Radiocommunications (Public Safety and Emergency Response) Class Licence 2013

Radiocommunications Act 1992

The AUSTRALIAN COMMUNICATIONS AND MEDIA AUTHORITY makes this Class Licence under subsections 132(1) and 133(1) of the *Radiocommunications Act 1992*.

Dated 13 May 2013

Chris Chapman
[signed]
Member

Giles Tanner
[signed]
~~Member~~ / General Manager

Australian Communications and Media Authority

Part 1 Preliminary

1 Name of Class Licence

This Class Licence is the *Radiocommunications (Public Safety and Emergency Response) Class Licence 2013*.

2 Commencement

This Class Licence commences on the later of:

(a) the day after it is registered; and

(b) the day on which it is published in the *Gazette*.

Note 1: All legislative instruments and compilations are registered on the Federal Register of Legislative Instruments kept under the *Legislative Instruments Act 2003*. See http://www.frli.gov.au.

Note 2: Both of these events must occur before this Class Licence commences.

3 Definitions and interpretation

(1) In this Class Licence:

Act means the *Radiocommunications Act 1992*.

airborne mobile transmitter means a radiocommunications transmitter designed for use while in motion in the air, or during halts at unspecified points in the air.

authorisation means an authorisation of the kind referred to in subsection 6(3).

authorised body means a body that is authorised by a public safety body to operate a radiocommunications device under an authorisation.

Defence Force has the meaning given in section 30 of the *Defence Act 1903*.

EIRP, in relation to a radiocommunications transmitter, means the equivalent isotropically radiated power emitted in any direction from either of the following:

(a) an antenna that is an integral part of the transmitter; or

(b) an antenna that is connected to the transmitter.

fixed service has the same meaning as in the spectrum plan made under subsection 30(1) of the Act.

harmful interference has the same meaning as in the spectrum plan made under subsection 30(1) of the Act.

maximum transmitter power means the peak power spectral density that is measured as a conducted emission over any interval of continuous transmission.

mobile service has the same meaning as in the spectrum plan made under subsection 30(1) of the Act.

power spectral density means the measured amount of power within a specified reference bandwidth.

prescribed (fixed service) radius, in relation to a radio astronomy site, means the radius corresponding to the site and fixed service set out in Table 2.2 of Schedule 2.

prescribed (mobile service – airborne) radius, in relation to a radio astronomy site, means the radius corresponding to the site and mobile service set out in Table 2.2 of Schedule 2.

public safety body means:

(a) the Australian Federal Police or the police force of a State or Territory;

(b) any Commonwealth, State or Territory body that is not covered by paragraph (a) and that performs functions relating to the investigation or prevention of terrorism, serious crime or corruption;

(c) any Commonwealth, State, Territory or other body that provides an ambulance, fire-fighting, search or rescue service; or

(d) the Defence Force.

public safety or emergency response function has the meaning given in subsection 4(2).

radio astronomy site means an observatory or facility at a site latitude and longitude mentioned in an item in Table 2.1 in Schedule 2.

Note: A number of terms used in this Class Licence are defined in the Act and, unless the contrary intention appears, have the meanings given to them by the Act.

(2) In this Class Licence, a frequency band described using two frequencies starts immediately above the lower frequency and ends at the higher frequency.

Part 2 Class Licence

4 Class Licence

(1) This Class Licence authorises any person to operate a radiocommunications device for the purpose of:

(a) performing a public safety or emergency response function;

(b) supporting the performance of a public safety or emergency response function; or

(c) facilitating the performance of a public safety or emergency response function by a public safety body.

(2) In this Class Licence, ***public safety or emergency response function*** means a function relating to:

(a) the compliance or enforcement of the laws of the Commonwealth, a State or Territory;

(b) the provision of an ambulance, fire-fighting, search or rescue service;

(c) the protection of life, property or infrastructure;

(d) securing the health or safety of the public; or

(e) the provision of assistance and relief to any person affected by a natural disaster, extreme weather conditions or other emergency.

