

# Radiocommunications (Communication with Space Object) Class Licence 2015

made under subsection 132(1) of the

Radiocommunications Act 1992

## **Compilation No. 5**

Includes amendments up to: F2023L01695

Prepared by the Australian Communications and Media Authority, Melbourne.

## About this compilation

### This compilation

This is a compilation of the *Radiocommunications (Communication with Space Object) Class Licence 2015* that shows the text of the law as amended and in force on 19 December 2023 (the *compilation date*).

The notes at the end of this compilation (the *endnotes*) include information about amending laws and the amendment history of provisions of the compiled law.

#### **Uncommenced amendments**

The effect of uncommenced amendments is not shown in the text of the compiled law. Any uncommenced amendments affecting the law are accessible on the Register (www.legislation.gov.au). The details of amendments made up to, but not commenced at, the compilation date are underlined in the endnotes. For more information on any uncommenced amendments, see the Register for the compiled law.

#### Application, saving and transitional provisions for provisions and amendments

If the operation of a provision or amendment of the compiled law is affected by an application, saving or transitional provision that is not included in this compilation, details are included in the endnotes.

#### Modifications

If the compiled law is modified by another law, the compiled law operates as modified but the modification does not amend the text of the law. Accordingly, this compilation does not show the text of the compiled law as modified. For more information on any modifications, see the Register for the compiled law.

#### Self-repealing provisions

If a provision of the compiled law has been repealed in accordance with a provision of the law, details are included in the endnotes.

## 1 Name of class licence

This class licence is the *Radiocommunications (Communication with Space Object) Class Licence 2015.* 

### 4 Interpretation

(1) In this class licence:

**26 GHz band spectrum licence area** means an area specified in the relevant tables for HCIS area descriptions set out in RALI SM 26 that apply to the 25.1 to 27.5 GHz frequency range.

Act means the Radiocommunications Act 1992.

aircraft has the meaning given by section 3 of the Civil Aviation Act 1988.

AMSA means the Australian Maritime Safety Authority.

**ARPANSA Standard** means the Radiation Protection Standard for Limiting Exposure to Radiofrequency Fields – 100 kHz to 300 GHz (2021), or any standard published as a replacement of that standard, by the Australian Radiation Protection and Nuclear Safety Agency.

Note: The ARPANSA Standard is available from the Australian Radiation Protection and Nuclear Safety Agency website at <u>www.arpansa.gov.au</u>.

*Australian Spectrum Map Grid* means the Australian Spectrum Map Grid 2012, published by the ACMA.

Note: The Australian Spectrum Map Grid is available, free of charge, from the ACMA's website at <u>www.acma.gov.au</u>.

*device compliance day* for a station means the most recent of the following days:

- (a) if the station was manufactured in Australia the day the station was manufactured;
- (b) if the station was manufactured overseas and imported the day it was imported;
- (c) if the station was altered or modified in a material respect the day it was altered or modified.

**Global Maritime Distress and Safety System (GMDSS)** means the systems of requirements for ships contained in Chapter IV of SOLAS (the International Convention for the Safety of Life At Sea) and implemented in Australia through Marine Orders made under the *Navigation Act 2012*, as in force from time to time.

*Note* For the current text of Chapter IV of SOLAS, see *SOLAS*, *1974*, *as amended*, published by the IMO, available at <u>www.imo.org</u>. Marine Orders are legislative instruments available on ComLaw at <u>http://www.comlaw.gov.au</u>.

*HCIS* (short for Hierarchical Cell Identification Scheme) means the cell grouping hierarchy scheme used to describe areas in the Australian Spectrum Map Grid.

IMO means the International Maritime Organisation.

ITU means the International Telecommunication Union.

*ITU-R Resolution 169 (WRC-19)* means the "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 ITU.

Note: ITU-R Resolution 169 (WRC 19) is available, free of charge, on the ITU website at <u>www.itu.int</u>.

