

EXPLANATORY STATEMENT

Approved by the Australian Communications and Media Authority

Radiocommunications Act 1992

Radiocommunications (Communication with Space Object) Class Licence Variation 2022 (No. 1)

Authority

The Australian Communications and Media Authority (**the ACMA**) has made the *Radiocommunications (Communication with Space Object) Class Licence Variation 2022 (No. 1)* (**the instrument**) under subsection 132(1) of the *Radiocommunications Act 1992* (**the Act**) and subsection 33(3) of the *Acts Interpretation Act 1901* (**the AIA**).

Subsection 132(1) of the Act provides that the ACMA may, by legislative instrument, issue class licences which authorise any person to operate a radiocommunications devices of a specified kind, or for a specified purpose, or of a specified kind for a specified purpose. In accordance with section 133 of the Act, the ACMA may include in a class licence such conditions as it thinks fit.

Subsection 33(3) of the AIA provides that where an Act confers a power to make a legislative instrument, the power shall be construed to include a power exercisable in the like manner and subject to the like conditions (if any) to repeal, rescind, revoke, amend or vary any such instrument. Subsection 134 of the Act provides that the power to vary a class licence in accordance with subsection 33(3) of the AIA includes the power to vary the licence by including one or more further conditions, or by revoking any conditions of the licence.

Under section 137 of the Act, the ACMA must not issue a class licence that is inconsistent with the *Australian Radiofrequency Spectrum Plan 2021* (**spectrum plan**) or a frequency band plan. The instrument is not inconsistent with:

- the spectrum plan;
- the *Radiocommunications (Mid-West Radio Quiet Zone) Frequency Band Plan 2011*; and
- the *Radiocommunications (Mobile Satellite Services) 1980-2010 MHz and 2170-2200 MHz) Frequency Band Plan 2022*.

Under paragraph 136(1A)(a) of the Act, the ACMA must not vary a class licence if the variation would affect the spectrum allocated, to be allocated or to be re-allocated by issuing or re-issuing spectrum licences, unless the ACMA is satisfied that the variation would not result in unacceptable levels of interference to the operation of radiocommunications devices under those spectrum licences, and that the variation of the class licence would be in the public interest. The ACMA is satisfied of those matters.

Purpose and operation of the instrument

The purpose of the instrument is to vary the *Radiocommunications (Communication with Space Object) Class Licence 2015* (**the CSO Class Licence**). The CSO Class Licence authorises the operation of radiocommunications devices on Earth (**earth stations**) that communicate with radiocommunications devices located on space objects, such as satellites (**space stations**). The instrument:

- adds new frequency ranges to the list of frequencies for which the operation of earth stations is authorised by the CSO Class Licence; and
- specifies the conditions under which earth stations may be operated on these frequencies.

The instrument also inserts definitions of new terms that have been added to the CSO Class Licence.

Operation of a radiocommunications device is not authorised by a class licence if it is not in accordance with the conditions of the class licence (subsection 132(3) of the Act).

It is an offence, and subject to a civil penalty, to operate a radiocommunications device otherwise than as authorised by a spectrum licence, apparatus licence or class licence (section 46 of the Act). The Act prescribes the following maximum penalties for the offence:

- if the radiocommunications device is a radiocommunications transmitter, and the offender is an individual – imprisonment for 2 years;
- if the radiocommunications device is a radiocommunications transmitter, and the offender is not an individual – 1,500 penalty units (which is \$333,000 based on the current penalty unit amount of \$222);
- if the radiocommunications device is not a radiocommunications transmitter – 20 penalty units (\$4,400).

The Act prescribes the following maximum civil penalties:

- if the radiocommunications device is a radiocommunications transmitter – 300 penalty units (\$66,600);
- if the radiocommunications device is not a radiocommunications transmitter – 20 penalty units (\$4,400).

It is an offence, and subject to a civil penalty, to possess a radiocommunications device for the purpose of operating the device otherwise than as authorised by a spectrum licence, apparatus licence or class licence (section 47 of the Act). The Act prescribes the same penalties for this offence and civil penalty contravention as for the offence and civil penalty contravention in section 46.

The instrument is a disallowable legislative instrument for the purposes of the *Legislation Act 2003* (the LA). The CSO Class Licence is subject to the sunset provisions of the LA.

A provision-by-provision description of the instrument is set out in the notes at **Attachment A**.

Documents incorporated by reference

Section 314 of the Act provides that an instrument under the Act may make provision in relation to a matter by applying, adopting or incorporating (with or without modifications) matters contained in any Act or any other instrument or writing as in force or existing at a particular time or from time to time.

The instrument incorporates the following Act and legislative instrument, as in force from time to time:

- the *Civil Aviation Act 1988*;
- the *Radiocommunications (Mobile-Satellite Service) (1980–2010 MHz and 2170–2200 MHz) Frequency Band Plan 2022*.

