Response to submissions

Review of scientific licensing arrangements

AUGUST 2023

Canberra

Red Building   
Benjamin Offices  
Chan Street   
Belconnen ACT

PO Box 78  
Belconnen ACT 2616

T +61 2 6219 5555  
F +61 2 6219 5353

Melbourne

Level 32   
Melbourne Central Tower  
360 Elizabeth Street   
Melbourne VIC

PO Box 13112  
Law Courts   
Melbourne VIC 8010

T +61 3 9963 6800  
F +61 3 9963 6899

Sydney

Level 5   
The Bay Centre  
65 Pirrama Road   
Pyrmont NSW

PO Box Q500  
Queen Victoria Building   
NSW 1230

T +61 2 9334 7700  
F +61 2 9334 7799

Copyright notice

[Creative Commons logo](http://i.creativecommons.org/l/by/3.0/88x31.png)

<https://creativecommons.org/licenses/by/4.0/>

With the exception of coats of arms, logos, emblems, images, other third-party material or devices protected by a trademark, this content is made available under the terms of the Creative Commons Attribution 4.0 International (CC BY 4.0) licence.

We request attribution as © Commonwealth of Australia (Australian Communications and Media Authority) 2023.

All other rights are reserved.

The Australian Communications and Media Authority has undertaken reasonable enquiries to identify material owned by third parties and secure permission for its reproduction. Permission may need to be obtained from third parties to re-use their material.

Written enquiries may be sent to:

Manager, Editorial Services  
PO Box 13112  
Law Courts  
Melbourne VIC 8010  
Email: [info@acma.gov.au](mailto:info@acma.gov.au)

[Background 1](#_Toc144196213)

[Response to submissions 2](#_Toc144196214)

[Non-assigned scientific licensing 3](#_Toc144196215)

[What stakeholders told us 3](#_Toc144196216)

[Our response 3](#_Toc144196217)

[Outcomes 4](#_Toc144196218)

[Assigned scientific licensing 5](#_Toc144196219)

[What stakeholders told us 5](#_Toc144196220)

[Our response 5](#_Toc144196221)

[Outcomes 5](#_Toc144196222)

[Other matters 6](#_Toc144196223)

[What stakeholders told us 6](#_Toc144196224)

[Our response 6](#_Toc144196225)

[Outcomes 6](#_Toc144196226)

# Background

Between 5 December 2022 and 28 February 2023, we consulted on our review of scientific licensing arrangements. This paper summarises the key issues and recommendations made by submitters to the consultation, and it provides our response to the feedback received.

Scientific licensing is intended to support spectrum users in developing, trialing and assessing new and innovative radiocommunications technologies and services. The review examined whether current regulatory arrangements were operating efficiently and effectively as intended.

Before the consultation paper was released, the ACMA issued 2 kinds of transmitter licences under the *Radiocommunications Act 1992* (Act) for scientific licensing purposes:

assigned scientific licences, which authorised the operation of radiocommunications transmitters on frequencies specified in the licence

non-assigned scientific licences, which authorised the operation of radiocommunications transmitters on shared frequencies specified in the Radiocommunications Licence Conditions (Scientific Licence) Determination 2015 (Scientific LCD).[[1]](#footnote-2)

In the consultation paper, we invited comments on a number of issues relating to conditions for authorised use-cases under non-assigned scientific licences, amendments to frequency band plans,[[2]](#footnote-3) and radiocommunication trials under assigned scientific licences.

We also sought views on a proposed class licence – the Radiocommunications (Scientific Purposes) Class Licence 2023 (the proposed class licence) – to replace non-assigned scientific licences. The proposed class licence largely replicates the provisions of the Scientific LCD that applied to non-assigned scientific licences. It provides for additional permitted purposes for the operation of radiocommunications devices (i.e., repair and maintenance of radiocommunication devices) and operation of devices in shielded enclosures as well as screened rooms.

The proposed class licence also proposed restricting the operation of devices in frequency bands covered by any inconsistent frequency band plans.[[3]](#footnote-4) However, the consultation proposed to amend all relevant frequency band plans to allow for operation of devices authorised by the proposed class licence.

