Radiocommunications Spectrum Marketing Plan (1800 MHz Band) 2015

Radiocommunications Act 1992

The AUSTRALIAN COMMUNICATIONS AND MEDIA AUTHORITY makes this Plan under sections 39 and 39A of the *Radiocommunications Act 1992*.

Dated *28 August 2015*

Richard Bean
[signed]
Member

James Cameron
[signed]
Member / General Manager

Australian Communications and Media Authority

Table of Contents

Part 1 Introduction

1.1 Name of Plan

This Plan is the *Radiocommunications Spectrum Marketing Plan (1800 MHz Band) 2015*.

1.2 Commencement

This Plan commences on the day after it is registered.

Note 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.

1.3 Purpose of this Plan

This Plan describes:

(a) the procedures and timetable for issuing spectrum licences in the 1800 MHz band;

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

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

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

1.4 Definitions

(1) In this Plan:

1800 MHz band means:

(a) the following frequency ranges:

(i) 1725 MHz to 1785 MHz; and

(ii) 1820 MHz to 1880 MHz;

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

(b) the following frequency ranges within the ***identified geographic areas of Australia*** as that term is defined in section 3 of the designation notice and specified in the Schedule to the designation notice:

(i) 1770 MHz to 1775 MHz and 1865 MHz to 1870 MHz in Adelaide;

(ii) 1710 MHz to 1712.5 MHz and 1805 MHz to 1807.5 MHz in regional South Australia; and

(iii) 1710 MHz to 1712.5 MHz and 1805 MHz to 1807.5 MHz in Cairns/Townsville.

Act means the *Radiocommunications Act 1992*.

advisory guidelines means the following documents made by the ACMA under section 262 of the Act:

(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.*

allocation determination means the *Radiocommunications (Spectrum Licence Allocation – 1800 MHz Band) Determination 2015.*

applicant information package has the meaning given by subsection 1.4 (1) of the allocation determination.

auction has the meaning given by subsection 2.3 (1).

Australian spectrum map grid (ASMG) means the Australian Spectrum Map Grid 2012, published by the ACMA, as existing from time to time.

designation notice means the *Radiocommunications (Spectrum Designation) Notice No. 1 of 2014*.

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 (HCIS) means the cell grouping hierarchy scheme used to describe geographic areas in the Australian spectrum map grid (ASMG).

lot means a part of the spectrum as referred to in section 2.4.

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.

pre-determined price has the same meaning as in the allocation determination.

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

sample spectrum licence has the meaning given by section 3.9.

spurious emission means emissions that are not:

(a) modulation products; or

(b) wide band noise; or

(c) emissions 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; and

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

Note Terms and expressions used in this Plan have the meaning given by section 5 of the Act, for example:

ACMA	licensee
apparatus licence	public or community service
core condition	Register
frequency band	spectrum licence.

(2) In this Plan, 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 *Legislative Instruments Act 2003* for the application of the *Acts Interpretation Act 1901* to legislative instruments.

Note 2 All Commonwealth Acts and legislative instrument are available on the ComLaw website at http://www.comlaw.gov.au.

Part 2 Allocation of spectrum licences

2.1 Purpose of this Part

This Part describes the procedures and timetable for allocating spectrum licences that authorise the operation of radiocommunications devices in the 1800 MHz band.

2.2 Parts of the spectrum

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

(2) This Plan will have no effect if the re-allocation declaration is revoked in accordance with the Act.

2.3 How licences will be allocated

(1) Spectrum licences for spectrum in the 1800 MHz band will be allocated by a simultaneous multiple round ascending (SMRA) auction in accordance with the procedures set out in the allocation determination (***auction***).

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 their own legal, technical and financial advice before applying.

(2) However, if the ACMA considers that it may be able to allocate spectrum licences without having to conduct an auction, the ACMA may offer to allocate spectrum licences for a pre-determined price.

(3) The ACMA may also make allocations of spectrum in the 1800 MHz band for unallocated lots in accordance with section 8.1 of the allocation determination.

2.4 Lots for the auction

(1) There are three categories of lots for the 1800 MHz band. The categories are characterised by:

(a) the frequencies set out in columns 3 and 4 of table 1 in Schedule 1; and

(b) the bandwidth described in column 5 of table 1 in Schedule 1.

(2) The ACMA has divided up the 1800 MHz band into the lots described in Schedule 2. Each lot is characterised by:

(a) the category to which the lot belongs, set out in column 3 of table 1 in Schedule 2;

(b) the region for the lot, specified in column 4 of table 1 in Schedule 2; and

(c) the frequencies set out in columns 5 and 6 of table 1 in Schedule 2.

(3) The size of each lot varies depending upon which category of the 1800 MHz band the lot is in. Lots in categories 1 and 3 are 2 x 5 MHz, being 5

MHz in the lower frequency range mentioned for that category in table 1 of Schedule 1 and 5 MHz in the upper frequency range mentioned for that category in table 1 of Schedule 1. Lots in category 2 are 2 x 2.5 MHz, being 2.5 MHz in the lower frequency range mentioned for that category in table 1 of Schedule 1 and 2.5 MHz in the upper frequency range mentioned for that category in table 1 of Schedule 1.

(4) The ACMA will notify applicants of the lot rating for each lot set under section 4.6 of the allocation determination. All lots in the same region within the same category will have the same lot rating.