The Act and legislative instrument are available, free of charge, from the Federal Register of Legislation website at www.legislation.gov.au.

The instrument also incorporates the following documents as in force or in existence from time to time:

- the Australian Spectrum Map Grid 2012, published by the ACMA and available, free of charge, on the ACMA website at www.acma.gov.au;
- ITU-R Resolution 169 *Use of the frequency bands 17.7-19.7 GHz and 27.5-29.5 GHz by earth stations in motion communicating with geostationary space stations in the fixed-satellite service*, published by the International Telecommunication Union (ITU) and available, free of charge, on the ITU website at www.itu.int;
- Radiocommunications Assignment and Licensing Instruction No. SM 26, *Restrictions on Apparatus Licensing in Spectrum Licensed Spaces*, published by the ACMA and available, free of charge, on the ACMA website.

The following Acts and legislative instruments are referred to in the instrument, but are not incorporated by reference:

- the Act;
- the *Radiocommunications (Interpretation) Determination 2015*.

Consultation

Before making the instrument, the ACMA was satisfied that consultation was undertaken to the extent appropriate and reasonably practicable, in accordance with section 17 of the LA.

Before the instrument was made, the ACMA was required by subsection 136(1) of the Act to publish a written notice that:

- stated that the ACMA proposed to vary the CSO Class Licence;
- stated the subject matter of the proposed variation;
- set out the CSO Class Licence and the proposed variation; and
- invited interested persons to make representations about the proposed variation by a specified date that was at least one month after the date of publication.

Under subsection 136(2A) of the Act, a written notice prepared pursuant to subsection 136(1) must be published on the ACMA's website and in another form readily available to the public. Under subsection 136(4) of the Act, the ACMA must give due consideration to any representations made before varying the CSO Class Licence.

Under paragraph 136(1A)(b) of the Act, if the variation of a class licence would affect the spectrum allocated, to be allocated or to be re-allocated by issuing or re-issuing spectrum licences, before varying the class licence the ACMA must consult all licences of spectrum licences who may be affected by the proposed variation of the class licence.

After previous consultation, the ACMA made the following announcements:

- in September 2019, the ACMA announced its decision to replan the 28 GHz band (27.5 GHz to 29.5 GHz) for fixed wireless access (FWA) and ubiquitous fixed-satellite services (FSS);

- in January 2021, the ACMA announced its decision to replan part of the 2 GHz band, namely 2005 MHz to 2010 MHz and 2195 MHz to 2200 MHz, for shared narrowband mobile-satellite services (MSS).

On 20 December 2021, the ACMA commenced a [public consultation](#) on the proposed variation to the CSO Class Licence. A written notice about the proposal to vary the CSO Class Licence and a draft of the instrument were published on the ACMA's website and in the Commonwealth *Gazette* in accordance with the requirements of subsections 136(1) and 136(2A) of the Act. Interested parties were invited to comment. The proposal to vary the CSO Class Licence was to implement the previously announced decisions of the ACMA in relation to FWA and FSS in the 28 GHz band, and MSS in part of the 2 GHz band.

The consultation closed on 28 February 2022. The ACMA received 12 written submissions in response to the consultation. These are available on the [ACMA website](#) (with the exception of three confidential submissions). The ACMA considered all submissions prior to making the instrument. Eight respondents commented in relation to the 2 GHz band proposals. Three broadly supported the proposals, three requested reconsideration of the ACMA's planning decision for the 2 GHz band (announced in January 2021), and two did not object to the overall proposal but suggested conditions be imposed in relation to the use of earth stations in non-metropolitan areas to better protect television outside broadcast services operating in an adjacent frequency band.

The ACMA notes that, before making its decision to replan the 2 GHz band, the ACMA considered feedback from all respondents who participated in the public consultation processes. The ACMA continues to consider that the best use of the frequency bands 2005 MHz to 2010 MHz and 2195 MHz to 2200 MHz is shared narrowband MSS.

The ACMA did not change the instrument to impose any additional conditions in relation to the use of earth stations in non-metropolitan areas. As the CSO Class Licence only authorises the operation of earth stations that communicate with space stations authorised under an apparatus licence, it is better to allow consideration of such matters on a case-by-case basis, when deciding whether to issue apparatus licences for the space stations, and whether to impose conditions on those licences.

The ACMA gave due consideration to all of the submissions received in relation to the 2 GHz band and decided to proceed to implement arrangements to support shared use of the band, as set out in the instrument.

Four respondents commented in relation to the 28 GHz band proposals. While all four respondents supported the inclusion of arrangements for FSS in the frequency band 27.5 GHz to 28.3 GHz, the respondents' issues concerned the planning arrangements associated with the protection of FWA services.

