

COMMONWEALTH OF AUSTRALIA
AUSTRALIAN COMMUNICATIONS AND MEDIA AUTHORITY



Radiocommunications Act 1992

SPECTRUM LICENCE FOR THE 20 GHz BAND

This licence is issued under Part 3.2 of the *Radiocommunications Act 1992* (the Act) to the person named at Item 1 of Part 1, Licence Schedule 1 of this licence.

1. The person named at Item 1 of Part 1, Licence Schedule 1 of this licence (the licensee), or a person authorised under subsection 68(1) of the Act, is authorised, under this licence, to operate radiocommunications devices in accordance with:
 - (a) the Act;
 - (b) the core conditions set out in Licence Schedule 2;
 - (c) the statutory conditions set out in Licence Schedule 3; and
 - (d) the other conditions set out in Licence Schedule 4.
2. This licence comes into force on the date shown at Item 5 of Part 1, Licence Schedule 1 and remains in force until the end of the date shown at Item 6 of Part 1, Licence Schedule 1.

Definitions

1. In this licence, unless the contrary intention appears;

20 GHz band means the frequency band 20.2 GHz - 21.2 GHz.

30 GHz band means the frequency band 30.0 GHz - 31.0 GHz.

emission limits outside the geographic area means the maximum permitted level of radio emission, outside the geographic area of a licence, that may be caused by radiocommunications devices operating under the licence.

emission limits outside the frequency band means the maximum permitted level of radio emission, outside the frequency band of a licence, that may be caused by radiocommunications devices operating under the licence.

geographic area, for a licence, means the area within which operation of a radiocommunications device is authorised under the licence.

harmful interference means interference that:

- (a) endangers the functioning of a radio-navigation service or other safety services; or
- (b) seriously degrades, obstructs, or repeatedly interrupts a radiocommunications service.

Note: A number of terms used in this licence are defined in the Act and have the meanings given to them by the Act, including:

- ACMA
- core condition
- frequency band
- radiocommunications device
- radiocommunications receiver
- radiocommunications transmitter
- radio emission
- Register
- spectrum licence
- spectrum licence tax
- spectrum plan

Licence Schedule 1

Licence details, bands and areas

Part 1 Licence Details

<i>Item</i>	<i>Licencee Details</i>	
1	<i>Name of licensee</i>	Department of Defence
2	<i>Address of licensee</i>	D DSO APW-GF-173, Anzac Park West Canberra ACT 2610
3	<i>Client number</i>	1138015
	<i>Licence Details</i>	
4	<i>Band release</i>	20 GHz Defence Band
5	<i>Date of licence effect</i>	27/04/2021
6	<i>Date of licence expiry</i>	26/04/2036
7	<i>Licence number</i>	11232380
8	<i>Date of licence issue</i>	16/04/2021

Part 2 Frequency bands and geographic areas

For Core Condition 1, this licence authorises the operation of radiocommunications devices in the frequency bands specified in column 3 and within the corresponding geographic areas specified in column 2 of Table 1.

The frequency bands consist of the bandwidth between the lower and upper frequencies, where the lower frequency limit is exclusive and upper frequency limit is inclusive. The geographic areas in column 2 of Table 1 are described by the sequence of HCIS identifiers in Table 2.

Licence Schedule 1 Licence details, bands and areas (cont)

Table 1: Frequency bands and geographic areas of this licence

Identifier (column 1)	Geographic areas (column 2)	Frequency bands (column 3)			
		Lower band (MHz)		Upper band (MHz)	
		Lower limit	Upper limit	Lower limit	Upper limit
A	1	20200	21200		

Licence Schedule 1 Licence details, bands and areas (cont)