(5) The lot rating will be used as the basis for calculating the amount of an applicant's eligibility payment or deed of financial security. Details of this are in section 4.16 of the allocation determination.

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

(7) If, before the auction manager sets the start date and time for the first and second rounds of the auction, the ACMA considers that it may be able to allocate spectrum licences for lots without having to conduct an auction to identify the highest value user for the spectrum represented by those 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.

2.5 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.

2.6 Taking part in the auction

(1) The ACMA will make available an applicant information package that contains more detail 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 4.5 (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

3.1 Purpose of this Part

This Part describes:

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

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

(c) conditions to be included in spectrum licences issued in accordance with this Plan; 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 Plan.

3.2 Issue of licences

Subject to the Act, the allocation determination and other relevant law, 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 the balance of the winning price in accordance with Division 2 of Part 7 of the allocation determination or the full balance of the pre-determined price in accordance with section 5.5 of the allocation determination.

3.3 Duration of licences

(1) Licences issued to a person who has been allocated a lot or lots as a result of the auction or for a pre-determined price will start on the date set out in section 3.4 and will be for a fixed term with an expiry date of 17 June 2028.

(2) Where allocation occurs afterwards because of unallocated lots at the auction, the licence will be for a fixed term, with an expiry date of 17 June 2028, starting on a date to be specified by the ACMA.

3.4 Commencement of licences

(1) A licence issued to a person who has been allocated a lot in Category 1 as a result of the auction or for a pre-determined price will come into force on 30 May 2017.

(2) A licence issued to a person who has been allocated a lot in Category 2 or 3 as a result of the auction or for a pre-determined price will come into force on the day after payment of the balance of the winning price or full balance of the pre-determined price is made, as the case may be, or immediately upon issue if the relevant balance is zero.

3.5 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; and

(d) a condition specifying the maximum permitted level 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 Plan.

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

3.6 Determining core licence conditions

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

(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 the region described in Schedule 3 that is for the lots allocated to the person in accordance with the allocation determination.

(2) For spectrum licences mentioned in subsection 2.3 (3) of this Plan, the frequency bands and geographic areas of the licence will be determined by this Plan, unless varied.

Note The ACMA may make a separate instrument for the allocation of those licences. They may be allocated for a pre-determined price or by a second auction held under the allocation determination.

(3) The emission limits outside the area for all licences issued in accordance with this Plan will be calculated in accordance with Schedule 4.

(4) The emission limits outside the band for all licences issued in accordance with this Plan will be calculated in accordance with Schedule 5.

3.7 Other licence conditions

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

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

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

(c) registration of radiocommunications 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 or for a pre-determined price will include a condition which will provide that where:

(a) a service is provided using the same parameters as a fixed licence listed in table 1 of Schedule 6 (a ***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 those 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 the specified fixed services; and

(e) cannot claim protection from interference caused by such specified fixed services.

Note 1 The sample licence includes a version of this condition.

Note 2 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 are cancelled at the end of the re-allocation period. The ACMA may, however, under subsection 153P (3) of the Act, issue apparatus licences that authorise the operation of the same services that were provided under the fixed licences after the end of the re-allocation period if it is satisfied that special circumstances of the particular case justify the issuing of the licence. If the ACMA does issue any such licences wholly or partly in the 1800 MHz band under subsection 153P (3), and those licences have the same parameters as the licences listed in table 1 of Schedule 6, the spectrum licensee will not be able to establish operation of, or use, any radiocommunications devices authorised by the spectrum licence in a manner that would cause interference to the operation of radiocommunications devices authorised by those fixed licences.

(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 imposed are included in the sample spectrum licence at Schedule 7.

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

3.8 Registration of radiocommunications 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 unacceptable 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 radiocommunications devices to be operated under a licence issued in accordance with this Plan, 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.

3.9 Draft sample licence

Schedule 7 sets outa sample spectrum licence (***sample spectrum licence***) including conditions that may be included in each spectrum licence that is issued in a part of the spectrum referred to in the re-allocation declaration.

Note The sample spectrum licence may not reflect the conditions included in a spectrum licence issued to a winning bidder.

3.10 Compatibility requirements

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

Part 4 After allocation

4.1 Purpose of this Part

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

4.2 Registration of spectrum 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 1997*.

4.3 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.

4.4 Trading in spectrum licences

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.

4.5 Trading rules

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 described in the *Radiocommunications (Trading Rules for Spectrum Licences) Determination 2012.*

4.6 Agreements about emission limits

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

(a) paragraph 1 of Schedule 4 (about emission limits outside the geographic area of the licence); or

(b) paragraph 1 of Schedule 5 (about emission limits outside the band of the licence).

4.7 Spectrum licences that are about to expire

As required by section 78 of the Act, the ACMA must, from time to time, cause to be published on its website notices that:

(a) state where information may be obtained about the spectrum licences that will expire during the period specified in the notice and the parts of the spectrum to which they relate (***expiring spectrum licences***); and

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

4.8 Re-issue of spectrum licences

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

(2) Spectrum licences that are re-issued may not take the same form as originally issued as the parts of the spectrum may be divided and distributed differently. Conditions on the spectrum licences may also change. Licensees should not assume that they will be re-issued with their existing spectrum licences.