Part 3 Conditions

5 Operation subject to conditions

The operation of a radiocommunications device under this Class Licence is subject to the conditions set out in this Part.

Note: Subsection 132(3) of the Act provides that the 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.

6 Operator of a radiocommunications device

(1) A person must not operate a radiocommunications device under this Class Licence unless the person is a member or employee of:

(a) a public safety body; or

(b) an authorised body.

(2) A public safety body may authorise an authorised body to operate a radiocommunications device for the purpose of this Class Licence.

(3) An authorisation:

(a) must be in writing;

(b) must specify the circumstances in which the radiocommunications device may be operated;

(c) must specify the period, not exceeding six months, during which the radiocommunications device may be operated; and

(d) may impose requirements, not inconsistent with this Class Licence, in relation to the operation of the radiocommunications device.

7 Operation in the course of performing functions or duties

A person must not operate a radiocommunications device under this Class Licence other than in the course of performing the person's functions or duties as a member or employee of a public safety body or an authorised body, as the case may be.

8 Limitation in relation to authorised bodies

(1) This section applies to a person who is a member or employee of an authorised body.

(2) A person to whom this section applies must not operate a radiocommunications device under this Class Licence unless the operation of the device:

(a) is for the purpose of facilitating the performance of a public safety or emergency response function by a public safety body; and

(b) is in accordance with the requirements, not inconsistent with this Class Licence, of the authorisation given by the public safety body.

9 Operation of radiocommunications transmitter within emission mask

(1) A person must not operate a radiocommunications transmitter under this Class Licence unless operation of the transmitter complies with emission mask L or emission mask M set out in the following table.

	Attenuation (dB) relative to Peak Average Power	
Fraction of Channel Bandwidth (BW)	**Emission Mask L**	**Emission Mask M**
0 > BW > 0.45	0	0
0.45 > BW > 0.50	219 log(BW/0.45)	568 log(BW/0.45)
0.50 > BW > 0.55	10 + 242 log(BW/0.5)	26 + 145 log(BW/0.5)
0.55 > BW > 1	20 + 31 log(BW/0.55)	32 + 31 log(BW/0.55)
1 > BW > 1.5	28 + 68 log(BW)	40+57 log(BW)
BW > 1.5	50	50

Note: The purpose of the emission masks is to ensure that emissions into adjacent frequencies are contained to an acceptable level, so as to allow for coexistence with other services.

(2) The operation of a radiocommunications transmitter that complies with:

(a) emission mask L – must not exceed a maximum transmitter power of 7dBm/MHz;

(b) emission mask M – must not exceed a maximum transmitter power of 20dBm/MHz.

Note: The maximum transmitter power is to be measured in a 1MHz reference bandwidth.

10 Operation of radiocommunications transmitter within maximum EIRP level

Under this Class licence, a person must:

(a) not operate a radiocommunications transmitter of a kind and for a type of service mentioned in column 1 in the following table at a level of EIRP that exceeds the maximum EIRP mentioned in column 2; and

(b) operate the radiocommunications transmitter to comply with the applicable emission mask mentioned in column 3.

Column 1	Column 2	Column 3
Kind of transmitter and type of service	**Maximum EIRP (dBm/MHz)**	**Applicable emission mask**
Low power transmitter	16	L
High power transmitter in a fixed service	46	M
High power transmitter in a mobile service	29	M
High power airborne mobile transmitter in a mobile service	36	M

Note: The maximum EIRP is to be measured in a 1MHz reference bandwidth and the applicable emission masks in column 3 are those specified in section 9.

11 Harmful interference

(1) A person must not operate a radiocommunications transmitter under this Class Licence if its operation causes harmful interference to another radiocommunications device operated under a licence.

(2) For the avoidance of doubt, the condition in subsection (1) applies notwithstanding any other condition in this Class Licence.

Note: A radiocommunications receiver communicating with a radiocommunications device operated under this Class Licence will not be afforded protection from harmful interference caused by other radiocommunications devices.