*metropolitan area* has the same meaning as in the *Radiocommunications (Mobile-Satellite Service) (1980–2010 MHz and 2170–2200 MHz) Frequency Band Plan 2022.* 

Note: The *Radiocommunications (Mobile-Satellite-Service) (1980–2010 MHz and 2170–2200 MHz) Frequency Band Plan 2022* is available, free of charge, on the Federal Register of Legislation at <u>www.legislation.gov.au</u>.

*occupied bandwidth*, in relation to a radiocommunications transmitter, means the width of a frequency band having upper and lower limits that are necessary to contain 99% of the true mean power of the transmitter's emission at any time.

qualified operator means a person who:

- (a) holds a certificate of proficiency issued under section 121 of the Act; or
- (b) holds a qualification issued by AMSA; or
- (c) holds an overseas qualification recognised by the ACMA or AMSA as an equivalent qualification.
- Note: For further information on the qualifications recognised by the ACMA or AMSA, refer to their websites at <u>www.acma.gov.au</u> and <u>www.amsa.gov.au</u>, respectively.

**RALI SM 26** means the Radiocommunications Assignment and Licensing Instruction No. SM 26, *Restrictions on Apparatus Licensing in Spectrum Licensed Spaces*, published by the ACMA.

- Note 1: RALI SM 26 is available, free of charge, on the ACMA's website at www.acma.gov.au.
- Note 2: For definitions of other expressions used in this class licence, see the Act and the *Radiocommunications (Interpretation) Determination 2015.* These include the following terms which are defined and have the meaning given to them by the *Radiocommunications (Interpretation) Determination 2015:* 
  - area-wide receive licence
  - area-wide receive station
  - earth receive licence
  - EIRP
  - maritime ship station
  - ship
  - space licence
  - space receive licence
  - station
- (3) In this class licence, the range of numbers that identifies a frequency band is taken to include the higher, but not the lower, number.

*Example* The 148 to 150.05 MHz frequency band is made up of radio frequencies that exceed 148 MHz but do not exceed 150.05 MHz.

### 4A References to other instruments

In this class licence, unless the contrary intention appears:

- (a) a reference to any other legislative instrument is a reference to that other legislative instrument as in force from time to time; and
- (b) a reference to any other kind of instrument or writing is a reference to that other instrument or writing as in force or in existence from time to time.
- Note 1: For references to Commonwealth Acts, see section 10 of the *Acts Interpretation Act* 1901; and see also subsection 13(1) of the *Legislation Act* 2003 for the application of the *Acts Interpretation Act* 1901 to legislative instruments.

Note 2: All Commonwealth Acts and legislative instruments are registered on the Federal Register of Legislation.

Note 3: See section 314A of the Act.

## 5 Class licence

- (1) This class licence authorises a person to operate a station to which this class licence applies for the purpose of communications with:
  - (a) a station on a space object which is authorised by a space or space receive licence; or
  - (b) another station through a station on a space object which is authorised by a space or space receive licence;

subject to the conditions set out in sections 6, 7 and 8.

- (2) This class licence applies to all stations except:
  - (a) stations located on a space object; and
  - (b) stations authorised by an apparatus licence to operate for a purpose that is substantially the same as the purpose authorised by this class licence.

### 6 Authorised frequencies

This class licence authorises transmission or reception of radio emissions by a station operating under this class licence in the following frequency ranges only:

- (a) for transmission:
  - (i) 148 to 150.05 MHz; or
  - (ia) 399.9 to 400.05 MHz; or
  - (ii) 1610 to 1660.5 MHz; or
  - (iia) 1668 to 1675 MHz; or
  - (iib) 2005 to 2010 MHz; or
  - (iii) 14 to 14.5 GHz; or
  - (iv) 27.5 to 30 GHz.
- (b) for reception:
  - (i) 137 to 138 MHz; or
  - (ii) 400.05 to 400.15 MHz; or
  - (iii) 400.15 to 401 MHz; or
  - (iv) 1518 to 1559 MHz; or
  - (v) 1613.8 to 1626.5 MHz; or
  - (va) 2195 to 2200 MHz; or
  - (vi) 2483.5 to 2500 MHz; or
  - (vii) 10.7 to 12.75 GHz; or
  - (viii) 17.7 to 20.2 GHz.