Schedule 1 Categories

(subsections 2.4 (1) and (3))

Table 1

Column 1 Category Number	Column 2 Category name	Column 3 Lower frequency range	Column 4 Upper frequency range	Column 5 Bandwidth
1	Regional Australia	1725 – 1785 MHz	1820 – 1880 MHz	2 x 5 MHz
2	Residual - Regional	1710 – 1712.5 MHz	1805 – 1807.5 MHz	2 x 2.5 MHz
3	Residual - Metropolitan	1770 – 1775 MHz	1865 – 1870 MHz	2 x 5 MHz

Schedule 2 Lots

(subsection 2.4 (2))

Table 1

Column 1 Lot Number	Column 2 Lot Name	Column 3 Category Number	Column 4 Region	Column 5 Lower frequency range	Column 6 Upper frequency range
1	DARW01	1	Darwin	1725–1730 MHz	1820–1825 MHz
2	DARW02	1	Darwin	1730–1735 MHz	1825–1830 MHz
3	DARW03	1	Darwin	1735–1740 MHz	1830–1835 MHz
4	DARW04	1	Darwin	1740–1745 MHz	1835–1840 MHz
5	DARW05	1	Darwin	1745–1750 MHz	1840–1845 MHz
6	DARW06	1	Darwin	1750–1755 MHz	1845–1850 MHz
7	DARW07	1	Darwin	1755–1760 MHz	1850–1855 MHz
8	DARW08	1	Darwin	1760–1765 MHz	1855–1860 MHz
9	DARW09	1	Darwin	1765–1770 MHz	1860–1865 MHz
10	DARW10	1	Darwin	1770–1775 MHz	1865–1870 MHz
11	DARW11	1	Darwin	1775–1780 MHz	1870–1875 MHz
12	DARW12	1	Darwin	1780–1785 MHz	1875–1880 MHz
13	NQLD01	1	North Queensland (Cairns/Townsville)	1725–1730 MHz	1820–1825 MHz
14	NQLD02	1	North Queensland (Cairns/Townsville)	1730–1735 MHz	1825–1830 MHz
15	NQLD03	1	North Queensland (Cairns/Townsville)	1735–1740 MHz	1830–1835 MHz
16	NQLD04	1	North Queensland (Cairns/Townsville)	1740–1745 MHz	1835–1840 MHz
17	NQLD05	1	North Queensland (Cairns/Townsville)	1745–1750 MHz	1840–1845 MHz
18	NQLD06	1	North Queensland (Cairns/Townsville)	1750–1755 MHz	1845–1850 MHz
19	NQLD07	1	North Queensland (Cairns/Townsville)	1755–1760 MHz	1850–1855 MHz
20	NQLD08	1	North Queensland (Cairns/Townsville)	1760–1765 MHz	1855–1860 MHz
21	NQLD09	1	North Queensland (Cairns/Townsville)	1765–1770 MHz	1860–1865 MHz
22	NQLD10	1	North Queensland (Cairns/Townsville)	1770–1775 MHz	1865–1870 MHz
23	NQLD11	1	North Queensland (Cairns/Townsville)	1775–1780 MHz	1870–1875 MHz
24	NQLD12	1	North Queensland (Cairns/Townsville)	1780–1785 MHz	1875–1880 MHz

Column 1 Lot Number	Column 2 Lot Name	Column 3 Category Number	Column 4 Region	Column 5 Lower frequency range	Column 6 Upper frequency range
25	CQLD01	1	Central Queensland (Mackay)	1725–1730 MHz	1820–1825 MHz
26	CQLD02	1	Central Queensland (Mackay)	1730–1735 MHz	1825–1830 MHz
27	CQLD03	1	Central Queensland (Mackay)	1735–1740 MHz	1830–1835 MHz
28	CQLD04	1	Central Queensland (Mackay)	1740–1745 MHz	1835–1840 MHz
29	CQLD05	1	Central Queensland (Mackay)	1745–1750 MHz	1840–1845 MHz
30	CQLD06	1	Central Queensland (Mackay)	1750–1755 MHz	1845–1850 MHz
31	CQLD07	1	Central Queensland (Mackay)	1755–1760 MHz	1850–1855 MHz
32	CQLD08	1	Central Queensland (Mackay)	1760–1765 MHz	1855–1860 MHz
33	CQLD09	1	Central Queensland (Mackay)	1765–1770 MHz	1860–1865 MHz
34	CQLD10	1	Central Queensland (Mackay)	1770–1775 MHz	1865–1870 MHz
35	CQLD11	1	Central Queensland (Mackay)	1775–1780 MHz	1870–1875 MHz
36	CQLD12	1	Central Queensland (Mackay)	1780–1785 MHz	1875–1880 MHz
37	SQLD01	1	South Queensland (Maryborough)	1725–1730 MHz	1820–1825 MHz
38	SQLD02	1	South Queensland (Maryborough)	1730–1735 MHz	1825–1830 MHz
39	SQLD03	1	South Queensland (Maryborough)	1735–1740 MHz	1830–1835 MHz
40	SQLD04	1	South Queensland (Maryborough)	1740–1745 MHz	1835–1840 MHz
41	SQLD05	1	South Queensland (Maryborough)	1745–1750 MHz	1840–1845 MHz
42	SQLD06	1	South Queensland (Maryborough)	1750–1755 MHz	1845–1850 MHz
43	SQLD07	1	South Queensland (Maryborough)	1755–1760 MHz	1850–1855 MHz
44	SQLD08	1	South Queensland (Maryborough)	1760–1765 MHz	1855–1860 MHz
45	SQLD09	1	South Queensland (Maryborough)	1765–1770 MHz	1860–1865 MHz
46	SQLD10	1	South Queensland (Maryborough)	1770–1775 MHz	1865–1870 MHz
47	SQLD11	1	South Queensland (Maryborough)	1775–1780 MHz	1870–1875 MHz
48	SQLD12	1	South Queensland (Maryborough)	1780–1785 MHz	1875–1880 MHz
49	NNSW01	1	Northern New South Wales (Grafton)	1725–1730 MHz	1820–1825 MHz
50	NNSW02	1	Northern New South Wales (Grafton)	1730–1735 MHz	1825–1830 MHz
51	NNSW03	1	Northern New South Wales (Grafton)	1735–1740 MHz	1830–1835 MHz
52	NNSW04	1	Northern New South Wales (Grafton)	1740–1745 MHz	1835–1840 MHz
53	NNSW05	1	Northern New South Wales (Grafton)	1745–1750 MHz	1840–1845 MHz
54	NNSW06	1	Northern New South Wales (Grafton)	1750–1755 MHz	1845–1850 MHz
55	NNSW07	1	Northern New South Wales (Grafton)	1755–1760 MHz	1850–1855 MHz
56	NNSW08	1	Northern New South Wales (Grafton)	1760–1765 MHz	1855–1860 MHz