The ACMA notes that, before making its decision to replan the 28 GHz band, the ACMA considered feedback from respondents who participated in the public consultation process, and from industry participants who assisted in specialised technical consultation. The ACMA considers that the draft of the instrument already adequately addressed the proposals raised in the submissions.

The ACMA gave due consideration to all of the submissions received in relation to the 28 GHz band and decided to proceed on the basis that was previously announced, as set out in the instrument.

Regulatory impact assessment

A preliminary assessment of the proposal to make the instrument was conducted by the Office of Best Practice Regulation (**OBPR**), based on information provided by the ACMA, for the purposes of determining whether a Regulation Impact Statement (**RIS**) would be required. For the proposed changes in relation to the 2 GHz band, OBPR advised that a RIS would not be required because the proposed regulatory change is within the scope of the previous RIS-like process conducted as part of the review of the 2 GHz band. OBPR confirmed that no further regulatory impact analysis was required – OBPR reference number 25164.

For the proposed changes in relation to the 28 GHz band, OBPR advised that a RIS would not be required because the proposed regulatory change is minor or machinery in nature – OBPR reference number 25460.

Statement of compatibility with human rights

Subsection 9(1) of the *Human Rights (Parliamentary Scrutiny) Act 2011* requires the rule-maker in relation to a legislative instrument to which section 42 (disallowance) of the LA applies to cause a statement of compatibility with human rights to be prepared in respect of that legislative instrument.

The statement of compatibility set out below has been prepared to meet that requirement.

Overview of the instrument

The *Radiocommunications (Communication with Space Object) Class Licence Variation 2022 (No. 1)* (**the instrument**) varies the *Radiocommunications (Communication with Space Object) Class Licence 2015* (**the CSO Class Licence**). The CSO Class Licence authorises the operation of radiocommunications devices on Earth (**earth stations**) that communicate with radiocommunications devices located on space objects, such as satellites (**space stations**). The instrument:

- adds new frequency ranges to the list of frequencies for which the operation of earth stations is authorised by the CSO Class Licence; and
- specifies the conditions under which earth stations may be operated on these frequencies.

The instrument also inserts definitions of new terms added to the CSO Class Licence.

The purpose of these variations to the CSO Class Licence is to implement licensing arrangements relating to ACMA's replanning decisions for the 2 GHz and 28 GHz bands.

For the part of the spectrum known as the 2 GHz band, the instrument facilitates use of the upper 2 x 5 MHz of the band for innovative narrowband mobile-satellite applications such as telemetry, short messaging, and low-data-rate services (which includes satellite internet of things (IoT) applications). These arrangements are intended to provide spectrum access to new entrants with minimal regulatory arrangements, thereby supporting growth in the Australian space industry, while maintaining coexistence with use of nearby spectrum for television outside broadcast services.

For the part of the spectrum known as the 28 GHz band, the instrument facilitates use of the frequency range 27.5 GHz to 28.3 GHz for ubiquitous fixed satellite applications, such as very small aperture terminals and aeronautical, maritime and land earth stations in motion. These arrangements are intended to provide spectrum access for satellite broadband services, thereby supporting growth in the Australian space industry, while maintaining coexistence with adjacent-band and co-channel fixed wireless access services.

Human rights implications

The ACMA has assessed whether the instrument is compatible with human rights, being the rights and freedoms recognised or declared by the instruments listed in subsection 3(1) of the *Human Rights (Parliamentary Scrutiny) Act 2011* as they apply to Australia.

Having considered the likely impact of the instrument and the nature of the applicable rights and freedoms, the ACMA has formed the view that the instrument does not engage any of those rights or freedoms.

Conclusion

The instrument is compatible with human rights as it does not raise any human rights issues.

**Notes to the *Radiocommunications (Communication with Space Object)*
*Class Licence Variation 2022 (No. 1)***

Section 1 Name

This section provides for the instrument to be cited as the *Radiocommunications (Communication with Space Object) Class Licence Variation 2022 (No. 1)*.

Section 2 Commencement

This section provides for the instrument to commence at the start of the day after the day it is registered on the Federal Register of Legislation.

Section 3 Authority

This section identifies the provision that authorises the making of the instrument, namely subsection 132(1) of the Act.

Section 4 Variations

This section provides that the variations set out in Schedule 1 have effect.

Schedule 1 Variations

Item 1 Subsection 4(1)

This item inserts new definitions in subsection 4(1) for key terms used in the CSO Class Licence.

Item 2 Subsection 4(1) (definition of *qualified operator*)

This item inserts a new definition in subsection 4(1), of the term ***RALISM 26***. Because of the location of the new definition, it was convenient to omit and replace (without change) the existing definition of *qualified operator* and (with minor consequential changes) existing notes.