## 7 Equipment rules and Resolutions

- (1) A person must not operate a station under this class licence unless the station complies with:
  - (a) if the device compliance day for the station occurs before the commencement of Part 1 of Schedule 4 to the *Radiocommunications Legislation Amendment (Reform and Modernisation) Act 2020* – any standard applicable to it, as in force on the device compliance day;
  - (b) if the device compliance day for the station occurs on or after the day Part 1 of Schedule 4 to the *Radiocommunications Legislation Amendment (Reform and Modernisation) Act 2020* commenced – any equipment rules applicable to it, as in force on the device compliance day.
- (2) A person must not operate a maritime ship station in the GMDSS under this class licence unless:
  - (a) the person is a qualified operator; and
  - (b) the station complies with the Resolutions of the IMO relating to such maritime ship stations;
  - *Note:* The *Maritime Design and Installation Guidelines* as published by Inmarsat from time to time define the Resolutions of the IMO applicable to Inmarsat equipment operating within the GMDSS. These guidelines are available at <u>www.inmarsat.com</u>. Resolutions of the IMO are available at <u>www.imo.org</u>.
- (3) A person must not operate a station, or a group of stations, to which this class licence applies if the electromagnetic energy emitted by the station, or group of stations, exceeds the general public exposure limits specified in the ARPANSA Standard in a place accessible by the public.
- (4) In paragraph (1)(a), *standard* has the meaning given by section 5 of the Act, as in force immediately before the commencement of Part 1 of Schedule 4 to the *Radiocommunications Legislation Amendment (Reform and Modernisation) Act 2020.* 
  - Note: Part 1 of Schedule 4 to the *Radiocommunications Legislation Amendment (Reform and Modernisation) Act 2020* replaces standards with equipment rules. See also item 42 of that Schedule.

### 8 Interference with other stations

- (1) This class licence authorises operation of a station only when its operation does not interfere with the operation of a radiocommunications receiver.
- (1A) For the purposes of subsection (1), the operation of a station authorised by this class licence is taken to not interfere with the operation of an area-wide receive station that is:
  - (a) operating under an area-wide receive licence in the frequency range of 27.5 to 28.1 GHz that is located outside a 26 GHz band spectrum licence area; or
  - (b) operating under an area-wide receive licence in the frequency range of 28.1 to 29.5 GHz.
  - (2) This class licence authorises operation of a station in the frequency ranges of 1610 to 1626.5 MHz and 1670 to 1675 MHz within 20 kilometres of a radio astronomy observatory mentioned in footnote AUS87 of the spectrum plan, only if:

- (a) the operator of the station has sought advice from the operator of the radio astronomy observatory about when it may operate the station; and
- (b) the station is operated during periods consistently with the advice from the radio astronomy observatory.
- (3) This class licence does not authorise operation of a station in the frequency ranges of 1660 to 1660.5 MHz and 1668 to 1670 MHz when the station:
  - (a) is within 500 kilometres of a radio astronomy observatory mentioned in footnote AUS87 of the spectrum plan; or
  - (b) is in an airborne aircraft.
- (3A) This class licence does not authorise the operation of a station in the frequency range of 1673.38 to 1675 MHz if the emissions of the radiocommunications transmitter of the station exceed a level of -128.1 dBm/4MHz for more than 20% of the time at the output of the antenna of any radiocommunications receiver authorised to operate in all or part of that frequency range under an earth receive licence.
  - (4) Subject to subsection (5), this class licence authorises the operation of a station in the frequency range of 2005 to 2010 MHz only if:
    - (a) the radiocommunications transmitter of the station is not on board an aircraft that is in the air; and
    - (b) the emissions of the radiocommunications transmitter above the frequency 2010 MHz do not exceed an EIRP of -66 dBW for each MHz.
  - (5) This class licence does not authorise the operation of a station in the frequency range of 2005 to 2010 MHz in a metropolitan area unless:
    - (a) the emissions of the radiocommunications transmitter of the station do not exceed a maximum EIRP of 0.5 dBW for each MHz; and
    - (b) the maximum duty cycle of the radiocommunications transmitter does not exceed 1% averaged over a 15-minute period; and
    - (c) each transmission of the radiocommunications transmitter does not exceed 4 seconds in duration.
  - (6) This class licence authorises the operation of a station in the frequency range of 27.5 to 28.3 GHz on land only if the radiocommunications transmitter of the station:
    - (a) is not operated in the frequency range of 27.5 to 28.1 GHz in a 26 GHz band spectrum licence area; and
    - (b) when operated in the frequency range of 28.1 to 28.3 GHz in a 26 GHz band spectrum licence area, is not operated within the greater of:
      - (i) 50 MHz above 28.1 GHz; or
      - (ii) twice the occupied bandwidth of the radiocommunications transmitter above 28.1 GHz; and
    - (c) when operated in the frequency range of 27.5 to 28.1 GHz outside a 26 GHz band spectrum licence area, the emissions of the 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
    - (d) when operated in the frequency range of 27.5 to 27.7 GHz outside a 26 GHz band spectrum licence area, is not operated within the greater of:
      - (i) 50 MHz above 27.5 GHz; or

- (ii) twice the occupied bandwidth of the radiocommunications transmitter above 27.5 GHz.
- (7) This class licence authorises the operation of a station in the frequency range of 27.5 to 28.3 GHz on board an aircraft that is in the air only if 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 range of 27.5 to 28.1 GHz in a 26 GHz band spectrum licence area.
- (8) This class licence authorises the operation of a station in the frequency range of 27.5 to 28.3 GHz on board a ship only if 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 range of 27.5 to 28.1 GHz in a 26 GHz band spectrum licence area.

*Note 1*: A station to which this class licence applies will not be afforded protection from interference caused by a radiocommunications transmitter of other radiocommunications services.

*Note 2*: In accordance with section 137 of the Act, this class licence does not authorise the operation of any station in a way that is inconsistent with the terms of the *Radiocommunications (Australian Radio Quiet Zone Western Australia) Frequency Band Plan 2023*, as in force from time to time, accessible for free at www.legislation.gov.au.

*Note 3*: Section 197 of the Act makes it an offence for a person to engage in conduct where they are reckless as to whether that conduct will result in substantial interference with, or substantial disruption or disturbance of, radiocommunications. In administering that provision with respect to the operation of a station for transmission on land under this class licence within the RQZ (inner) zone described in item 1 of Schedule 1 to the *Radiocommunications (Australian Radio Quiet Zone Western Australia) Frequency Band Plan 2023*, as in force from time to time, the ACMA will take into account whether or not the entity responsible for operating the Murchison Radioastronomy Observatory objects to the operation of the station.

### 9 Interference to certain receiving stations

The operation of a station for reception in the following frequency ranges is authorised on the basis of no protection from interference caused by a point to point station:

- (a) 10.7 to 11.7 GHz;
- (b) 18.2 to 18.8 GHz;
- (c) 19.3 to 19.7 GHz.

## Endnotes

### Endnote 1—About the endnotes

The endnotes provide information about this compilation and the compiled law.

The following endnotes are included in every compilation:

Endnote 1—About the endnotes

Endnote 2—Abbreviation key

Endnote 3—Legislation history

Endnote 4—Amendment history

#### Abbreviation key—Endnote 2

The abbreviation key sets out abbreviations that may be used in the endnotes.

#### Legislation history and amendment history—Endnotes 3 and 4

Amending laws are annotated in the legislation history and amendment history.

The legislation history in endnote 3 provides information about each law that has amended (or will amend) the compiled law. The information includes commencement details for amending laws and details of any application, saving or transitional provisions that are not included in this compilation.

