Australian Government | acma Australian Communications and Media Authority

Response to submissions

Proposed framework for long-term licensing of radionavigation-satellite service (RNSS) retransmission technologies

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Background

Between 19 June and 17 July 2024, we consulted on a proposed framework to enable long-term licensing arrangements for radionavigation-satellite service (RNSS) retransmission devices. The framework included licensing, technical and pricing arrangements, as well as the legislative changes needed to implement the framework for RNSS repeaters.

The arrangements, if made, will enable more RNSS coverage in environments with low or no coverage.

The proposed arrangements included:

- a licensing approach, to license RNSS repeaters under a subtype of the radiodetermination licence type
- a technical framework, outlined in RALI MS49, to set out the conditions generally to be imposed on licences about the operation of RNSS repeaters
- taxes and charges for licensing RNSS repeaters

The arrangements were proposed to be implemented by changes to instruments that were scheduled to sunset on 1 April or 1 October 2025:

- Radiocommunications (Charges) Determination 2022 (Charges Determination)
- Radiocommunications (Interpretation) Determination 2015 (ID 2015)
- Radiocommunications (Radionavigation-Satellite Service) Class Licence 2015 (RNSS CL 2015)
- Radiocommunications (Low Interference Potential Devices) Class Licence 2015 (LIPD CL 2015)
- Radiocommunications (Transmitter Licence Tax) Determination 2015 (TLTD 2015).

This paper summarises the submissions to the consultation and outlines our responses to the feedback received.

Submissions to the consultation

We received 7 public submissions to the consultation, from industry representative bodies, toll-road and mobile network operators, and aerospace and railway entities.

Public submissions were provided from:

- Airservices Australia
- Australasian Railway Association (ARA)
- Australian Mobile Telecommunications Association (AMTA)
- Boeing Australia
- Optus
- RFI Technology Solutions
- Transurban Limited.

These submissions are published on the consultation page on our website.

Long-term licensing arrangements

Licensing approach

What stakeholders told us

All submitters commented on the proposed licensing approach. Submitters responded positively to the proposal to use apparatus licensing with the radiodetermination licence type to license RNSS repeater devices. They stated that the use of the radiodetermination licence type complements the satellite and terrestrial nature of RNSS radiocommunications from RNSS repeaters. It also supports the ability to identify the location of devices and their operators under apparatus licensing.

Noting the use of trial data to inform the development of the long-term licensing framework, some submitters welcomed the sharing of results and outcomes from the trial of RNSS repeater devices in road tunnels in May 2020 to determine the effectiveness of RALI MS49.

Our responses

RNSS repeaters will be licensed through a radiodetermination licence subtype arrangement, with conditions usually included on the licences to be outlined in a RALI.

We have carefully reviewed the results and outcomes from the trial of RNSS repeater devices in road tunnels in May 2020 to assess the risks, costs and operational requirements associated with the devices. We consider the final long-term licensing arrangements to be appropriate in ensuring the most optimal configuration and deployment of RNSS repeater devices.

Taxes and charges

What stakeholders told us

Submitters supported the proposed new taxes and charges as a practical and economical approach to incentivise the deployment of publicly beneficial technologies such as RNSS repeaters.

One submitter requested clarification on the frequency of the renewal and administrative charges for a licence.

Our response

Under the Australian Government Charging Framework, we are required to cost recover for the regulatory services we provide. Our standard hourly rate has been revised from $226 to $239 to reflect our current costs based on 2023–24 actual costs to the ACMA.

Following the change to the ACMA's standard hourly rate, a $510 (increased from $482) cost-recovery charge applies when a licence is first issued. For subsequent renewals of the licence, a $4 cost-recovery charge applies each time the licence is renewed. Transmitter licence tax is payable in full on issue of the licence, or in annual instalments.

Technical framework

The table below summarises stakeholder responses by specific sections of the RALI and our corresponding responses.

Table 1: Summary of submissions to the draft RALI MS49

Topic	Stakeholder response	ACMA response
Service description	While most submitters agreed with the description of Radionavigation-Satellite Service Repeater Devices (RRDs), one submitter noted that a retransmitted RNSS signal from an RRD may be different compared to the signal received at the surface location.	We have updated the service description to remove the reference indicating that the retransmitted signal remains unchanged. We have also referenced the related definitions for RNSS receiver, RNSS repeater station and RNSS repeater station in the Radiocommunications (Interpretation) Determination 2025 (ID 2025).
Deployment conditions and intended service area	A submitter questioned whether the RALI provided an objective standard for defining 'poor network design or layout' and who held responsibility for ensuring the RRD complies with the intended service area.	As part of the application process, licensees are encouraged to engage an Accredited Person to be satisfied that the deployment complies with the requirements set out in the RALI. This includes providing information about the intended service area for operation, which we will assess when deciding whether to issue a licence.

