Radiocommunications Spectrum Marketing Plan (1800 MHz unallocated lots band) 2017

The Australian Communications and Media Authority makes the following plan under section 39A of the *Radiocommunications Act 1992*.

Dated: 25 September 2017

Richard Bean
[signed]
Member

Brendan Byrne
[signed]
~~Member~~/General Manager

Australian Communications and Media Authority

Part 1—Preliminary

1 Name

This is the *Radiocommunications Spectrum Marketing Plan (1800 MHz unallocated lots band) 2017*.

2 Commencement

This instrument commences immediately after the commencement of the *Radiocommunications Spectrum Marketing Plan (1800 MHz Band) Variation 2017 (No.1)*.

Note: The Federal Register of Legislation may be accessed at www.legislation.gov.au.

3 Authority

This instrument is made under section 39A of the Act.

4 Purpose of the instrument

This instrument describes:

(a) the procedures for issuing spectrum licences in the 1800 MHz (unallocated lots) band;

(b) the spectrum licences that will be allocated by the ACMA in accordance with this instrument;

(c) some of the matters a licensee must take into account when operating radiocommunications devices under a spectrum licence allocated in accordance with this instrument; and

(d) other matters which a person should take into account when deciding whether to apply for a spectrum licence under the allocation determination.

5 Definitions

In this instrument:

1800 MHz band means the following frequency ranges:

(a) 1725 MHz to 1785 MHz; and

(b) 1820 MHz to 1880 MHz;

in the geographic areas specified in the table in clause 1 of Schedule 1 to the re-allocation declaration.

1800 MHz lot has the meaning given by subsection 4(1) of the allocation determination.

1800 MHz (unallocated lots) band means the following frequency ranges within the following regions:

(a) 1775 MHz to 1780 MHz and 1870 MHz to 1875 MHz in Dubbo, as that region is defined in Schedule 2 to this instrument;

(b) 1775 MHz to 1785 MHz and 1870 MHz to 1880 MHz in Mackay, as that region is defined in Schedule 2 to this instrument;

(c) 1745 MHz to 1750 MHz and 1840 MHz to 1845 MHz in Maryborough, as that region is defined in Schedule 2 to this instrument;

(d) 1780 MHz to 1785 MHz and 1875 MHz to 1880 MHz in Regional Western Australia, as that region is defined in Schedule 2 to this instrument; and

(e) 1750 MHz to 1755 MHz and 1845 MHz to 1850 MHz in Tasmania, as that region is defined in Schedule 2 to this instrument.

Note: The 1800 MHz (unallocated lots) band is a subset of the 1800 MHz band.

Act means the *Radiocommunications Act 1992*.

advisory guidelines means one or more of the following:

(a) *Radiocommunications Advisory Guidelines (Additional Device Boundary Criteria – 1800 MHz Lower Band) 2012*;

(b) *Radiocommunications Advisory Guidelines (Managing Interference to Spectrum Licensed Receivers – 1800 MHz Band) 2012*; and

(c) *Radiocommunications Advisory Guidelines (Managing Interference from Spectrum Licensed Transmitters – 1800 MHz Band) 2012.*

Note: The advisory guidelines are registered on the Federal Register of Legislation.

allocation determination means the *Radiocommunications (Spectrum Licence Allocation – Multi-band Auction) Determination 2017*.

applicant has the meaning given by subsection 4(1) of the allocation determination.

applicant information package has the meaning given by subsection 4(1) of the allocation determination.

auction has the meaning given by subsection 4(1) of the allocation determination.

Australian spectrum map grid or ***ASMG*** means the *Australian Spectrum Map Grid 2012* published by the ACMA on its website at https://www.acma.gov.au.

balance of the pre-determined price has the meaning given by subsection 4(1) of the allocation determination.

balance of the winning price has the meaning given by subsection 4(1) of the allocation determination.

first and second rounds of the auction has the same meaning as in section 56 of the allocation determination.

fixed transmitter means a transmitter that is not a mobile transmitter.

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

HCIS identifier means an identifier used to describe a geographic area in the HCIS.

hierarchical cell identifier scheme or ***HCIS*** means the cell grouping hierarchy scheme used to describe geographic areas in the ASMG.

in-band means:

(a) for a radiocommunications transmitter or radiocommunications receiver operated under a spectrum licence – the frequencies within the frequency band to which the licence relates;

(b) for a radiocommunications transmitter or radiocommunications receiver operated under an apparatus licence – the frequencies within the lower frequency limit and the upper frequency limit of that licence.

licence schedule means a schedule to the sample spectrum licence.

lot means a 1800 MHz lot.

maximum true mean power means the true mean power measured in a specified rectangular bandwidth that is located within a specified frequency band such that the true mean power is the maximum of true mean powers produced.

Note: The power within the specified rectangular bandwidth is normally established by taking measurements using either an adjacent channel power meter or a spectrum analyser. Estimation of the accuracy of the measuring equipment, measurement procedure and any adjustments made to measurements to take account of practical filter shape factors should be in accordance with good engineering practice.

mean power means the average power measured during an interval of time that is at least 10 times the period of the lowest modulation frequency.

mobile transmitter means a transmitter that is designed or manufactured to be capable of being operated in each of the following circumstances:

(a) the transmitter is in motion or moving; and

(b) the transmitter is stationary.

non spurious emission means an unwanted emission that is not a spurious emission.

occupied bandwidth, in relation to a radiocommunications transmitter, means the bandwidth of a frequency band, having fixed upper and lower limits, that is necessary to contain not less than 99 per cent of the true mean power of the transmitter's emissions at any time.

post-auction application has the meaning given by subclause 2(1) of Schedule 4 to the allocation determination.

post-auction process means the process for allocation of licences conducted in accordance with Schedule 4 of the allocation determination.

pre-determined price has the meaning given by subsection 4(1) of the allocation determination.

preferred lots has the meaning given by subsection 4(1) of the allocation determination.

re-allocation declaration means the *Radiocommunications (Spectrum Re-allocation-Regional 1800 MHz Band) Declaration 2015*.

region: see Schedule 2.

sample spectrum licence: see section 21.

spurious emission means an emission that is not:

(a) a modulation product; or

(b) wide band noise; or

(c) an emission caused by switching transients.

true mean power means:

(a) if an unmodulated carrier is present – the mean power measured while the unmodulated carrier is present;

(b) if an unmodulated carrier is not present – the mean power measured while transmitter information is present.

unwanted emission, in relation to the operation of a transmitter authorised by a spectrum licence, means an emission outside the lower and upper frequency limits of the licence.

Note: A number of other expressions used in this instrument are defined in the Act, including the following:

(a) ACMA;
(b) apparatus licence;
(c) core conditions;
(d) frequency band;
(e) licensee;
(f) radiocommunications device;
(g) Register; and
(h) spectrum licence.

6 References to other legislative instruments and to other instruments or writing

(1) In this instrument, unless the contrary intention appears, a reference to another legislative instrument is a reference to that other legislative instrument as in force 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.

(2) In this instrument, unless the contrary intention appears, a reference to an instrument or other writing (other than a legislative instrument) is a reference to that instrument or writing as existing from time to time.