Table 2: Description of the geographic areas of this licence

Geographic areas (column 1)	HCIS identifiers (column 2)
1	BR, BS, BU, BV, CR, CS, CT, CU, CV, DQ, DR, DS, DT, DU, DV, EP, EQ, ER, ES, ET, EU, FP, FQ, FR, FS, FT, FU, GP, GQ, GR, GS, GT, GU, HO, HP, HQ, HR, HS, HT, HU, IO, IP, IQ, IR, IS, IT, IU, IV, IW, JO, JP, JQ, JR, JS, JT, JU, JV, JW, KQ, KR, KS, KT, KU, KV, KW, LR, LS, LT, LU, LV, LW, LX, LY, MS, MT, MU, MV, MW, NT, NU, AR8, AR9, AS2, AS3, AS5, AS6, AS8, AS9, AT1, AT2, AT3, AT5, AT6, AT8, AT9, AU2, AU3, AU6, AU9, AV9, AW3, BT1, BT2, BT3, BW1, BW2, BW3, BW5, BW6, CW1, CW2, CW3, CW4, DW1, DW2, DW3, EV1, EV2, EV3, EV4, EV5, EV6, EV7, FV1, FV2, FV3, FV4, FV5, GO3, GO4, GO5, GO6, GO7, GO8, GO9, GV1, GV2, GV3, GV6, HV1, HV2, HV3, HV4, HV5, HV6, HV8, HV9, HW3, HW6, JX1, JX2, JX3, JX5, JX6, KO1, KO4, KO5, KO7, KO8, KP1, KP2, KP4, KP5, KP6, KP7, KP8, KP9, KX1, KX2, KX3, KX4, KX5, KX6, KX8, KX9, KY2, KY3, KY6, LP4, LP7, LQ1, LQ2, LQ4, LQ5, LQ7, LQ8, LZ1, LZ2, LZ3, MR1, MR4, MR5, MR7, MR8, MR9, MX1, MX2, MX3, MX4, MX7, MY1, MY4, MY7, MZ1, NS4, NS7, NS8, NS9, NV1, NV2, NV3, NV4, NV5, NV7, NW1, BT4A, BT4B, BT4C, BT4E, BT4F, BT4G, BT4I, BT4J, BT4K, BT4M, BT4N, BT4O, BT6C, BT6D, BT6G, BT6H, BT6K, BT6L, BT6O, BT6P, BT7A, BT7B, BT7C, BT7E, BT7F, BT7G, BT7I, BT7J, BT7K, BT7L, BT7M, BT7N, BT7O, BT7P, BT8I, BT8J, BT8K, BT8L, BT8M, BT8N, BT8O, BT8P, BT9C, BT9D, BT9G, BT9H, BT9I, BT9J, BT9K, BT9L, BT9M, BT9N, BT9O, BT9P, BT4D1, BT4D2, BT4D4, BT4D5, BT4D7, BT4D8, BT4H1, BT4H2, BT4H4, BT4H5, BT4H7, BT4H8, BT4L1, BT4L2, BT4L4, BT4L5, BT4L7, BT4L8, BT4P1, BT4P2, BT4P4, BT4P5, BT4P7, BT4P8, BT6B3, BT6B6, BT6B9, BT6F3, BT6F6, BT6F9, BT6J3, BT6J6, BT6J9, BT6N3, BT6N6, BT6N9, BT7D1, BT7D2, BT7D4, BT7D5, BT7D7, BT7D8, BT7H1, BT7H2, BT7H4, BT7H5, BT7H7, BT7H8, BT7H9, BT8E7, BT8E8, BT8E9, BT8F7, BT8F8, BT8F9, BT8G7, BT8G8, BT8G9, BT8H7, BT8H8, BT8H9, BT9B3, BT9B6, BT9B9, BT9E7, BT9E8, BT9E9, BT9F3, BT9F6, BT9F7, BT9F8, BT9F9

Note: The HCIS is described in the *Australian Spectrum Map Grid 2012*. The *Australian Spectrum Map Grid 2012* is available on the ACMA website at: www.acma.gov.au.

Licence Schedule 2 Core Conditions

Frequency band and geographic areas

1. This licence authorises the operation of radiocommunications devices in the frequency bands and within the geographic areas set out in Part 2 of Licence Schedule 1.