We also welcomed comments with respect to arrangements for the sunsetting of the Scientific LCD, due on 1 October 2025.

# Response to submissions

We received 7 submissions to the consultation, from industry representative bodies, mobile network operators, and telecommunication and aerospace entities.

We received submissions from:

Australian Mobile Telecommunications Association (AMTA)

Boeing Australia

Free TV

NBN Co

Optus

Radio Amateur Society of Australia

Telstra.

Submissions that were not made in confidence are published on our website.

The following chapters summarise and respond to the submissions received.

# Non-assigned scientific licensing

## What stakeholders told us

Of the 7 submissions, 6 commented on the proposed changes to non-assigned scientific licensing arrangements.

Overall, submissions were broadly supportive of our proposal to issue a class licence that would authorise the operation of scientific stations previously authorised by   
non-assigned scientific licences.

Submissions acknowledged the similarities between non-assigned scientific licences and class licences, in that they both authorise radiocommunications transmitters on a ‘no interference, no protection’ basis on shared or common frequencies, and do not require specific technical registration of details of transmitters (such as location or frequencies which are being used). One submitter expressed full support towards the issue of a class licence, as this aligns with provisions of other administrations to support radio frequency equipment testing and research.

Two submissions opposed the removal of non-assigned scientific licensee information on the Register of Radiocommunications Licences (RRL). They said this would make it more difficult to monitor potential risks of interference. One of those submitters acknowledged the low risk of interference to other services (based on ACMA compliance data). However, they argued that the loss of licensee data on the RRL could lead to increased uptake of use cases under the class licence, which could make interference management more complex. Therefore, they recommended that the RRL be maintained under the class licensing arrangements.

A few submissions referenced ultra-wideband (UWB) use-cases under the proposed class licence. One submission requested that UWB transmitters be prevented from operating in spectrum-licensed frequency bands. Another submission expressed concerns with the creation of a class licence for UWB applications due to the risk of interference to television (TV) reception.

## Our response

As non-assigned scientific licences are managed on a ‘no interference, no protection’ basis, we do not consider the RRL to play a significant role in determining what locations or frequencies are suitable for use by a station under a non-assigned scientific licence.

Our compliance data indicates that we have not had to use non‑assigned scientific licensee data on the RRL in order to manage interference.

We consider the risk of interference associated with use of scientific stations to remain similar should the proposed class licence be made, and the details of users of devices no longer be available on the RRL. The arrangements for managing any suspected interference under the proposed class licence would remain the same as under the current non‑assigned licensing arrangements.

We also consider the proposed class licence does not alter the existing technical or operational conditions, and continues to authorise specific use-cases that do not have broad appeal, and in the case of UWB, that do not have any existing users.

## Outcomes

Following our consideration of submissions made to the consultation review, we have made the [Radiocommunications (Science and Research) Class Licence 2023](https://www.legislation.gov.au/Details/F2023L01122) (the class licence). The class licence allows people to continue conducting the same activities as under the non‑assigned scientific licence framework, by authorising persons to operate certain radiocommunication devices for a range of specified purposes under specified conditions.

To facilitate the transition to the class licence, the Scientific LCD has been repealed and replaced by the Radiocommunications Licence Conditions (Scientific Licence) Determination 2023, which determines the conditions that apply to the scientific licence type of transmitter licence. It contains a transitional provision imposing conditions on those non-assigned scientific licences that remain in force after the class licence commenced.

We have also made the [Radiocommunications (Science and Research) Frequency Band Plans Amendment Instrument (No. 1) 2023](https://www.legislation.gov.au/Details/F2023L01129).This amends the Radiocommunications 1.5 GHz Frequency Band Plan 2015, the Radiocommunications (Mobile-Satellite Service) (1980–2010 MHz and 2170–2200 MHz) Frequency Band Plan 2022, and the Radiocommunications (Television Outside Broadcasting)   
(2010–2110 MHz and 2200–2300 MHz) Frequency Band Plan 2022 to authorise operation under the class licence in the frequency bands and areas covered by the frequency band plans.