Note: See section 314A of the Act.

7 References to frequency ranges

In this instrument, the range of numbers that identifies a frequency range includes the higher, but not the lower, number.

Part 2—Allocation of spectrum licences

8 Simplified outline of this Part

This Part describes the procedures for allocating spectrum licences that authorise the operation of radiocommunications devices in the 1800 MHz (unallocated lots) band.

9 Parts of the spectrum

The ACMA will allocate and issue spectrum licences for spectrum in the 1800 MHz (unallocated lots) band in the manner described in this instrument and the allocation determination.

10 How licences will be allocated

(1) Spectrum licences for spectrum in the 1800 MHz (unallocated lots) band will be allocated by simple clock auction in accordance with the procedures set out in the allocation determination.

Note: Neither the ACMA nor the Commonwealth accepts any liability for any loss or damage suffered by any person participating in the auction. Any person intending to participate in the auction should obtain independent legal, technical and financial advice before applying.

(2) If, before the auction manager sets the start date and time for the first and second rounds of the auction, the ACMA is satisfied that, for a lot, there is only one applicant that has nominated the lot as one of its preferred lots, the ACMA may offer to allocate spectrum licences for the lots for a pre-determined price, as set out in Part 5 of the allocation determination.

(3) Parts of the 1800 MHz (unallocated lots) band that are offered at auction or for a pre-determined price but not allocated may be later offered for allocation in accordance with Schedule 4 of the allocation determination.

11 Lots for the auction

(1) The ACMA has divided the 1800 MHz (unallocated lots) band into lots described in Schedule 1. Each lot is characterised by:

(a) the region of the lot, specified in column 3 of table 1 in Schedule 1;

(b) the frequencies specified in columns 4 and 5 of table 1 in Schedule 1; and

(c) the bandwidth specified in column 6 of table 1 in Schedule 1.

(2) The auction will be held in accordance with the procedures set out in the allocation determination. All lots will be available for allocation in accordance with the allocation determination.

12 Advertising the auction

The ACMA will publish details of the auction and invite persons to apply to take part in the auction, in accordance with the allocation determination.

13 Taking part in the auction

(1) The ACMA will make available an applicant information package that contains more details about application requirements and the auction process in accordance with the

allocation determination. Details of what must be in the applicant information package are in subsection 28(1) of the allocation determination.

(2) Details of how to apply to take part in the auction are set out in Part 4 of the allocation determination.

Part 3—Spectrum licences to be issued

14 Simplified outline of this Part

This Part describes:

(a) the spectrum licences that will be issued in accordance with this instrument;

(b) some of the matters a licensee must take into account when operating devices under a spectrum licence issued in accordance with this instrument;

(c) conditions to be included in spectrum licences issued in accordance with this instrument; and

(d) other matters which a person should take into account when deciding whether to apply for a spectrum licence to be issued in accordance with this instrument.

15 Issue of licences

(1) Subject to the Act, the allocation determination and other relevant law, and subject to subsection (2), the ACMA will issue a spectrum licence to the person to whom it is allocated as soon as practicable after the person pays to the ACMA, on behalf of the Commonwealth, whichever of the following is relevant:
  (a) the balance of the pre-determined price;
  (b) the balance of the winning price.

(2) Subject to the Act, the allocation determination and other relevant law, if a spectrum licence is allocated to a person under clause 10 of Schedule 4 to the allocation determination, the ACMA will issue a spectrum licence to the person as soon as practicable.

16 Commencement and duration of licences

(1) A licence issued to a person who has been allocated the licence as a result of the auction or for a pre-determined price under Part 5 of the allocation determination will commence on the date that the licence was issued and, subject to the Act, will be for a fixed term with an expiry date of 17 June 2028.

Note: In accordance with the Act, a licence may be resumed or cancelled before the expiry date.

(2) A licence issued to a person who has been allocated the licence through the post-auction allocation process will commence on the later of:
  (a) the date stated in the post-auction application;
  (b) the date the licence is issued;
  (c) 1 February 2018;

and, subject to the Act, will be for a fixed term with an expiry date of 17 June 2028.

Note: In accordance with the Act, a licence may be resumed or cancelled before the expiry date.

17 Core licence conditions

(1) Section 66 of the Act requires spectrum licences to include the following core conditions:

(a) a condition specifying the part or parts of the spectrum in which operation of radiocommunications devices is authorised under the licence;

(b) a condition specifying the maximum permitted level of radio emission, in parts of the spectrum outside such a part, that may be caused by operation of radiocommunications devices under the licence;

(c) a condition specifying the area within which operation of radiocommunications devices is authorised under the licence;

(d) a condition specifying the maximum permitted levels of radio emission, outside that area, that may be caused by operation of radiocommunications devices under the licence.

(2) These conditions will be included in the spectrum licences issued in accordance with this instrument.

Note: These core conditions may be varied by the ACMA, with the licensee's agreement, under section 72 of the Act.

18 Determining core licence conditions

(1) For each spectrum licence issued to a person as a result of the auction, for a pre-determined price, or through the post-auction allocation process:

(a) the licence will be for the frequencies, or the aggregation of the frequencies, assigned to the lots allocated to the person in accordance with the allocation determination; and

(b) the geographic area of a licence will be, for the frequencies assigned to each lot allocated to the person in accordance with the allocation determination, the region described in Schedule 2 that is the region for the lot.

(2) The emission limits outside the geographic area for all licences issued in accordance with this instrument will be calculated in accordance with Schedule 3.

(3) The emission limits outside part or parts of the spectrum for each licence issued in accordance with this instrument will be calculated in accordance with Schedule 4.

19 Other licence conditions

(1) Each spectrum licence will also include conditions about:

(a) the payment of charges (section 67 of the Act);

(b) use by third parties (section 68 of the Act);

(c) registration of transmitters (section 69 of the Act); and

(d) residency (section 69A of the Act).

(2) Each spectrum licence issued as a result of the auction, for a pre-determined price, or through a post-auction allocation process will include a condition which will provide that where:

(a) a service is being provided using the same parameters as a fixed licence listed in Table 1 of Schedule 5 (***specified fixed service***); and

(b) the specified fixed service uses frequencies wholly or partly within the 1800 MHz band; and

(c) the specified fixed service is provided using a radiocommunications device operated under an apparatus licence;

the licensee:

(d) must not operate any radiocommunications transmitters authorised under its licence in a manner that would be inconsistent with the protections afforded to that specified fixed service by Part 2 of the *Radiocommunications Advisory Guidelines (Managing Interference from Spectrum Licensed Transmitters – 1800 MHz Band) 2012*. (Part 2 of those guidelines specifies the level of out-of-band and in-band protection to be afforded to such specified fixed services); and

(e) cannot claim protection from interference caused by that specified fixed service.

(3) Under section 71 of the Act, the ACMA may also include conditions about other matters as it thinks fit.

(4) Other conditions likely to be included in a licence are included in the sample spectrum licence at Schedule 6.

Note: The ACMA may include conditions in a spectrum licence that are not included in the sample spectrum licence.