Emission limits outside the frequency band

2. Emission limits for transmissions outside the frequency band are those defined in Appendix 3 of the Radio Regulations as published by the International Telecommunication Union (ITU) for radio emissions in the spurious domain. For the purposes of this core condition, any radio emission caused by operations under this licence outside the licence bandwidth are considered to be in the spurious domain.

Emission limits outside the geographic area

3. Emission limits for transmissions outside the geographic area are those defined in the ITU Radio Regulations, including any relevant ITU satellite network filings and coordination agreements.

Liability to pay charges

1. The licensee must comply with all its obligations to pay:
 - (a) charges fixed by determinations made under section 60 of the *Australian Communications and Media Authority Act 2005*;
 - (b) the spectrum access charges fixed by determinations made under section 294 of the Act; and
 - (c) amounts of spectrum licence tax.

Third party use

2.
 - (a) Any operation of a radiocommunications device under this licence by a person other than the licensee must comply with any rules made under subsection 68(3) of the Act.
 - (b) The licensee must notify any person the licensee authorises to operate radiocommunications devices under the licence of their obligations under the Act, in particular:
 - (i) if applicable, the registration requirements under Part 3.5 of the Act for operation of radiocommunications devices under the licence; and
 - (ii) any rules made under subsection 68(3) of the Act.
 - (c) If a person (***the requester***) requests that the licensee authorise the person to operate radiocommunications devices under the licence, the licensee must notify the ACMA in writing no later than 30 days after receiving the request, in accordance with paragraph (f).
 - (d) If the licensee, having received a request mentioned in paragraph (c), authorises the requester to operate radiocommunications devices under the licence, the licensee must notify the ACMA in writing no later than 30 days after authorising the requester, in accordance with paragraph (f).
 - (e) If the licensee, having received a request mentioned in paragraph (c), decides not to authorise the requester to operate radiocommunications devices under the licence, the licensee must notify the ACMA in writing no later than 30 days after deciding not to authorise the requester, in accordance with paragraph (f).

Licence Schedule 3

Statutory Conditions (cont)

- (f) When notifying the ACMA in accordance with paragraphs (c), (d) or (e), the licensee must include the following information:
 - (i) for paragraph (c) - the nature of the requester's proposed operation of devices under the licence;
 - (ii) for paragraphs (d) and (e) - the request to which the notification relates;
 - (iii) for paragraph (e) - the reason for the decision not to authorise the requester;
 - (iv) for paragraph (e) - if the licensee offered to authorise the requester on terms other than set out in the person's request, but the requester did not wish to be authorised on those terms, the reasons (to the extent known to the licensee) the requester did not wish to be authorised on those terms.

Radiocommunications transmitter registration requirements

- 3. The licensee must not operate a radiocommunications transmitter under this licence unless:
 - (a) the transmitter has been exempted from the registration requirements under Statutory Condition 4 below; or
 - (b) both:
 - (i) the requirements under Part 3.5 of the Act relating to registration of the transmitter have been met; and
 - (ii) the transmitter complies with the details about it that have been entered in the Register.

Exemption from registration requirements

- 4. Transmitters used for defence purposes and operating in accordance with the conditions of this spectrum licence are exempt from device registration with the ACMA. This exemption does not apply to transmitters used for non-defence purposes.
- 5. Transmitters operating under this licence which are not registered with the ACMA must not cause interference to stations of services having a primary allocation in the Australian Radiofrequency Spectrum Plan and operating in accordance with their licence conditions except where otherwise agreed between the licensee under this spectrum licence and the licensees of those stations.