The amendment history in endnote 4 provides information about amendments at the provision (generally section or equivalent) level. It also includes information about any provision of the compiled law that has been repealed in accordance with a provision of the law.

#### **Misdescribed amendments**

A misdescribed amendment is an amendment that does not accurately describe how an amendment is to be made. If, despite the misdescription, the amendment can be given effect as intended, then the misdescribed amendment can be incorporated through an editorial change made under section 15V of the *Legislation Act 2003*.

If a misdescribed amendment cannot be given effect as intended, the amendment is not incorporated and "(md not incorp)" is added to the amendment history.

### Endnote 2—Abbreviation key

ad = added or inserted	orig = original
am = amended	par = paragraph(s)/subparagraph(s)
amdt = amendment	/sub-subparagraph(s)
c = clause(s)	pres = present
C[x] = Compilation No. x	prev = previous
Ch = Chapter(s)	(prev) = previously
def = definition(s)	Pt = Part(s)
Dict = Dictionary	r = regulation(s)/rule(s)
disallowed = disallowed by Parliament	reloc = relocated
Div = Division(s)	renum = renumbered
exp = expires/expired or ceases/ceased to have	rep = repealed
effect	rs = repealed and substituted
F = Federal Register of Legislation	s = section(s)/subsection(s)
gaz = gazette	Sch = Schedule(s)
LA = Legislation Act 2003	Sdiv = Subdivision(s)
LIA = Legislative Instruments Act 2003	SLI = Select Legislative Instrument
(md not incorp) = misdescribed amendment	SR = Statutory Rules
cannot be given effect	Sub-Ch = Sub-Chapter(s)
mod = modified/modification	SubPt = Subpart(s)
No. = Number(s)	<u>underlining</u> = whole or part not
o = order(s)	commenced or to be commenced
Ord = Ordinance	

Radiocommunications (Communication with Space Object) Class Licence 20155Compilation date: 19 December 2023

## Endnote 3—Legislation history

Name	Registration	Commencement	Application, saving and transitional provisions
Radiocommunications (Communication with Space Object) Class Licence 2015	23 September 2015 F2015L01486	24 September 2015	
Radiocommunications (Communication with Space Object) Class Licence Variation 2018 (No. 1)	27 September 2018 F2018L01364	28 September 2018	
Radiocommunications (Communication with Space Object) Class Licence Variation 2020 (No. 1)	28 February 2020 F2020L00181	29 February 2020	
Radiocommunications (Class Licence) Amendment Instrument 2021 (No.1)	11 June 2021 F2021L00734	17 June 2021	
Radiocommunications (Communication with Space Object) Class Licence Variation 2022 (No.1)	1 July 2022 F2022L00937	2 July 2022	
Radiocommunications (Communication with Space Object) Class Licence Variation 2023 (No. 1)	18 December 2023 F2023L01695	19 December 2023	

## **Endnote 4—Amendment history**

Provision affected	How affected
s 2	rep LA s 48D
s 3	rep LA s 48C
s.4(1)	am. F2021L00734, am. F2022L00937, am. F2023L01695
s.4(2)	rep. F2021L00734
s.4A	ad. F2021L00734
s.5(1)	am. F2022L00937
s 6	am. No.1 of 2018, am. No.1 of 2020, am. F2022L00937
s.6(a)	am. F2023L01695
s.6(b)	am. F2023L01695
s.7 (heading)	rs. F2021L00734
s.7(1)	rs. F2021L00734
s.7(3)	ad. F2021L00734
s.7(4)	ad. F2021L00734
s.8(1A)	ad. F2022L00937
s.8(2)	am. F2023L01695
s.8(3)	am. F2023L01695
s.8(3A)	ad. F2023L01695
s.8(4)	ad. F2022L00937
s.8(5)	ad. F2022L00937
s.8(6)	ad. F2022L00937
s.8(7)	ad. F2022L00937
s.8(8)	ad. F2022L00937

Provision affected	How affected
s 8 (notes)	rs. No.1 of 2020, am. F2023L01695
s 9	ad. No. 1 of 2020