20 Registration of transmitters

(1) Each spectrum licence will include a condition that prohibits operation of a radiocommunications transmitter unless the requirements under Part 3.5 of the Act to have the transmitter registered have been met.

Note 1: Under subsection 145(1) of the Act, the ACMA may refuse to include in the Register details of a radiocommunications transmitter that is proposed to be operated under a spectrum licence if the ACMA is satisfied that operation of the transmitter could cause an unacceptable level of interference to the operation of other radiocommunications devices under that or any other licence.

Note 2: Subsection 145(4) of the Act states that the ACMA may determine, by written instrument, what are acceptable levels of interference for the purposes of section 145 of the Act.

Note 3: The *Radiocommunications (Unacceptable Levels of Interference – 1800 MHz Band) Determination 2012* sets out what are the unacceptable levels of interference for the purpose of registering devices to be operated under a licence issued in accordance with this instrument, and is to be used for the issue of certificates by accredited persons under subsection 145(3) of the Act.

(2) Each spectrum licence will include a condition that states the following radiocommunications transmitters are exempt from registration:

(a) a mobile transmitter that operates in the 1800 MHz band with a radiated power of less than or equal to 39 dBm EIRP per occupied bandwidth;

(b) a fixed transmitter that operates in the 1800 MHz band with a radiated power always less than or equal to 33 dBm EIRP per occupied bandwidth.

21 Draft sample licence

Schedule 6 sets out a sample spectrum licence (***sample spectrum licence***) including conditions that may be included in each spectrum licence that is issued in the 1800 MHz (unallocated lots) band.

Note: The sample spectrum licence may not reflect all the conditions included in a spectrum licence issued in accordance with the instrument.

22 Compatibility requirements

The advisory guidelines provide a means of coordinating services operating under spectrum licences with other services.

Part 4—After allocation

23 Simplified outline of this Part

This Part describes various matters that apply after licences are issued in accordance with this instrument.

24 Registration of licences

The ACMA will register all spectrum licences in accordance with Part 3.5 of the Act.

Note: Details about registration are in the *Radiocommunications (Register of Radiocommunications Licences) Determination 2017*.

25 Third party use

A licensee may authorise other persons to operate radiocommunications devices under any spectrum licence issued to it, provided it does so in accordance with Division 1 of Part 3.2 of the Act.

26 Trading in spectrum licences

(1) A licensee may assign, or otherwise deal with, the whole or any part of a spectrum licence, provided it does so in accordance with Division 5 of Part 3.2 of the Act.

(2) The ACMA has made rules under section 88 of the Act to regulate trading in spectrum licences. Section 85 of the Act requires assignments of the whole or part of any spectrum licence to comply with these rules.

Note: The rules are set out in the *Radiocommunications (Trading Rules for Spectrum Licences) Determination 2012*.

27 Agreements about emission limits

A licensee may enter into an agreement for the purpose of one or more of the following:

(a) clause 1 of Schedule 3 (about emission limits outside the geographic area of the licence); or

(b) clause 1 of Schedule 4 (about emission limits outside the band of the licence).

28 Spectrum licences that are about to expire

As required by section 78 of the Act, the ACMA must, from time to time, publish on its website a notice that:

(a) states where information may be obtained about:

(i) the spectrum licences that will expire during a period specified in the notice; and

(ii) the parts of the spectrum to which they relate; and

(b) invites expressions of interest from persons who wish to have issued to them spectrum licences relating to those parts of the spectrum.

29 Re-issue of licence

(1) The ACMA re-issues licences in accordance with Division 4 of Part 3.2 of the Act.

(2) Spectrum licences that are re-issued are unlikely to take the same form as originally issued, as the lots may be divided and distributed differently. Conditions on the spectrum licences may also change upon re-issue. A person considering applying to participate in the allocation process should not assume that, if the person is issued with a licence in accordance with this instrument:

(a) the licence will be re-issued to the person; or

(b) if the licence is re-issued to the person – the licence re-issued will have the same conditions as the licence originally issued to the person.

Schedule 1—Lots

(subsection 11(1))

Table 1 Lots

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Lot number	**Lot name**	**Region**	**Lower frequency range**	**Upper frequency range**	**Bandwidth**
1	DUBB01	Dubbo	1775 MHz–1780 MHz	1870 MHz–1875 MHz	2 x 5 MHz
2	MACK01	Mackay	1775 MHz–1785 MHz	1870 MHz–1880 MHz	2 x 10 MHz
3	MARY01	Maryborough	1745 MHz–1750 MHz	1840 MHz–1845 MHz	2 x 5 MHz
4	REGW01	Regional Western Australia	1780 MHz–1785 MHz	1875 MHz–1880 MHz	2 x 5 MHz
5	TASM01	Tasmania	1750 MHz–1755 MHz	1845 MHz–1850 MHz	2 x 5 MHz

Note: Columns 1 and 2 are included for information only. The auction system used for the purposes of the allocation determination may refer to the lot number and the lot name.

Schedule 2—Regions

(section 5, paragraph 11(1)(a))

1 The regions

(1) There are lots offered in five regions. The ***regions*** are:
  (a) Dubbo;
  (b) Mackay;
  (c) Maryborough;
  (d) Regional Western Australia; and
  (e) Tasmania.

(2) The regions are described using the hierarchical cell identifier scheme in the ASMG. The five regions are described by the HCIS identifiers specified in table 1 for each region. There are four levels to the HCIS, corresponding to 3 degree cells, 1 degree cells, 15 minute cells and 5 minute cells of the ASMG.

(3) The geographic area of each region can be determined by the aggregation of block areas represented by the HCIS identifiers used to describe the region. Refer to the ASMG for a complete description of the HCIS naming convention, as published by the ACMA.

Note: The map included in this Schedule is included for information only. The ACMA does not accept responsibility for the accuracy of that information. Potential participants in the allocation should obtain their own advice and make their own inquiries into the pictorial representation of the region.

Table 1 HCIS identifiers for spectrum licences in the 1800 MHz (unallocated lots) band