Column 1 Lot Number	Column 2 Lot Name	Column 3 Category Number	Column 4 Region	Column 5 Lower frequency range	Column 6 Upper frequency range
57	NNSW09	1	Northern New South Wales (Grafton)	1765–1770 MHz	1860–1865 MHz
58	NNSW10	1	Northern New South Wales (Grafton)	1770–1775 MHz	1865–1870 MHz
59	NNSW11	1	Northern New South Wales (Grafton)	1775–1780 MHz	1870–1875 MHz
60	NNSW12	1	Northern New South Wales (Grafton)	1780–1785 MHz	1875–1880 MHz
61	WNSW01	1	Western New South Wales (Dubbo)	1725–1730 MHz	1820–1825 MHz
62	WNSW02	1	Western New South Wales (Dubbo)	1730–1735 MHz	1825–1830 MHz
63	WNSW03	1	Western New South Wales (Dubbo)	1735–1740 MHz	1830–1835 MHz
64	WNSW04	1	Western New South Wales (Dubbo)	1740–1745 MHz	1835–1840 MHz
65	WNSW05	1	Western New South Wales (Dubbo)	1745–1750 MHz	1840–1845 MHz
66	WNSW06	1	Western New South Wales (Dubbo)	1750–1755 MHz	1845–1850 MHz
67	WNSW07	1	Western New South Wales (Dubbo)	1755–1760 MHz	1850–1855 MHz
68	WNSW08	1	Western New South Wales (Dubbo)	1760–1765 MHz	1855–1860 MHz
69	WNSW09	1	Western New South Wales (Dubbo)	1765–1770 MHz	1860–1865 MHz
70	WNSW10	1	Western New South Wales (Dubbo)	1770–1775 MHz	1865–1870 MHz
71	WNSW11	1	Western New South Wales (Dubbo)	1775–1780 MHz	1870–1875 MHz
72	WNSW12	1	Western New South Wales (Dubbo)	1780–1785 MHz	1875–1880 MHz
73	CANB01	1	Canberra (including south coast of New South Wales)	1725–1730 MHz	1820–1825 MHz
74	CANB02	1	Canberra (including south coast of New South Wales)	1730–1735 MHz	1825–1830 MHz
75	CANB03	1	Canberra (including south coast of New South Wales)	1735–1740 MHz	1830–1835 MHz
76	CANB04	1	Canberra (including south coast of New South Wales)	1740–1745 MHz	1835–1840 MHz
77	CANB05	1	Canberra (including south coast of New South Wales)	1745–1750 MHz	1840–1845 MHz
78	CANB06	1	Canberra (including south coast of New South Wales)	1750–1755 MHz	1845–1850 MHz
79	CANB07	1	Canberra (including south coast of New South Wales)	1755–1760 MHz	1850–1855 MHz
80	CANB08	1	Canberra (including south coast of New South Wales)	1760–1765 MHz	1855–1860 MHz
81	CANB09	1	Canberra (including south coast of New South Wales)	1765–1770 MHz	1860–1865 MHz
82	CANB10	1	Canberra (including south coast of New South Wales)	1770–1775 MHz	1865–1870 MHz
83	CANB11	1	Canberra (including south coast of New South Wales)	1775–1780 MHz	1870–1875 MHz