Residency

6. (1) The licensee must not derive any income, profits or gains from operating radiocommunications devices under this licence, or from authorising an authorised person to do so, unless:
- (a) the licensee is an Australian resident; or
 - (b) the income, profits or gains are attributable to a permanent establishment in Australia through which the licensee carries on business.
- (2) An authorised person must not derive income, profits or gains from operating radiocommunications devices under this licence, or from allowing third parties to operate radiocommunications devices under this licence, unless:
- (a) the authorised person is an Australian resident; or
 - (b) the income, profits or gains are attributable to a permanent establishment in Australia through which the authorised person carries on business.
- (3) In this condition:
- Australian resident*** has the same meaning as in the *Income Tax Assessment Act 1997*.
- authorised person*** means a person authorised under section 68 of the Act by the licensee to operate radiocommunications devices under this licence.
- permanent establishment*** has the same meaning as in:
- (a) if the licensee or authorised person (as appropriate) is a resident of a country or other jurisdiction with which Australia has an agreement within the meaning of the *International Tax Agreements Act 1953*-that agreement; or
 - (b) in any other case-the *Income Tax Assessment Act 1997*.

Definitions

1. In this Licence Schedule 4:

managing interference includes but is not limited to:

- (a) investigating the possible causes of the interference;
- (b) taking all steps reasonably necessary to resolve disputes about interference;
- (c) taking steps (or requiring persons authorised to operate devices under this licence to take steps) reasonably likely to reduce interference to acceptable levels;
- and
- (d) negotiating with other persons to reduce interference to acceptable levels.

Responsibility to manage interference

2. The licensee must manage interference between:
 - (a) radiocommunications devices operated under this licence; and
 - (b) radiocommunications devices operated under this licence and under each other spectrum licence held by the licensee.

Operation of Stations

3. The operation of radiocommunication stations under this licence must be in accordance with the Australian Radiofrequency Spectrum Plan and the Radio Regulations of the ITU.

Operation of Space and Earth Stations

4. The operation of Space and Earth Stations under this licence must be in accordance with frequency assignments recorded in the Master International Frequency Register (MIFR) of the ITU.

Note: The MIFR is maintained by the ITU in accordance with the ITU Radio Regulations.

5. Prior to the frequency assignments being recorded in the MIFR, space stations and earth stations may operate in accordance with the operating parameters published by the ITU in Special Sections of International Frequency Information Circulars and in accordance with any agreements reached as a result of an ITU frequency coordination process.

Operation of Receivers

6. The operation of receivers under this licence is on the basis that no protection is afforded for interference from stations of services having a primary allocation in the Australian Radiofrequency Spectrum Plan and operating in accordance with their licence conditions except where otherwise agreed between the licensee under this spectrum licence and the licensees of those stations.

Space Stations not Authorised

7. Space stations are not authorised under this licence unless there is an entry recorded in either the *Radiocommunications (Australian Space Objects) Determination 2014* or the *Radiocommunications (Foreign Space Objects) Determination 2014* made by the ACMA.

Coordination Agreements

8. Coordination agreements reached as a result of an ITU frequency coordination process are intended to minimise the potential for harmful interference to radiocommunications stations. A radiocommunications station operated prior to a frequency assignment being recorded in the MIFR cannot necessarily claim protection from harmful interference from other radiocommunications stations

Note: The MIFR is maintained by the ITU in accordance with the ITU Radio Regulations.

Co-sited devices

9. If:
- (a) interference occurs between a radiocommunications device:
 - (i) operated under this spectrum licence; and
 - (ii) operated under another licence (the *other licence*);when the measured separation between the phase centre of the antenna used with each device is less than 200 metres; and
 - (b) that interference is not the result of operation of a radiocommunications device in a manner that does not comply with the conditions of the relevant licence; and
 - (c) either the licensee or the holder (or authorised third party) of the other licence wishes to resolve the interference;
- the licensee must manage interference with:
- (d) the holder of the other licence; or
 - (e) if a site manager is responsible for managing interference at that location, that site manager.

Information for register

10. The licensee must give the ACMA all information as required by the ACMA from time to time for inclusion in the Register.

Note: Licensees should assist the ACMA in keeping the Register accurate and up to date by informing the ACMA of changes to device registration details as soon as possible.