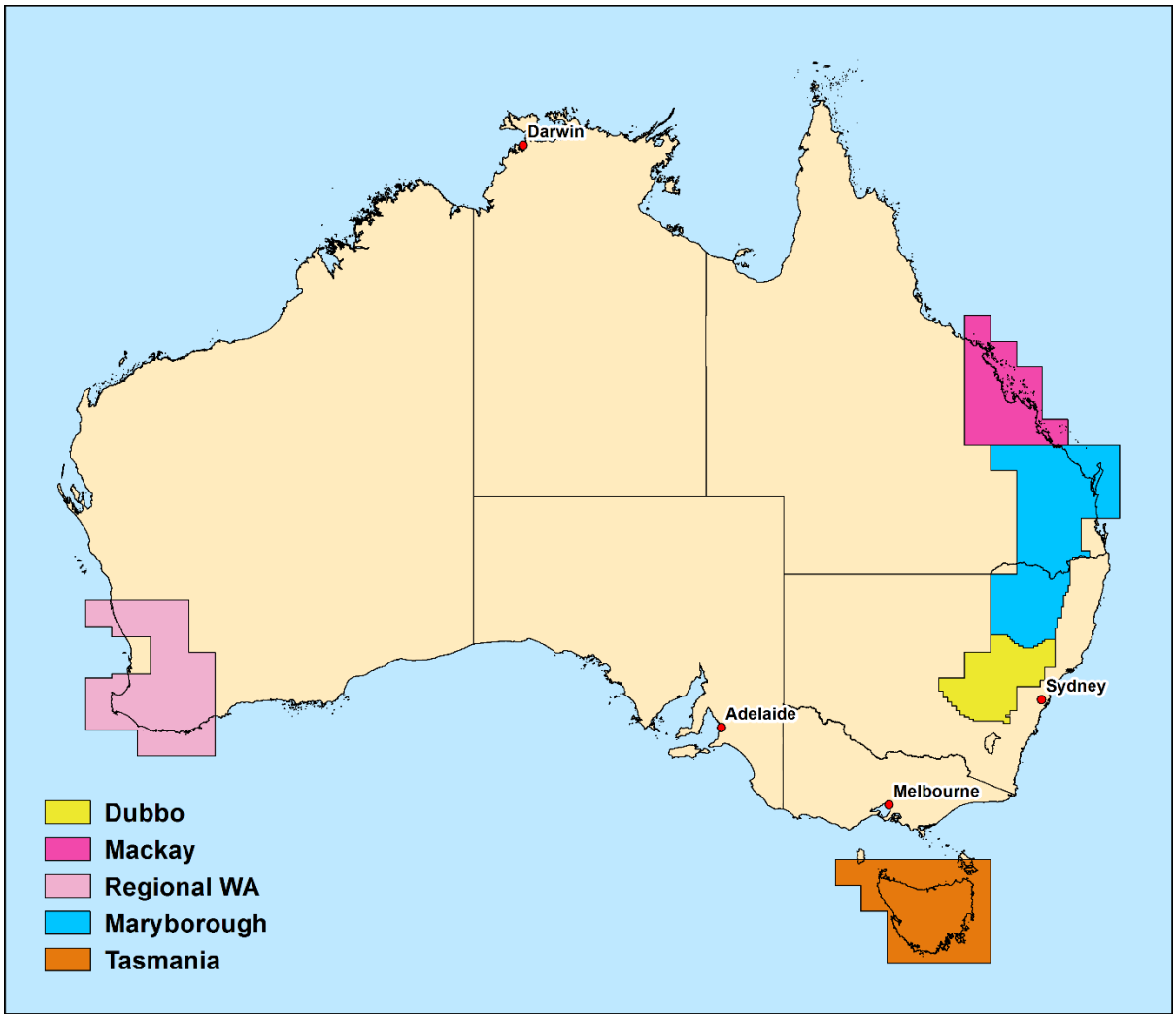
Geographic areas	HCIS identifiers
Dubbo	MV4, MV5, MV6, MV7, MV8, LV9A, LV9B, LV9C, LV9D, LV9E, LV9F, LV9G, LV9H, MV2I, MV2J, MV2K, MV2M, MV2N, MV2O, MV2P, MV3M, MV3P, MV9A, MV9B, MV9C, NV1J, NV1M, NV1N, NV4A, NV4B, NV4E, NV4F, LV9J, LV9K, LV9L, LV9O, LV9P, LW3D, MW1A, MW1B, MW1C, MW1E, MW1F, MW1G, MW1D, MW1H, MW2A, MW2B, MW2C, MW2D, MW2E, MW2F, MV2E4, MV2E5, MV2E6, MV2F4, MV2F5, MV2F6, MV2G4, MV2G5, MV2E7, MV2E8, MV2E9, MV2F7, MV2F8, MV2F9, MV2G7, MV2G8, MV2G9, MV2L1, NV1I2, NV1I3, MV2L4, MV2L5, NV1I4, NV1I5, NV1I6, MV2L7, MV2L8, MV2L9, MV3I7, MV3L8, MV3L9, NV1I7, NV1I8, NV1I9, MV3O3, MV3N4, MV3N5, MV3N6, MV3O4, MV3O5, MV3O6, MV3N7, MV3N8, MV3N9, MV3O7, MV3O8, MV3O9, NV4I1, NV4I2, NV4I3, NV4J1, NV4I4, NV4I7, NV4M1, NV4M4, NV4M7, MV9D1, MV9D2, MV9D3, NV7A1, MV9D4, MV9D5, MV9D7, MV9D8, MV9E1, MV9E2, MV9E3, MV9F1, MV9F2, MV9F3, MV9G1, MV9G2, MV9G3, MV9H1, MV9H2, NV4J2, NV4J3, LV9I3, LV9I6, LV9I9, LV9N2, LV9N5, LV9N3, LV9N6, LW3C1, LW3C2, LW3C3, LW3C6, LW3C9, LW3H2, LW3H3, LW3H5, LW3H6, MW1I3, MW1J1, MW1J2, MW1J3, MW1K1, MW1K2, MW1K3, MW1J5, MW1J6, MW1K4, MW1K5, MW1K6, MW2G1, MW2G2, MW2G3, MW2G4, MW2G5, MW2G6, MW2G7, MW1L1, MW1L2, MW1L3, MW2I1, MW2I2, MW2I3, MW2J1, MW2J2, MW2J3, MW2K1, MW1L4, MW1L5, MW1L6, MW2I4, MW2I5, MW2I6, MW2J4, MW2J5, MW2J6, MW2K4
Mackay	MR1, MR4, MR5, MR7, MR8, MR9, MS1, MS2, MS3, MS4, MS5, MS6, NS4