Schedule 2 Lots

Column 1 Lot Number	Column 2 Lot Name	Column 3 Category Number	Column 4 Region	Column 5 Lower frequency range	Column 6 Upper frequency range
84	CANB12	1	Canberra (including south coast of New South Wales)	1780–1785 MHz	1875–1880 MHz
85	SNSW01	1	Southern New South Wales/Riverina (Albury)	1725–1730 MHz	1820–1825 MHz
86	SNSW02	1	Southern New South Wales/Riverina (Albury)	1730–1735 MHz	1825–1830 MHz
87	SNSW03	1	Southern New South Wales/Riverina (Albury)	1735–1740 MHz	1830–1835 MHz
88	SNSW04	1	Southern New South Wales/Riverina (Albury)	1740–1745 MHz	1835–1840 MHz
89	SNSW05	1	Southern New South Wales/Riverina (Albury)	1745–1750 MHz	1840–1845 MHz
90	SNSW06	1	Southern New South Wales/Riverina (Albury)	1750–1755 MHz	1845–1850 MHz
91	SNSW07	1	Southern New South Wales/Riverina (Albury)	1755–1760 MHz	1850–1855 MHz
92	SNSW08	1	Southern New South Wales/Riverina (Albury)	1760–1765 MHz	1855–1860 MHz
93	SNSW09	1	Southern New South Wales/Riverina (Albury)	1765–1770 MHz	1860–1865 MHz
94	SNSW10	1	Southern New South Wales/Riverina (Albury)	1770–1775 MHz	1865–1870 MHz
95	SNSW11	1	Southern New South Wales/Riverina (Albury)	1775–1780 MHz	1870–1875 MHz
96	SNSW12	1	Southern New South Wales/Riverina (Albury)	1780–1785 MHz	1875–1880 MHz
97	VICT01	1	Regional Victoria	1725–1730 MHz	1820–1825 MHz
98	VICT02	1	Regional Victoria	1730–1735 MHz	1825–1830 MHz
99	VICT03	1	Regional Victoria	1735–1740 MHz	1830–1835 MHz
100	VICT04	1	Regional Victoria	1740–1745 MHz	1835–1840 MHz
101	VICT05	1	Regional Victoria	1745–1750 MHz	1840–1845 MHz
102	VICT06	1	Regional Victoria	1750–1755 MHz	1845–1850 MHz
103	VICT07	1	Regional Victoria	1755–1760 MHz	1850–1855 MHz
104	VICT08	1	Regional Victoria	1760–1765 MHz	1855–1860 MHz
105	VICT09	1	Regional Victoria	1765–1770 MHz	1860–1865 MHz
106	VICT10	1	Regional Victoria	1770–1775 MHz	1865–1870 MHz
107	VICT11	1	Regional Victoria	1775–1780 MHz	1870–1875 MHz
108	VICT12	1	Regional Victoria	1780–1785 MHz	1875–1880 MHz
109	TASM01	1	Tasmania	1725–1730 MHz	1820–1825 MHz
110	TASM02	1	Tasmania	1730–1735 MHz	1825–1830 MHz
111	TASM03	1	Tasmania	1735–1740 MHz	1830–1835 MHz
112	TASM04	1	Tasmania	1740–1745 MHz	1835–1840 MHz

Column 1 Lot Number	Column 2 Lot Name	Column 3 Category Number	Column 4 Region	Column 5 Lower frequency range	Column 6 Upper frequency range
113	TASM05	1	Tasmania	1745–1750 MHz	1840–1845 MHz
114	TASM06	1	Tasmania	1750–1755 MHz	1845–1850 MHz
115	TASM07	1	Tasmania	1755–1760 MHz	1850–1855 MHz
116	TASM08	1	Tasmania	1760–1765 MHz	1855–1860 MHz
117	TASM09	1	Tasmania	1765–1770 MHz	1860–1865 MHz
118	TASM10	1	Tasmania	1770–1775 MHz	1865–1870 MHz
119	TASM11	1	Tasmania	1775–1780 MHz	1870–1875 MHz
120	TASM12	1	Tasmania	1780–1785 MHz	1875–1880 MHz
121	SAUS01	1	Regional South Australia	1725–1730 MHz	1820–1825 MHz
122	SAUS02	1	Regional South Australia	1730–1735 MHz	1825–1830 MHz
123	SAUS03	1	Regional South Australia	1735–1740 MHz	1830–1835 MHz
124	SAUS04	1	Regional South Australia	1740–1745 MHz	1835–1840 MHz
125	SAUS05	1	Regional South Australia	1745–1750 MHz	1840–1845 MHz
126	SAUS06	1	Regional South Australia	1750–1755 MHz	1845–1850 MHz
127	SAUS07	1	Regional South Australia	1755–1760 MHz	1850–1855 MHz
128	SAUS08	1	Regional South Australia	1760–1765 MHz	1855–1860 MHz
129	SAUS09	1	Regional South Australia	1765–1770 MHz	1860–1865 MHz
130	SAUS10	1	Regional South Australia	1770–1775 MHz	1865–1870 MHz
131	SAUS11	1	Regional South Australia	1775–1780 MHz	1870–1875 MHz
132	SAUS12	1	Regional South Australia	1780–1785 MHz	1875–1880 MHz
133	WAUS01	1	Regional Western Australia	1725–1730 MHz	1820–1825 MHz
134	WAUS02	1	Regional Western Australia	1730–1735 MHz	1825–1830 MHz
135	WAUS03	1	Regional Western Australia	1735–1740 MHz	1830–1835 MHz
136	WAUS04	1	Regional Western Australia	1740–1745 MHz	1835–1840 MHz
137	WAUS05	1	Regional Western Australia	1745–1750 MHz	1840–1845 MHz
138	WAUS06	1	Regional Western Australia	1750–1755 MHz	1845–1850 MHz
139	WAUS07	1	Regional Western Australia	1755–1760 MHz	1850–1855 MHz
140	WAUS08	1	Regional Western Australia	1760–1765 MHz	1855–1860 MHz
141	WAUS09	1	Regional Western Australia	1765–1770 MHz	1860–1865 MHz
142	WAUS10	1	Regional Western Australia	1770–1775 MHz	1865–1870 MHz
143	WAUS11	1	Regional Western Australia	1775–1780 MHz	1870–1875 MHz
144	WAUS12	1	Regional Western Australia	1780–1785 MHz	1875–1880 MHz
145	RESD01	2	North Queensland (Cairns/Townsville)	1710–1712.5 MHz	1805–1807.5 MHz
146	RESD02	2	Regional South Australia	1710–1712.5 MHz	1805–1807.5 MHz
147	RESD03	3	Adelaide	1770–1775 MHz	1865–1870 MHz

