g. rail mobile radio). It is ARA’s view that where those are developed internationally, but can be applied domestically, it represents significant efficiency. We support the ACMA’s view:

“International spectrum harmonisation, equipment standardisation and markets heavily influence domestic decisions on how spectrum is used and how coexistence between different spectrum uses and users is achieved”; and that “Harmonising how we use spectrum with other countries and making use of international standards allows individuals and business to benefit from infrastructure/device economies of scale, global roaming and seamless interoperability.”

Private Networks

Certain private networks are not ideal for high-frequency bands, as public transport services require broad coverage that high-frequency bands can't efficiently support. Some private networks will need to facilitate roaming or similar mechanisms to allow devices to connect to both public and private networks for essential public transport services. ARA is concerned about the difficulty private networks face in obtaining the required mobile network codes and national numbers needed for interoperability with other networks.

Open RAN/Neutral hosts

The railway supports Open RAN/Neutral hosts. We foresee that they have the potential to extend current networks and reduce costs.

Spectrum for government requirements

The ACMA acknowledges the government's need for spectrum, and the railway supports its allocation for use in providing public transport services.

As new transport routes are developed, we anticipate an increase in the use of both private and public networks. This increased usage will be essential for establishing radiocommunications connectivity between vehicles and fixed infrastructure, such as signals and level crossings, with the goal of reducing crashes and enhancing safety.

ARA supports ACMA's continued proactive engagement with the railway.

2300-2302 MHz

ARA supports consideration of band optimisation to fully support international and regional radiocommunications standards.

1.9 GHz (1880–1920 MHz)

ARA supports the ACMA implementing outcomes from the 1.9 GHz band review. This is an area of keen interest for us, and we look forward to contributing to the planned consultations:

- creating a framework to support rail services in the 1900–1910 MHz frequency range; and
- formalising arrangements for rail services in 1.9 GHz band in Q3 2025.

In fact, the railway would welcome anything the ACMA could do to accelerate the process. This would support our industry's projects that will depend on access to 1.9 GHz, such as Queensland's planned introduction of FRMCS to the Sunshine Coast where they do not have 1800 MHz spectrum.

Managing rail's presence in the 1800 MHz band, and the future use of the 1900 MHz band will be critical to the safe, reliable and efficient continuation of passenger and freight rail operations.

ARA supports adoption of technically compatible spectrum licence frameworks with international standards.

Intelligent Transport Systems

ARA acknowledges the ACMA's ongoing approach to monitor advancements in cooperative intelligent transport systems (C-ITS) in relation to Intelligent Transport Systems, which currently operate within the 5.9GHz class licence band. ARA supports the monitoring of C-ITS developments and aligning these with progress in the EU and ETSI standards. We anticipate significant advancements in C-ITS over the next five years, which may necessitate a review

of the current approach to ensure it can effectively support the deployment of C-ITS technology in Australia, enabling secure, reliable, and timely communication between connected vehicles, infrastructure, and the network.

Expiring spectrum licences (ESLs)

Long-term, cost-effective access to the 1800 MHz spectrum band is essential for the ongoing safe and efficient operation of rail services in Australia, as well as for achieving national goals relating to interoperability, productivity, and decarbonisation. The ARA has previously expressed concerns about the timelines associated with the Expiring Spectrum License Process and the potential risks these pose to railway operators.

We look forward to continuing to engage in consultations on spectrum and licensing.

Spectrum Pricing Review implementation

The ARA emphasises that rail spectrum is essential for delivering critical public transport services and should be made available at a price that reflects the public interest. The competitive, market-based pricing allocation process is a barrier for government spectrum users due to their limited financial resources. Additionally, this approach lacks price certainty, which is crucial for effective state government budget planning. The ARA advocates for all spectrum charges to be paid in annual instalments. This method would allow railways to integrate spectrum costs into standard budgeting procedures, while avoiding complex and time-consuming approval processes for spectrum renewals.