Geographic areas	HCIS identifiers
Maryborough	MS8, MS9, MT3, MT6, MT9, MU3, MU5, MU6, MU8, MU9, NS7, NS8, NS9, NT1, NT2, NT3, NT4, NT7, NU1, NT5A, NT5B, NT5C, NT5D, NT5E, NT5F, NT5G, NT5H, NT5I, NT5J, NT5K, NT5L, NT5M, NT5N, NT6A, NT6B, NT6C, NT6D, NT6E, NT6F, NT6G, NT6H, NT6I, NT6J, NT6K, NT6L, NT8A, NT8B, NT8E, NT8F, NT8I, NT8J, NT8M, NT8N, NU2A, NU2B, MV2A, MV2B, MV2C, MV2D, MV2H, MV3A, MV3B, MV3C, MV3D, MV3E, MV3F, MV3G, MV3H, MV3J, MV3K, NU4A, NU4B, NU4C, NU4D, NU4E, NU4F, NU4G, NU4H, NU4I, NU4J, NU4K, NU4M, NU4N, NU4O, NU7A, NU7B, NU7C, NU7E, NU7F, NU7G, NU7I, NU7J, NU7M, NU7N, NV1A, NV1B, NV1E, NV1F, NT5O1, NT5O2, NT5O3, NT5P1, NT5P2, NT5P3, NT6M1, NT6M2, NT6M3, NT6N1, NT6N2, NT6N3, NT6O1, NT6O2, NT6O3, NT6P1, NT6P2, NT6P3, NU2C4, NU2C5, NU2C6, NU2D4, NU2C7, NU2C8, NU2C9, NU2D7, MV2E1, MV2E2, MV2E3, MV2F1, MV2F2, MV2F3, MV2G1, MV2G2, MV2G3, MV2G6, MV2L2, MV2L3, MV3I1, MV3I2, MV3I3, MV3L1, MV3L2, MV3L3, NV1I1, MV2L6, MV3I4, MV3I5, MV3I6, MV3L4, MV3L5, MV3L6, MV3I8, MV3I9, MV3L7, MV3N1, MV3N2, MV3N3, MV3O1, MV3O2, NU4L4, NU4L5, NU4L6, NU4L7, NU4L8, NU4P1, NU4P2, NU4P4, NU4P7, NU7D1, NU7D4, NU7D7, NU7K1, NU7K2, NU7K3, NU7K4, NU7K5, NU7K6, NU7K7, NU7O1, NU7O4, NU2E1, NU2E2, NU2E3, NU2F1, NU2F2, NU2F3, NU2G1, NU2G2, NU2E4, NU2E5, NU2E7, NU2I1, NU2I4, NU2I7, NU2M1, NU2M4, NU2M7, NU5A1, NU5A4, NU5A7, NU5E1, NU5E4, NU4L1, NU4L2, NU4L3, NU2G3, NU2H1, NU7O7, NV1C1
Regional Western Australia	AU9, AV9, AW3, BU7, BU8, BU9, BV3, BV6, BV7, BV8, BV9, BW1, BW2, BW3, BW5, BW6, CV4, CV7, CW1, CW4, BV1A, BV1B, BV1C, BV1D, BV2A, BV2B, BV2C, BV2D, BV2G, BV2H, BV2K, BV2L, BV2O, BV2P, BV5C, BV5D, BV5G, BV5H, BV5K, BV5L, BV5O, BV5P, BV1E1, BV1E2, BV1E3, BV1F1, BV1F2, BV1F3, BV1G1, BV1G2, BV1G3, BV1H1, BV1H2, BV1H3, BV2E1, BV2E2, BV2E3, BV2F1, BV2F2, BV2F3, BV1E4, BV1E5, BV1E6, BV1F4, BV1F5, BV1F6, BV1G4, BV1G5, BV1G6, BV1H4, BV1H5, BV1H6, BV2E4, BV2E5, BV2E6, BV2F4, BV2F5, BV2F6, BV4M4, BV4M5, BV4M6, BV4N4, BV4N5, BV4N6, BV4O4, BV4O5, BV4O6, BV4P4, BV4P5, BV4P6, BV5M4, BV5M5, BV5M6, BV5N4, BV5N5, BV5N6, BV4M7, BV4M8, BV4M9, BV4N7, BV4N8, BV4N9, BV4O7, BV4O8, BV4O9, BV4P7, BV4P8, BV4P9, BV5M7, BV5M8, BV5M9, BV5N7, BV5N8, BV5N9
Tasmania	KY2, KY3, KY6, LY1, LY2, LY3, LY4, LY5, LY6, LY7, LY8, LY9, LZ1, LZ2, LZ3, MY1, MY4, MY7, MZ1

2 Indicative pictorial representation

The areas shaded in the map are only an indicative pictorial representation of each region. The ACMA does not accept responsibility for the accuracy of the information in the map.

Schedule 2—Regions



Schedule 3—Emission limits outside the area

(subsection 18(2))

1 Emission limits outside the area specified by written agreement

(1) Where a written agreement specifying the maximum permitted level of radio emissions exists between:

(a) the licensee; and

(b) all the affected licensees of frequency-adjacent licences and area-adjacent licences;

the licensee must comply with that specified maximum permitted level of radio emission.

(2) Where there is no written agreement for the purpose of this clause in force, the licensee must comply with clause 2.

2 Emission limits outside the area without agreement

(1) The licensee must ensure that the maximum permitted level of radio emissions for an area outside of the geographic area for which the licence authorises the operation of radiocommunications devices caused by operation of radiocommunications devices under the licence does not exceed a radiated maximum true mean power of 54.5 dBm EIRP per 30 kHz.

(2) The licensee complies with subclause (1) by ensuring that no radiocommunications device is operated under the licence in excess of a radiated maximum true mean power of 54.5 dBm EIRP per 30 kHz.

Schedule 4—Emission limits outside the band

(subsection 18(3))

1 Emission limits outside the band specified by written agreement

(1) Where a written agreement specifying the maximum permitted level of radio emission exists between:

(a) the licensee; and

(b) all affected licensees of frequency-adjacent licences and area-adjacent licences;

the licensee must comply with that specified maximum permitted level of radio emission.

(2) Where there is no written agreement for the purposes of this clause in force, the licensee must comply with clauses 2 and 3.

2 Non spurious emission limits

(1) Subject to subclause (2), the licensee must ensure that radiocommunications devices operated under the licence do not exceed the non spurious emission limits in subclauses (3) and (4).

(2) For any frequency where an emission limit described in subclause (5) is less than an emission limit described in subclause (3) or (4), the emission limit in subclause (5) applies instead of the emission limit in subclause (3) or (4).

(3) The non spurious emission limits in Table 1 apply:

(a) at frequencies outside the 1710 – 1785 MHz and 1805 – 1880 MHz frequency bands; and

(b) offset from 1785 MHz, 1805 MHz and 1880 MHz;

where:

f_{offset}: is the frequency offset from the 1785 MHz, 1805 MHz and 1880 MHz band edges. The -3dB point of the specified bandwidth closest to the band edge being offset from, is placed at $\mathbf{f_{offset}}$.

Table 1 Radiated maximum true mean power non spurious emission limits

Frequency offset range	Radiated maximum true mean power (dBm EIRP)	Specified bandwidth
0 Hz ≤ f_{offset} < 200 kHz	2	30 kHz
200 kHz ≤ f_{offset} < 900 kHz	$2 - 15 \times (f_{offset}(MHz) - 0.2)$	30 kHz
900 kHz ≤ f_{offset} < 5.6 MHz	-8.5	30 kHz
f_{offset} ≥ 5.6 MHz	-18.5	30 kHz

(4) The non spurious emission limits in Tables 2a and 2b apply:

(a) at frequencies outside the 1710 – 1785 MHz frequency band; and

(b) offset from 1710 MHz;

where:

f_{offset}: is the frequency offset from the 1710 MHz band edge. The -3dB point of the specified bandwidth closest to the band edge being frequency offset from, is placed at $\mathbf{f_{offset}}$.

Table 2a Radiated maximum true mean power non spurious emission limits

Frequency offset range	Radiated maximum true mean power (dBm EIRP)	Specified bandwidth
0 Hz ≤ f_{offset} < 500 kHz	-8.5	30 kHz
f_{offset} ≥ 500 kHz	-33.5	30 kHz

Table 2b Radiated peak power non spurious emission limits

Frequency offset range	Radiated peak power (dBm EIRP)	Specified bandwidth
0 Hz ≤ f_{offset} < 300 kHz	10	300 kHz

(5) The non spurious emission limits in Table 3 apply:

(a) at frequencies outside the upper or lower frequency limits of the frequency band in which the licence authorises the operation of radiocommunications devices; and

(b) offset from the upper or lower frequency limits of the frequency band in which the licence authorises the operation of radiocommunications devices;

where:

f_{offset}: is the frequency offset from the upper or lower frequency limits of the frequency band in which the licence authorises the operation of radiocommunications devices. The -3dB point of the specified bandwidth closest to the band edge being frequency offset from, is placed at $\mathbf{f_{offset}}$.