Note The region in column 4 indicates the geographical area in which radiocommunications devices may be operated using the lot. Each region is defined by reference to its HCIS identifiers in Schedule 3.

Schedule 3 Regions

(paragraph 3.6 (1) (b))

There are lots offered in thirteen regions. The regions are:

1) Darwin
2) North Queensland (Cairns/Townsville)
3) Central Queensland (Mackay)
4) South Queensland (Maryborough)
5) Northern New South Wales (Grafton)
6) Western New South Wales (Dubbo)
7) Canberra (including south coast of New South Wales)
8) Southern New South Wales/Riverina (Albury)
9) Regional Victoria
10) Tasmania
11) Regional South Australia
12) Regional Western Australia
13) Adelaide.

The thirteen areas are described by the HCIS identifiers specified in table 1. Each region is described using the hierarchical cell identifier scheme (HCIS) in the *Australian Spectrum Map Grid 2012* (ASMG). There are four levels to the HCIS corresponding to 3 degree, 1 degree, 15 minute and 5 minute cells of the ASMG.

The geographic area of a region can be determined by the aggregation of block areas referenced by HCIS identifiers used to describe it. Refer to the ASMG for a complete description of the naming convention referred to as the HCIS, as published by the ACMA.

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

Table 1 HCIS identifiers for spectrum licences in the 1800 MHZ band

Geographic areas	HCIS identifiers
Darwin	GO7C, GO7D, GO7G, GO7H, GO8A, GO8E, GO7K, GO7L, GO8I
North Queensland (Cairns/Townsville)	LQ1, LQ2, LQ4, LQ5, LQ7, LQ8, LR2, LR3, LR5, LR6
Central Queensland	MR1, MR4, MR5, MR7, MR8, MR9, MS1, MS2, MS3, MS4, MS5, MS6, NS4

Geographic areas	HCIS identifiers
(Mackay)	
South Queensland (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
Northern New South Wales (Grafton)	NU6, NU8, NU9, NV2, NV3, NU2J, NU2K, NU2L, NU2N, NU2O, NU2P, NU3M, NU3N, NU3O, NU3P, NU5B, NU5C, NU5D, NU5F, NU5G, NU5H, NU5I, NU5J, NU5K, NU5L, NU5M, NU5N, NU5O, NU5P, NU7H, NU7L, NU7P, NV1D, NV1G, NV1H, NV1K, NV1L, NV1O, NV1P, NV4C, NV4D, NV4G, NV4H, NV5A, NV5B, NV5C, NV5D, NV5E, NV5F, NV5G, NV5H, NU4L9, NU4P3, NU4P5, NU4P6, NU4P8, NU4P9, NU7D2, NU7D3, NU7D5, NU7D6, NU7D8, NU7D9, NU7K8, NU7K9, NU7O2, NU7O3, NU7O5, NU7O6, NU2E6, NU2F4, NU2F5, NU2F6, NU2G4, NU2G5, NU2E8, NU2E9, NU2F7, NU2F8, NU2F9, NU2G7, NU2G8, NU2I2, NU2I3, NU2I5, NU2I6, NU2I8, NU2I9, NU2M2, NU2M3, NU2M5, NU2M6, NU2M8, NU2M9, NU5A2, NU5A3, NU5A5, NU5A6, NU5A8, NU5A9, NU5E2, NU5E3, NU5E5, NU5E6, NU5E7, NU5E8, NU5E9, NU2G6, NU2H4, NU2H5, NU2H6, NU3E4, NU2G9, NU2H7, NU2H8, NU2H9, NU3E7, NU3I1, NU3I4, NU3I5, NU3I6, NU3J4, NU3J5, NU3J6, NU3K4, NU3K5, NU3K6, NU3L4, NU3L5, NU3L6, NU3I7, NU3I8, NU3I9, NU3J7, NU3J8, NU3J9, NU3K7, NU3K8, NU3K9, NU3L7, NU3L8, NU3L9, NU7O8, NU7O9, NV1C2, NV1C3, NV1C4, NV1C5, NV1C6, NV1C7, NV1C8, NV1C9, NV4K1, NV4K2, NV4K3, NV4L1, NV4L2, NV4L3, NV5I1, NV5I2, NV5I3, NV5J1, NV5J2, NV5J3, NV5K1, NV5K2, NV5K3, NV5L1, NV5L2, NV5L3
Western New South Wales (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,