Non-assigned scientific licensees have been directly notified of the changes to non-assigned arrangements. The existing licences will continue to exist for the duration of the term, and the class licence will apply upon the expiry or surrender of the licence. Accordingly, our policy is not to renew non-assigned scientific licences and not to issue any new non-assigned scientific licences.

# Assigned scientific licensing

## What stakeholders told us

Five submissions commented on the proposed changes to assigned scientific licensing arrangements.

Submissions largely expressed satisfaction with the current operation of the assigned scientific licensing arrangements.

Submitters supported our suggestion that we provide further guidance on licensing arrangements for device testing.

The submissions recommended various options for the duration of radiocommunication trials. One recommended we be open to durations of longer than 12 months for assigned scientific licences, while another suggested a timeframe of   
9 months to accommodate the large bodies of work associated with trials. In contrast, one submitter expressed that the duration for trials should only be limited to 60 days.

## Our response

While we consider the assigned scientific licensing framework to be largely performing as intended, we see value in updating our guidelines to provide further guidance about using and applying for assigned scientific licences. This includes scientific trials, within broadcasting services bands spectrum, and for the use of high-power amateur stations.

## Outcomes

We have updated the ACMA guidelines on scientific licences (the guidelines) to:

describe our general policy approach towards assigned scientific licences

outline our approach towards radiocommunications trials conducted under assigned scientific licences

include guidance on applications to authorise higher power operation of amateur stations.

The guidelines can be found on the [ACMA website](https://www.acma.gov.au/licences/scientific-licence).

# Other matters

## What stakeholders told us

We note that the submissions did not express any views in relation to the sunsetting of the Scientific LCD.

One submission opposed the use of scientific licences to authorise use of amateur stations, including for higher power.

## Our response

Since no views were expressed in relation to the sunsetting of the Scientific LCD, we decided to proceed with the plan outlined in the consultation paper – to repeal the Scientific LCD, and replace it with a new instrument.

In September 2022, we published a [consultation paper](https://www.acma.gov.au/consultations/2022-09/proposed-amateur-class-licensing-arrangements-and-higher-power-operation-consultation-312022) that, among other things, sought views on a proposal for a staged implementation of high-power authorisation. It included implementing scientific licensing for amateur high‑power experimentation, and, in the medium-term, considering the establishment of a mechanism by which high‑power use-cases not enabled under scientific licensing can be authorised.

In the [draft FYSO 2023–28](https://www.acma.gov.au/consultations/2023-03/draft-five-year-spectrum-outlook-2023-28), we outlined that we would publish information to support the consideration of applications for assigned scientific licences to authorise certain high‑power experimentation uses by amateurs. This information is designed to assist applicants to understand the matters we will take into account when assessing an application and the type of information that should accompany an application.

## Outcomes

The conditions that apply to the scientific licence type of transmitter licence are outlined in the [Radiocommunications Licence Conditions (Scientific Licence) Determination 2023](https://www.legislation.gov.au/Details/F2023L01123), which replaced the Scientific LCD in the transition to the   
class licence.

The [scientific apparatus licences guidelines](https://www.acma.gov.au/licences/scientific-licence) include guidance on applications to authorise higher-power operation of amateur stations.

1. The Scientific LCD imposed common conditions on scientific licences, and broadly set out the activities for which a scientific station may be used. [↑](#footnote-ref-2)
2. Under section 137 of the Act, the ACMA must not issue a class licence that is inconsistent with a frequency band plan. A [frequency band plan](https://www.acma.gov.au/band-plans-allocate-spectrum#frequency-band-plans) sets out the purposes for which certain frequency bands may be used. [↑](#footnote-ref-3)
3. These frequency band plans are inconsistent with the proposed class licence: the Radiocommunications 1.5 GHz Frequency Band Plan 2015, the Radiocommunications (Mobile-Satellite Service) (1980–2010 MHz and 2170–2200 MHz) Frequency Band Plan 2022, and the Radiocommunications (Television Outside Broadcasting) (2010–2110 MHz and 2200–2300 MHz) Frequency Band Plan 2022*.* [↑](#footnote-ref-4)