Table 3 Radiated maximum true mean power non spurious emission limits

Frequency offset range	Radiated maximum true mean power (dBm EIRP)	Specified bandwidth
0 Hz ≤ f_{offset} < 200 kHz	21.5	30 kHz
200 kHz ≤ f_{offset} < 1 MHz	$2 - 13.125 \times (f_{offset}(MHz) - 0.2)$	30 kHz

1 MHz ≤ f_{offset} < 5.8 MHz	-8.5	30 kHz
f_{offset} ≥ 5.8 MHz	-13	30 kHz

3 Spurious emission limits

(1) The licensee must ensure that radiocommunications devices operated under the licence do not exceed the spurious emission limits in subclauses (2) and (3).

(2) For radiocommunications transmitters operated under the licence, the spurious emission limits in Table 4 apply at frequencies outside the 1710 – 1785 MHz and 1805 – 1880 MHz frequency bands, measured over the specified bandwidth for the relevant frequency range.

Table 4 Radiocommunications transmitter spurious emission limits

Frequency range (f)	Radiated mean power (dBm EIRP)	Specified bandwidth
9 kHz ≤ f < 150 kHz	-36	1 kHz
150 kHz ≤ f < 30 MHz	-36	10 kHz
30 MHz ≤ f < 1 GHz	-36	100 kHz
1 GHz ≤ f < 3.5 GHz	-2	1 MHz
3.5 GHz ≤ f < 12.75 GHz	-30	1 MHz

(3) For radiocommunications receivers operated under the licence, the spurious emission limits in Table 5 apply at frequencies outside the 1710 – 1785 MHz and 1805 – 1880 MHz frequency bands, measured over the specified bandwidth for the relevant frequency range.

Table 5 Radiocommunications receiver spurious emission limits

Frequency range (f)	Radiated mean power (dBm EIRP)	Specified bandwidth
9 kHz ≤ f < 1 GHz	-57	100 kHz
1 GHz ≤ f < 3.5 GHz	-19	1 MHz
3.5 GHz ≤ f < 12.75 GHz	-47	1 MHz

Schedule 5 Specified fixed licences

(paragraph 19(2)(a))

Table 1 – Specified fixed links

Licence Number	A-End Site ID	A-End Location	B-End Site ID	B-End Location	State/Territory
10231161	14788	WYCHIE	14787	CHINCHILLA	QLD
10231220	29111	MECKERING	29157	CUNDERDIN	WA
10231179	28654	DUMBLEYUNG	28657	DUMBLEYUNG	WA
10231165	28385	GNOWELLEN	28588	NALYERLUP	WA
10231166	28584	MAGITUP	28565	BORDEN	WA
10231167	28565	BORDEN	28588	NALYERLUP	WA
10231168	28518	PINGRUP	28523	PINGRUP	WA
10231155	14787	CHINCHILLA	14803	GLENHOPE	QLD
10231156	28693	NEWDEGATE	28609	LAKE GRACE	WA
10231157	38578	NEWDEGATE	28693	NEWDEGATE	WA
10231180	30382	BEACON	30381	CLEARY NORTH	WA
10231158	38578	NEWDEGATE	28760	NEWDEGATE	WA
10231159	14787	CHINCHILLA	38950	ESCHOL	QLD
10231178	131399	ORCHID VALLEY	29051	KULIKUP	WA
10231223	6887	ATHOLWOOD	400244	BRACKER FOREST	NSW
10231175	14902	TARA	400457	BENNETT	QLD
10231171	401132	DARR CREEK	37146	DARR CREEK	QLD
10231172	38950	ESCHOL	401132	DARR CREEK	QLD
10231176	600486	RF KULIKUP	29051	KULIKUP	WA
10231177	600487	KULIKUP	600486	RF KULIKUP	WA

Schedule 6—Sample spectrum licence

(section 21)

This Schedule sets out a sample spectrum licence, and the conditions that may be included in a spectrum licence, issued in the 1800 MHz (unallocated lots) band, in accordance with this instrument.

COMMONWEALTH OF AUSTRALIA

AUSTRALIAN COMMUNICATIONS AND MEDIA AUTHORITY

Radiocommunications Act 1992

Sample Spectrum Licence for the 1800 MHz (unallocated lots) band

Prepared under section 61 of the *Radiocommunications Act 1992* ('the Act') in accordance with the

Radiocommunications Spectrum Marketing Plan (1800 MHz unallocated lots band) 2017

This licence is issued under Part 3.2 of 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

3. In this licence, unless the contrary intention appears:

1800 MHz band has the meaning given by the *Radiocommunications Spectrum Marketing Plan (1800 MHz unallocated lots band) 2017*.

Act means the *Radiocommunications Act 1992.*

area-adjacent licences means the spectrum licences that authorise the operation of radiocommunications devices in the geographic areas adjacent to the geographic areas described in Part 2 of Licence Schedule 1 of this licence.

frequency-adjacent licences means the spectrum licences that authorise the operation of radiocommunications devices in the frequency bands adjacent to the frequency bands described in Part 2 of Licence Schedule 1 of this licence.

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

ITU Radio Regulations means the Radio Regulations published by the International Telecommunication Union as in force from time to time.

Note Copies of the ITU Radio Regulations can be obtained from the ITU: www.itu.int.

peak power means the average power measured within a specified bandwidth during one radio frequency cycle at the crest of the signal envelope.

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 plan.

4. Unless the contrary intention appears, terms and expressions used in this licence have the meaning given to them by the *Radiocommunications Spectrum Marketing Plan (1800 MHz unallocated lots band) 2017* or the *Radiocommunications (Unacceptable Levels of Interference - 1800 MHz Band) Determination 2012.*

5. Unless the contrary intention appears, in this licence:

(a) the value of a parameter in Licence Schedules 2 and 3 must be estimated with a level of confidence not less than 95% that the true value of the parameter will always remain below the requirement specified; and

(b) the range of numbers that identify a frequency band includes the higher, but not the lower, number.

Licence Schedule 1 Licence details, bands and areas

Part 1 Licence details

Item		
	Licensee Details	
1	*Name of licensee*	
2	*Address of licensee*	
3	*Client number*	
	Licence Details	
4	*Band release*	1800 MHz (unallocated lots) band
5	*Date of licence effect*	
6	*Date of licence expiry*	17 June 2028
7	*Licence number*	
8	*Date of licence issue*	dd/mm/yyyy

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 band consists of the bandwidth between the lower and upper frequencies, where the lower frequency limit is exclusive and the 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.

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	1775	1785	1870	1880

Table 2: Description of the geographic areas of this licence

Geographic areas (column 1)	HCIS identifiers (column 2)
1	MR1, MR4, MR5, MR7, MR8, MR9, MS1, MS2, MS3, MS4, MS5, MS6, NS4

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. Copies are also available from the ACMA.