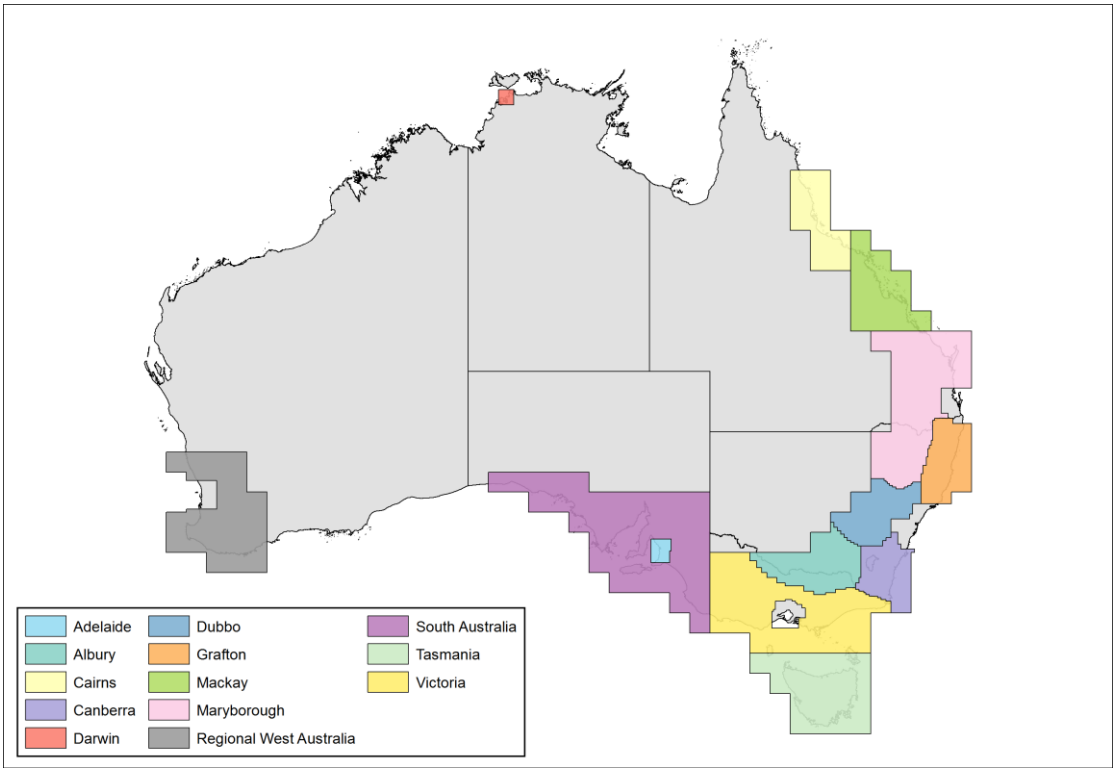
Geographic areas	HCIS identifiers
	MV3N8, MV3N9, MV3O7, MV3O8, MV3O9, NV4I1, NV4I2, NV4I3, NV4J1, NV4I4, NV4I7, NV4M1, NV4M4, NV4M7, MV9D1, MV9D2, MV9D3, NV7A1, MV9D4, MV9D5, MV9D7, MV9D8, MV9E1, MV9E2, MV9E3, MV9F1, MV9F2, MV9F3, MV9G1, MV9G2, MV9G3, MV9H1, MV9H2, NV4J2, NV4J3, LV9I3, LV9I6, LV9I9, 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
Canberra (including south coast of New South Wales)	MW5, MW6, MW8, MW9, MX3, MW1O, MW4C, MW4G, MW4K, MW4O, MW7C, MW7G, MW7J, MW7K, MW1P, MW2H, MW2L, MW2M, MW2N, MW2O, MW2P, MW3A, MW3E, MW3I, MW3M, MW3N, MW4D, MW4H, MW4L, MW4P, MW7D, MW7H, MW7L, MW7P, MX2C, MX2D, MW1K7, MW1K8, MW1K9, MW7F3, MW7F6, MW7F9, MW7N1, MW7N2, MW7N3, MW7O1, MW7O2, MW7O3, MW7N6, MW7O4, MW7O5, MW7O6, MW7O9, MX1D1, MX1D2, MX1D3, MX2A1, MX2A2, MX2A3, MX2B1, MX2B2, MX2B3, MX1D6, MX2A4, MX2A5, MX2A6, MX2B4, MX2B5, MX2B6, MX2B8, MX2B9, MX2G1, MX2G2, MX2G3, MX2H1, MX2H2, MX2H3, MX2H4, MX2H5, MX2H6, MW3B1, MW3B4, MW3B7, MW3F1, MW3F4, MW2G8, MW2G9, MW3F7, MW2K2, MW2K3, MW3J1, MW2K5, MW2K6, MW3J4, MW3J5, MW3J6, MW1L7, MW1L8, MW1L9, MW2I7, MW2I8, MW2I9, MW2J7, MW2J8, MW2J9, MW2K7, MW2K8, MW2K9, MW3J7, MW3J8, MW3J9, MW3O4, MW3O5, MW3O6, MW3P4, MW3P5, MW3P6, NW1M4, NW1M5, MW3O7, MW3O8, MW3O9, MW3P7, MW3P8, MW3P9, NW1M7, NW1M8
Southern New South Wales/Riverina (Albury)	KW6, LW2, LW4, LW5, LW6, KW5A, KW5B, KW5C, KW5D, KW5G, KW5H, KW5K, KW5L, KW5P, KW9A, KW9B, KW9C, KW9D, KW9G, KW9H, LV9M, LW3A, LW3B, LW3E, LW3F, LW3G, LW3I, LW3J, LW3K, LW3L, LW3M, LW3N, LW3O, LW3P, LW7A, LW7B, LW7C, LW7D, LW7E, LW7F, LW7G, LW7H, LW7L, LW8A, LW8B, LW8C, LW8D, LW8E, LW8F, LW8G, LW8H, LW8I, LW8J, LW8K, LW8L, LW8N, LW8O, LW8P, LW9A, LW9B, LW9C, LW9D, LW9E, LW9F, LW9G, LW9H, LW9I, LW9J, LW9K, LW9L, LW9M, MW1M, MW1N, MW4A, MW4B, MW4E, MW4F, MW4I, MW4J, MW4M, MW4N, MW7A, MW7B, MW7E, MW7I, KW5E1, KW5E2, KW5E3, KW5F1, KW5F2, KW5F3, KW5E4, KW5E5, KW5E6, KW5F4, KW5F5, KW5F6, KW5F8, KW5F9, KW5J2, KW5J3, KW5J5, KW5J6, KW5J8, KW5J9, KW8D8, KW8D9, KW9F2, KW9F3, KW9F5, KW9F6, KW9F8, KW9F9, KW9L1, KW9L2, KW9L3, LW7I1, LW7I2, LW7I3, LW7J1, LW7J2, LW7J3, LW7K1, LW7K2, LW7K3, KW9L4, KW9L5, KW9L6, LW7I4, LW7I5, LW7I6, LW7J4, LW7J5, LW7J6, LW7K4, LW7K5, LW7K6, LW7K9, LW7O3, LW7P1, LW7P2, LW7P3, LW8M1, LW7O6, LW7P4, LW7P5, LW7P6, LW8M4, KW5O2, KW5O3, KW5O5, KW5O6, KW5O8, KW5O9, KW8D2, KW8D3, KW8D5, KW8D6, LV9I1, LV9I2, LV9I4, LV9I5, LV9I7, LV9I8, LV9N1, LV9N4, LV9N7, LV9N8, LV9N9, LW3C4, LW3C5, LW3C7, LW3C8, LW3H1, LW3H4, LW3H7, LW3H8, LW3H9, MW1I1, MW1I2, MW1I4, MW1I5, MW1I6, MW1J4, MW1I7, MW1I8, MW1I9, MW1J7, MW1J8, MW1J9, MW7F1, MW7F2, MW7F4, MW7F5, MW7F7, MW7F8, LW8M2, LW8M3, LW9N1, LW9N2, LW9N3, LW9O1, LW9O2, LW9O3, LW8M5, LW8M6, LW8M9, LX2A3, LX2B1, LX2B2, LX2B3, LX2C1, LX2C2, LX2C3