Topic	Stakeholder response	ACMA response
Installation requirements	Three submitters commented on the more stringent spurious emission limits for specific frequency bands in Table 2 under Chapter 4.5. Of these 3 submitters, 2 raised concerns with the more stringent limits potentially adding more complexity for Australian arrangements than what is needed under ETSI Harmonised Standard EN 302 645. This could disadvantage equipment manufacturers and vendors operating in the Australian market and impact other radiocommunications services in certain frequency bands. Other suggestions included: • applying the more stringent emission limits to the 1427–1518 MHz frequency range and to uplinks and downlinks in the 800 and 900 MHz frequency bands to protect cellular mobile networks • requiring external antennas to be installed in compliance with the Australian Standard AS/CA S009 (Wiring Rules) and by an ACMA Registered Cabler.	We have removed parts of Table 2 that are not applicable for the Australian context. Regarding the suggestion for more stringent limits to protect cellular mobile networks, we note the limits stated in Table 1 under Chapter 4.5 are more stringent compared to limits in spectrum licences. As a result, we consider the requirements in the RALI to be sufficient.
Boundary conditions	One submitter suggested changing the procedures to specify a measurement of an emissions limit just inside the service area close to the 'edge' boundary. This is away from open sky, instead of under clear sky conditions with no additional attenuation from the transmission point.	Since section 8.3.28 of the National Telecommunications and Information Administration (NTIA) Manual of Regulations and Procedures for Federal Radio Frequency Management requires radiated emissions to be calculated, we have updated the RALI to better align with the NTIA Manual.

Topic	Stakeholder response	ACMA response
Registration and notification requirements	There were mixed views from submitters towards the requirements specified in Chapter 4.7 of the RALI. One submitter agreed that the chapter provides an effective mechanism to achieve transparency and compliance with the RALI. Another submitter agreed with inserting a condition on all issued licences to restrict RRDs from causing interference to other services operating in accordance with the Australian Radiofrequency Spectrum Plan 2021. Other submitters questioned whether the RALI provided sufficient enforceability on RRD operators to comply with its requirements and raised questions and suggestions about: • the lack of coordination process against other devices or services • whether a licensee has discretion to exclude an RRD from being registered on the Register of Radiocommunications Licences (RRL) • whether spectrum licence holders would be responsible for determining incidents of interference from RRDs • requests to be notified when an RRD is licensed in the vicinity of other RNSS devices.	We must register details of all RRDs operated under radiodetermination licences on the RRL. This mandatory registration process allows us to maintain high visibility of the devices to identify and resolve interference issues. Licensees must provide details about the intended location and service area for device operation during the application process. This information is reviewed by the ACMA for compliance with the RALI, which removes the need for an extensive device-by-device coordination process. The technical requirements for RRDs as specified in the RALI are enforceable on licensees when they are included as licence conditions on the issued licences. To improve compliance with the RALI and minimise potential interference risks, we have: • expanded the proposed boundary licence condition to specify that licensees must provide copies of calculated emissions within 20 working days if requested by the ACMA • included a new proposed licence condition to require RRD operators to notify all major users of RNSS devices (such as mobile network operators and aviation providers) of where an RRD is located, prior to operation, using the contact details on the ACMA website.

Changes to remade instruments

What stakeholders told us

Six submitters commented on the proposed legislative changes to implement the new long-term licensing arrangements. Overall, submitters expressed general satisfaction or agreement with the proposed legislative changes.

One submitter suggested making the proposed definition for 'RNSS radiocommunication' less open. Another submitter also sought clarification on the expected timeframe for the arrangements to formally come into effect, based on their understanding that the arrangements would not commence until the relevant instruments have been amended.

Our response

As part of the sunsetting consultation process for the ID 2015, we proposed to place the definitions for 'radionavigation-satellite service (RNSS)', 'RNSS radiocommunication' and 'RNSS receiver', in the RNSS CL 2015, into a remade ID 2015. The RNSS CL 2015 and ID 2015 have since been remade into the Radiocommunications (Radionavigation-Satellite Service) Class Licence 2025 (RNSS CL 2025) and ID 2025.

When we consulted on the draft RNSS CL 2025, it included the following proposed definitions, which differ slightly from the previous proposed definitions:

radionavigation-satellite service has the meaning given by the spectrum plan.

RNSS frequency (short for radionavigation-satellite service frequency) means a frequency in a frequency band that the spectrum plan specifies is for use for the general purpose of the radionavigation-satellite service (whether or not the spectrum plan specifies the band is also for use for other purposes).

RNSS radiocommunication (short for radionavigation-satellite service radiocommunication) means a radiocommunication that is transmitted on an RNSS frequency.

RNSS receiver (short for radionavigation-satellite service receiver) means a radiocommunications receiver used to receive RNSS radiocommunications.

We consider the above definitions to be more consistent and have placed them into the ID 2025. We have also made other applicable changes to the remade TLTD 2015 (Radiocommunications (Transmitter Licence Tax) Determination 2025 (TLTD 2025)), Charges Determination (see 'Outcomes'), and intend to make changes to the LIPD CL 2015 when it is remade.

Outcomes

Following our consideration of consultation feedback, we have made the Communications (Radionavigation-Satellite Service Retransmission) Amendment Instrument 2025 (No. 1) (RNSS amendment instrument) and Radiocommunications (Transmitter Licence Tax) Amendment Determination 2025 (No. 1) (TLT amendment instrument).

The RNSS amendment instrument amends the Charges Determination and ID 2025 while the TLT amendment instrument amends the TLTD 2025. The changes include:

- authorising RNSS repeaters to be licensed under a radiodetermination licence subtype
- prescribing specified charges and taxes for issue of a radiodetermination licence that authorises the operation of an RNSS repeater system.

A full outline of the charge amounts for issuing and renewing a radiodetermination licence that authorises the operation of RNSS repeaters is in the Cost Recovery Implementation Statement.

We have also updated the guidance on radiodetermination licences to operate RNSS repeaters on the ACMA website.