Licence Schedule 2 Core conditions

Frequency bands 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 bands

2. Core conditions 3 to 11 apply in relation to those frequencies that are outside the frequency bands set out in Part 2 of Licence Schedule 1.

3. Where a written agreement specifying the maximum permitted level of radio emission for frequencies described in core condition 2 exists between:

   (a) the licensee; and

   (b) all the affected licensees of frequency-adjacent licences and area-adjacent licences;

   the licensee must comply with that specified maximum permitted level of radio emission.

4. Where there is no written agreement for the purposes of core condition 3 in force, the licensee must comply with core conditions 5 to 11.

Non spurious emission limits

5. (1) Subject to sub-condition (2), the licensee must ensure that radiocommunications devices operated under this licence do not exceed the non spurious emission limits in core conditions 6 and 7.

   (2) For any frequency where an emission limit described in core condition 8 is less than an emission limit described in core condition 6 or 7, the emission limit in core condition 8 applies instead of the emission limit in core condition 6 or 7.

6. The non spurious emission limits in Table 3 apply:

   (a) at frequencies outside the 1710-1785 MHz and 1805-1880 MHz frequency bands; and

   (b) offset from 1785 MHz, 1805 MHz and 1880 MHz;

   where: f_{offset}: is the frequency offset from the 1785 MHz, 1805 MHz and 1880 MHz band edges. The -3dB point of the specified bandwidth closest to the band edge being frequency offset from, is placed at $\mathbf{f_{offset}}$

Table 3: Radiated maximum true mean power non spurious emission limits

Frequency offset range	Radiated maximum true mean power (dBm EIRP)	Specified bandwidth
0 Hz ≤ f_{offset} < 200 kHz	2	30 kHz
200 kHz ≤ f_{offset} < 900 kHz	$2 - 15 \times (f_{offset}(MHz) - 0.2)$	30 kHz
900 kHz ≤ f_{offset} < 5.6 MHz	-8.5	30 kHz
f_{offset} ≥ 5.6 MHz	-18.5	30 kHz

7. The non spurious emission limits in Tables 4a and 4b apply:

   (a) at frequencies outside the 1710-1785 MHz frequency band; and

   (b) offset from 1710 MHz;

   where:

   f_{offset}: is the frequency offset from the 1710 MHz band edge. The -3dB point of the specified bandwidth closest to the band edge being frequency offset from, is placed at **f_{offset}**

Table 4a: Radiated maximum true mean power non spurious emission limits

Frequency offset range	Radiated maximum true mean power (dBm EIRP)	Specified bandwidth
0 Hz ≤ f_{offset} < 500 kHz	-8.5	30 kHz
f_{offset} ≥ 500 kHz	-33.5	30 kHz

Table 4b: Radiated peak power non spurious emission limits

Frequency offset range	Radiated peak power (dBm EIRP)	Specified bandwidth
0 Hz ≤ f_{offset} < 300 kHz	10	300 kHz

8. The non spurious emission limits in Table 5 apply:

   (a) at frequencies outside the upper or lower frequency limits set out in Part 2 of Licence Schedule 1; and

(b) offset from the upper or lower frequency limits set out in Part 2 of Licence Schedule 1;

where:

f_{offset}: is the frequency offset from the upper or lower frequency limits set out in Part 2 of Licence Schedule 1. The -3dB point of the specified bandwidth closest to the band edge being frequency offset from, is placed at $\mathbf{f_{offset}}$

Table 5: Radiated maximum true mean power non spurious emission limits

Frequency offset range	Radiated maximum true mean power (dBm EIRP)	Specified bandwidth
0 Hz ≤ f_{offset} < 200 kHz	21.5	30 kHz
200 kHz ≤ f_{offset} < 1 MHz	$2 - 13.125 \times (f_{offset}(MHz) - 0.2)$	30 kHz
1 MHz ≤ f_{offset} < 5.8 MHz	-8.5	30 kHz
f_{offset} ≥ 5.8 MHz	-13	30 kHz

Spurious emission limits

9. The licensee must ensure that radiocommunications devices operated under this licence do not exceed the spurious emission limits in core conditions 10 and 11.

10. For radiocommunications transmitters operated under this licence, the spurious emission limits in Table 6 apply at frequencies outside the 1710-1785 MHz and 1805-1880 MHz frequency bands, measured over the specified bandwidth for the relevant frequency range.

Table 6: Radiocommunications transmitter spurious emission limits

Frequency range (f)	Radiated mean power (dBm EIRP)	Specified bandwidth
9 kHz ≤ f < 150 kHz	-36	1 kHz
150 kHz ≤ f < 30 MHz	-36	10 kHz
30 MHz ≤ f < 1 GHz	-36	100 kHz
1 GHz ≤ f < 3.5 GHz	-2	1 MHz
3.5 GHz ≤ f < 12.75 GHz	-30	1 MHz

11. For radiocommunications receivers operated under this licence, the spurious emission limits in Table 7 apply at frequencies outside the 1710-1785 MHz and 1805-

1880 MHz frequency bands, measured over the specified bandwidth for the relevant frequency range.

Table 7: Radiocommunications receiver spurious emission limits

Frequency range (f)	Radiated mean power (dBm EIRP)	Specified bandwidth
9 kHz ≤ f < 1 GHz	-57	100 kHz
1 GHz ≤ f < 3.5 GHz	-19	1 MHz
3.5 GHz ≤ f < 12.75 GHz	-47	1 MHz

Emission limits outside the geographic areas

12. Core conditions 13 to 15 apply in relation to those areas that are outside the geographic areas set out in Part 2 of Licence Schedule 1.

13. Where a written agreement specifying the maximum permitted level of radio emission for areas described in core condition 12 exists between:

    (a) the licensee; and

    (b) all the affected licensees of frequency-adjacent licences and area-adjacent licences;

    the licensee must comply with that specified maximum permitted level of radio emission.

14. Where there is no written agreement for the purposes of core condition 13 in force, the licensee must comply with core condition 15.

15. (1) The licensee must ensure that the maximum permitted level of radio emission for an area described in core condition 12 caused by operation of radiocommunications devices under this licence does not exceed a radiated maximum true mean power of 54.5 dBm EIRP per 30 kHz.

    (2) The licensee complies with sub-condition (1) by ensuring that no radiocommunications device is operated under this licence in excess of a radiated maximum true mean power of 54.5 dBm EIRP per 30 kHz.

Licence Schedule 3 Statutory conditions

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) spectrum access charges fixed by determinations made under section 294 of the Act; and
   (c) amounts of spectrum licence tax.

Third party use

2. (1) The licensee must notify any person whom the licensee authorises, under section 68 of the Act, to operate radiocommunications devices under this licence of that person's obligations under the Act, in particular:

   (a) the registration requirements under Part 3.5 of the Act for operation of radiocommunications devices under this licence (if applicable); and

   (b) any rules made by the ACMA under subsection 68(3) of the Act.

   (2) Any person other than the licensee who operates a radiocommunications device under this licence must comply with rules made by the ACMA under subsection 68(3) of the Act.