Item 3 Subsection 5(1)

This item amends subsection 5(1) by omitting the word ‘apparatus’ from paragraphs 5(1)(a) and (b). The amendments align the name of the types of apparatus licence specified in the provision – space licence and space receive licence – with the way in which they are used in the *Radiocommunications (Interpretation) Determination 2015*.

Item 4 After subparagraph 6(a)(ii)

This item amends paragraph 6(a) by adding the frequency band 2005 MHz to 2010 MHz to the list of frequencies specified for the operation of stations as authorised by the CSO Class Licence.

Item 5 Subparagraph 6(a)(iv)

This item amends paragraph 6(a)(iv) by expanding the frequency band specified for the operation of stations as authorised by the CSO Class Licence to include the frequency band 27.5 GHz to 28.3 GHz.

Item 6 After subparagraph 6(b)(v)

This item amends paragraph 6(b) by adding the frequency band 2195 MHz to 2200 MHz to the list of frequencies specified for the operation of stations as authorised by the CSO Class Licence.

Item 7 After subsection 8(1)

This item inserts new subsection 8(1A). Subsection 8(1) imposes a condition that a station operated under the CSO Class Licence must not interfere with the operation of a radiocommunications receiver. New subsection 8(1A) provides that a station operated under the CSO Class Licence is taken not to interfere with the operation of an area-wide receive station (a kind of radiocommunications receiver) that is operated either:

- in the frequency range of 27.5 GHz to 28.1 GHz and located outside a 26 GHz band spectrum licence area; or
- in the frequency range of 28.1 GHz to 29.5 GHz.

The term **26 GHz band spectrum licence area** is defined to mean an area specified in RALI SM 26 for the 25.1 GHz to 27.5 GHz frequency range.

Item 8 After subsection 8(3) (before the notes)

This item inserts new conditions into section 8 of the CSO Class Licence.

New subsection 8(4) imposes a condition which provides that a station must not be operated in the frequency band 2005 MHz to 2010 MHz unless both:

- the radiocommunications transmitter of the station is not on board an aircraft that is in the air; and
- the emissions of the radiocommunications transmitter above 2010 MHz do not exceed an equivalent isotropically radiated power (**EIRP**) of -66 dBW for each MHz.

New subsection 8(5) imposes a condition which provides that a station must not be operated in the frequency band 2005 to 2010 MHz in a metropolitan area unless each of the following applies:

- the emissions of the radiocommunications transmitter of the station do not exceed a maximum EIRP of 0.5 dBW for each MHz; and
- the maximum duty cycle of the radiocommunications transmitter does not exceed 1% averaged over a 15-minute period; and
- each transmission of the radiocommunications transmitter does not exceed 4 seconds in duration.

New subsection 8(6) imposes a condition which provides that a station must not be operated in the frequency band of 27.5 GHz to 28.3 GHz on land unless each of the following applies:

- the radiocommunications transmitter of the station is not operated in the frequency band 27.5 GHz to 28.1 GHz, in a 26 GHz band spectrum licence area; and
- when operated in the frequency band 28.1 GHz to 28.3 GHz in a 26 GHz band spectrum licence area, that radiocommunications transmitter is not operated within the greater of:
 - 50 MHz above 28.1 GHz; or
 - twice the occupied bandwidth of the radiocommunications transmitter above 28.1 GHz; and

- when operated in the frequency band 27.5 GHz to 28.1 GHz outside a 26 GHz band spectrum licence area, the emissions of that radiocommunications transmitter do not exceed a maximum EIRP to the horizon of -17.8 dBW in a 1 MHz bandwidth, within 30 kilometres of a 26 GHz band spectrum licence area; and
- when operated in the frequency band 27.5 GHz to 27.7 GHz outside a 26 GHz band spectrum licence area, that radiocommunications transmitter is not operated within the greater of:
 - 50 MHz above 27.5 GHz; or
 - twice the occupied bandwidth of the radiocommunications transmitter above 27.5 GHz.

New subsection 8(7) imposes a condition which provides that a station must not be operated in the frequency band 27.5 GHz to 28.3 GHz on board an aircraft that is in the air unless the radiocommunications transmitter of the station does not exceed the maximum power flux density limits specified in clause 3.1 of Part II: Aeronautical ESIMs of Annex 3 to ITU-R Resolution 169 (WRC-19) for any emissions that fall in the frequency band 27.5 GHz to 28.1 GHz in a 26 GHz band spectrum licence area.

New subsection 8(8) imposes a condition which provides that a station must not be operated in the frequency band 27.5 GHz to 28.3 GHz on board a ship unless the radiocommunications transmitter of the station does not exceed a power flux density on the shore of -112.2 dBW per square metre for each MHz, at a height of 30 metres above ground level, for any emissions that fall in the frequency band 27.5 GHz to 28.1 GHz in a 26 GHz band spectrum licence area.