International coordination

11. Transmissions must not result in harmful interference to stations outside of Australia where these stations are operating in accordance with the Radio Regulations of the ITU, except where the transmissions are in accordance with any agreements reached as a result of an ITU frequency coordination process.
12. If operation of a radiocommunications transmitter under this licence causes harmful interference to a radiocommunications receiver that operates in accordance with the ITU Radio Regulations and is located in a country other than Australia, the operation of that radiocommunications transmission must cease

Electromagnetic Energy (EME) Requirements

13. The licensee must comply with Parts 2, 3 and 4 of the *Radiocommunications Licence Conditions (Apparatus Licence) Determination 2015*, as in force from time to time. For the purpose of compliance with this condition, the definition of licence in subsection 4 (1) of the *Radiocommunications Licence Conditions (Apparatus Licence) Determination 2015* is to be read as if it referred to a spectrum licence.

Coordination with the Mid-West Radio Quiet Zone (RQZ)

14. Before operating, or seeking to register for use, a radiocommunications transmitter in or around the RQZ and supplementary RQZ, as defined by the *Radiocommunications (Mid-West Radio Quiet Zone) Frequency Band Plan 2011*, the licensee must follow the procedures set out in *Radiocommunications Assignment and Licensing Instruction (RALI) MS 32* as in force from time to time.

Note: RALI MS 32 is available on the ACMA website at www.acma.gov.au.

Memorandum of Understanding

15. The Memorandum of Understanding between the Australian Communications and Media Authority and the Department of Defence contains matters relevant to the operation of radiocommunications stations under this licence.

Variation to licence conditions

1. The ACMA may, with the written agreement of the licensee, vary this licence by including one or more further conditions, or revoking or varying any conditions of the licence, provided that the conditions, as varied, still comply with the requirements of Subdivision C of Division 1 of Part 3.2 of the Act.
2. The ACMA may, by written notice given to the licensee, vary this licence by including one or more further conditions (other than core conditions), or revoking or varying any conditions (other than core conditions) of the licence, provided that the conditions as varied still comply with the requirements of Subdivision C or Division 1 of Part 3.2 of the Act.

Guidelines

3. No guidelines on coordination have been made by the ACMA at this stage. Guidelines may be made in the future to reflect advances in technology and changes in spectrum arrangements in bands adjacent to the 20.2 GHz to 21.2 GHz band.

Suspension and cancellation of spectrum licences

4. The ACMA may, by written notice given to a licensee, suspend or cancel a spectrum licence in accordance with Division 3 of Part 3.2 of the Act.

Re-issue

5. A spectrum licence will not be re-issued to the same licensee without a price based allocation procedure unless:
 - (a) the licence was used to provide a service of a kind determined by the Minister under subsection 82(3) of the Act for which re-issuing licences to the same licensees would be in the public interest; or
 - (b) the ACMA is satisfied under paragraph 82(1)(b) of the Act that special circumstances exist as a result of which it would be in the public interest for that licensee to continue to hold that licence.

Trading

6. (1) A licensee may assign or otherwise deal with the whole or any part of a spectrum licence provided that this is done in accordance with any rules determined by the ACMA under section 88 of the Act.
- (2) Under the *Radiocommunications (Trading Rules for Defence Spectrum Licences) Determination 2015* the licensee may only trade the licensee's rights in relation to the whole of the 20 GHz band and the whole of the geographic area.
- (3) Should the licensee trade the licensee's rights in relation to part of the spectrum, new licences will be issued by the ACMA in accordance with paragraphs 87(1)(c) and (d) of the Act. The ACMA will develop technical frameworks where appropriate to facilitate trading in part.
- (4) An assignment under section 85 of the Act of the whole or any part of a licence that involves any change to a licence does not take effect until the Register has been amended under Part 3.5 of the Act, to take it into account.

Appeals

7. An application may be made to the ACMA for reconsideration of a decision of a kind listed in section 285 of the Act. A person affected by and dissatisfied with an ACMA decision may seek a reconsideration of the decision by the ACMA under subsection 288(1) of the Act. This decision can be subject to further review by the Administrative Appeals Tribunal, subject to the provisions of the *Administrative Appeals Tribunal Act 1975*.

Labelling of transmitters

8. Radiocommunications transmitters operated under this licence are to be labelled in accordance with the *Radiocommunications (Labelling) Determination 2013*.