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. The following kinds of radiocommunications transmitters are exempt from the registration requirement in statutory condition 3:

   (a) a mobile transmitter that operates in the 1800 MHz band with a radiated power of less than or equal to 39 dBm EIRP per occupied bandwidth; or
   (b) a fixed transmitter that operates in the 1800 MHz band with a radiated power always less than or equal to 33 dBm EIRP per occupied bandwidth.

Residency etc

5. (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*.

Licence Schedule 4 Other conditions

Definitions

1. In this Licence Schedule 4:

communal site has the same meaning as in the *Radiocommunications (Interpretation) Determination 2015* as in force from time to time.

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 radiocommunications 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.

Co-sited radiocommunications devices

3. If:

(a) interference occurs between:
  (i) a radiocommunications device operated under this spectrum licence; and
  (ii) a radiocommunications device operated under another licence;
  when the measured separation between the phase centre of the antenna used with each radiocommunications 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

4. 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 radiocommunications device registration details as soon as possible.

International coordination

5. A licensee must ensure that operation of a radiocommunications transmitter under this licence does not cause harmful interference to a radiocommunications receiver that operates in accordance with the ITU Radio Regulations and is located in a country other than Australia.

Electromagnetic Energy Requirements (EME)

6. 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.

Record keeping – radiocommunications transmitters located at communal sites

7. (1) If the licensee operates a radiocommunications transmitter under this licence, and the transmitter:

(a) is located at a communal site; and

(b) is not exempt under statutory condition 4 of Licence Schedule 3;

the licensee must comply with sub-conditions 7(2) and 7(3).

(2) In relation to each radiocommunications transmitter, the licensee must keep a record which includes the following information:

(a) the transmitter's device registration number as specified in the Register;

(b) the licence number of this licence;

(c) the transmitter's geographic location;

(d) if the licensee owns the transmitter, the licensee's name and address;

(e) if the licensee does not own the transmitter, the owner's name and address;

(f) the transmitter's centre frequency;

(g) the transmitter's emission designator;

(h) details of the transmitter's antenna including the manufacturer, model, type, gain, polarisation, azimuth and average ground height;

(i) the transmitter's maximum true mean power; and

(j) the transmitter's maximum EIRP.

(3) If the ACMA requests a copy of a record kept under sub-condition 7(2), the licensee must comply with the request as soon as practicable.

Interference with specified fixed services

8. If:

(a) a service is provided using the same parameters as a fixed licence listed in Table 1 of Schedule 5 to the *Radiocommunications Spectrum Marketing Plan (1800 MHz unallocated lots band) 2017* (***specified fixed service***); and

(b) the specified fixed service uses frequencies wholly or partly within the 1800 MHz band; and

(c) the specified fixed service is provided using a radiocommunications device operated under an apparatus licence;

the licensee:

(d) must not operate any radiocommunications transmitters authorised under this licence in a manner that would be inconsistent with the protections afforded to that specified fixed services by Part 2 of the *Radiocommunications Advisory Guidelines (Managing Interference from Spectrum Licensed Transmitters – 1800 MHz Band) 2012*. (Part 2 specifies the level of out-of-band and in-band protection to be afforded to such specified fixed services); and

(e) cannot claim protection from interference caused by the specified fixed service.

Note: By operation of section 153H of the Act all fixed licences authorising the operation of the radiocommunications devices listed in table 1 of Schedule 6 to the *Radiocommunications Spectrum Marketing Plan (1800 MHz Band) 2015* were cancelled at the end of the re-allocation period (30 May 2017). The ACMA, under subsection 153P(3) of the Act, subsequently issued apparatus licences that authorise the operation of some of the same services that were provided under the fixed licences after the end of the re-allocation period on the basis that it was satisfied that special circumstances of the particular case justified the issuing of the licence. In particular, the ACMA has issued licences in relation to the specified fixed services listed in Schedule 5 of the *Radiocommunications Spectrum Marketing Plan (1800 MHz unallocated lots band) 2017.* A spectrum licensee will not be able to establish the operation or use of any radiocommunications device authorised by the spectrum licence in a manner that would cause interference to the operation of radiocommunications devices authorised by those fixed licences providing services using the same parameters.

Licence Schedule 5 Licence notes

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 by revoking or varying any conditions of this 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 by 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 of Division 1 of Part 3.2 of the Act.

Determination of unacceptable interference

3. The ACMA has made the *Radiocommunications (Unacceptable Levels of Interference – 1800 MHz Band) Determination 2012* under subsection 145(4) of the Act that sets out the unacceptable levels of interference for the purpose of registering radiocommunications transmitters to be operated under this licence, and which is to be used for the issuing of certificates by accredited persons under subsection 145(3) of the Act.

   Note: Although not mandatory, the registration of radiocommunications receivers to be operated under this licence is advised because one of the matters the ACMA will take into account in settling interference disputes is the time of registration of the receiver involved in the interference.

Advisory guidelines

4. The ACMA has issued written radiocommunications advisory guidelines under section 262 of the Act about:

   (a) co-ordinating the operation of radiocommunications transmitters under this licence with radiocommunications receivers operated under other licences:

   - *Radiocommunications Advisory Guidelines (Managing Interference from Spectrum Licensed Transmitters – 1800 MHz Band) 2012*;

   (b) co-ordinating the operation of radiocommunications receivers operated under this licence with radiocommunications transmitters operated under other licences:

   - *Radiocommunications Advisory Guidelines (Managing Interference to Spectrum Licensed Receivers – 1800 MHz Band) 2012*; and

   (c) co-ordinating the operation of high sited radiocommunications transmitters operated under this licence with radiocommunications receivers in the 1800 MHz lower band (1710 MHz – 1785 MHz) operated under other licences:

   - *Radiocommunications Advisory Guidelines (Additional Device Boundary Criteria – 1800 MHz Lower Band) 2012.*

5. The advisory guidelines should be read in conjunction with the *Radiocommunications (Unacceptable Levels of Interference – 1800 MHz Band) Determination 2012* (see Licence Note 3). This determination sets out the unacceptable levels of interference for the purpose of registration of transmitters to be operated under this licence. The guidelines should be followed by licensees (and accredited persons) in the planning of services and the resolution of interference cases. The ACMA will consider these guidelines during the settlement of

interference disputes. Each case will be assessed on its merits. Copies of the guidelines are available from www.legislation.gov.au and the ACMA.

Suspension and cancellation of spectrum licences

6. 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 of spectrum licences

7. A spectrum licence will not be re-issued to the same licensee without a price based allocation procedure unless:

(a) the ACMA is satisfied under subsection 82(1) of the Act that special circumstances exist as a result of which it would in the public interest for that licensee to continue to hold that licence; or

(b) 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.

Trading

8. (1) A licensee may assign or otherwise deal with the whole or any part of a spectrum licence provided that is done in accordance with any rules determined by the ACMA under section 88 of the Act.

(2) 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 in respect of spectrum licences has been amended to take it into account.

Appeals

9. 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

10. Licensees should affix identification labels containing the name and address of the licensee on all fixed transmitters operated under this licence.

Note: An example of an identification label would be one containing the following statement: “This device is the property of ‘name’”.