12 Permitted channels

A person must not operate a radiocommunications device under this Class Licence other than on:

(a) a channel; or

(b) two or more contiguous channels;

set out in the table in Schedule 1.

Note: The table describes each channel by reference to its lower and upper frequencies.

13 Limitation in respect of fixed services

A person must not operate a radiocommunications device under this Class Licence to provide a fixed service from a fixed location, if the radiocommunications device has been fixed at that location for a period exceeding six months.

14 Interference with radio astronomy observations

(1) The operation of a radiocommunications device under this Class Licence is subject to the conditions set out in this section if the device is operated on one or more of channels 11 to 22 mentioned in the table in Schedule 1.

(2) If a person operates a radiocommunications transmitter under this Class Licence, in a fixed service, at a location within the prescribed (fixed service) radius of a radio astronomy site, any interference caused by the transmitter must not exceed the radio astronomy interference threshold set out in respect of the site in Table 2.3 in Schedule 2.

(3) If a person operates an airborne mobile transmitter under this Class Licence, in a mobile service, at a location within the prescribed (mobile service – airborne) radius of a radio astronomy site, any interference caused by the transmitter must not exceed the radio astronomy interference threshold set out in respect of the site in Table 2.3 in Schedule 2.

Schedule 1 Channel Plan Frequencies for Operation of Radiocommunications Devices

(section 12 and subsection 14(1))

Channel Number	Bandwidth (MHz)	Lower Frequency (MHz)	Upper Frequency (MHz)
1	1	4 940	4 941
2	1	4 941	4 942
3	1	4 942	4 943
4	1	4 943	4 944
5	1	4 944	4 945
6	1	4 945	4 946
7	1	4 946	4 947
8	1	4 947	4 948
9	1	4 948	4 949
10	1	4 949	4 950
11	5	4 950	4 955
12	5	4 955	4 960
13	5	4 960	4 965
14	5	4 965	4 970
15	5	4 970	4 975
16	5	4 975	4 980
17	5	4 980	4 985
18	1	4 985	4 986
19	1	4 986	4 987
20	1	4 987	4 988
21	1	4 988	4 989
22	1	4 989	4 990

Note 1: Radiocommunications devices that operate on one or more of channels 11 to 22 are subject to the conditions relating to radio astronomy observations set out in section 14.

Note 2: Channel aggregation may be utilised to increase bandwidth with an increase in transmitter power and EIRP that does not exceed the maximum power spectral density as specified in subsection 9(2) and section 10 respectively.

Schedule 2 Radio Astronomy Observations

(subsections 3(1) and 14(2) and (3))

Table 2.1 Radio Astronomy Sites

Item	Site	Latitude	Longitude
1	Parkes Observatory, Parkes	-32.998403	148.263514
2	Paul Wild Observatory, Narrabri	-30.312889	149.550122
3	Mopra Observatory, Coonabarabran	-31.267811	149.099644
4	Ceduna Observatory, Ceduna	-31.867692	133.809833
5	Canberra Deep Space Communication Complex, Tidbinbilla	-35.398461	148.977683

Note: The latitude and longitude geographic coordinates of observatory locations are as set out in Geocentric Datum of Australia 1994 (GDA94 Datum).

Table 2.2 Prescribed Radii

Kind of Transmitter	Radius (km)				
	Parkes Observatory, Parkes	Paul Wild Observatory, Narrabri	Mopra Observatory, Coonabarabran	Ceduna Observatory, Ceduna	Canberra Deep Space Communication Complex, Tidbinbilla
High power transmitter in a fixed service	160	160	120	120	70
High power airborne mobile transmitter in a mobile service	250	250	250	250	250

Table 2.3 Radio Astronomy Interference Thresholds

Site	Parkes Observatory, Parkes	Paul Wild Observatory, Narrabri	Mopra Observatory, Coonabarabran	Ceduna Observatory, Ceduna	Canberra Deep Space Communication Complex, Tidbinbilla
Threshold Level (dBm/Hz)	-237	-232	-204	-204	-204