Geographic areas	HCIS identifiers
Regional Victoria	JW6, JW9, JX3, JX6, KW4, KW7, KX1, KX2, KX4, KX5, KX8, KX9, LX3, LX5, LX6, LX7, LX8, LX9, MX4, MX7, KW5I, KW5M, KW5N, KW8A, KW8B, KW8E, KW8F, KW8I, KW8J, KW8M, KW8N, KX6M, KX6N, KX6O, KX6P, LX4M, LX4N, LX4O, LX4P, KW8C, KW8G, KW8H, KW8K, KW8L, KW8O, KW8P, KW9E, KW9I, KW9J, KW9K, KW9M, KW9N, KW9O, KW9P, KX3A, KX3B, KX3C, KX3D, KX3E, KX3I, LW7M, LW7N, LW9P, LX1A, LX1B, LX1C, LX1D, LX1F, LX1G, LX1H, LX1L, LX1P, LX2D, LX2E, LX2F, LX2G, LX2H, LX2I, LX2J, LX2K, LX2L, LX2M, LX2N, LX2O, LX2P, LX4D, LX4G, LX4H, LX4K, LX4L, MW7M, MX1A, MX1B, MX1C, MX1E, MX1F, MX1G, MX1I, MX1J, MX1K, MX1M, MX1N, MX1O, MX1H, MX1L, MX1P, MX2E, MX2F, MX2I, MX2J, MX2K, MX2L, MX2M, MX2N, MX2O, MX2P, KW5E7, KW5E8, KW5E9, KW5F7, KW5J1, KW5J4, KW5J7, KW8D7, KW9F1, KW9F4, KW9F7, KW9L7, KW9L8, KW9L9, LW7I7, LW7I8, LW7I9, LW7J7, LW7J8, LW7J9, LW7K7, LW7K8, LW7O1, LW7O2, LW7O4, LW7O5, LW7O7, LW7O8, LW7O9, LW7P7, LW7P8, LW7P9, LW8M7, LX2A1, LX2A4, LX2A7, KX3F1, KX3F2, KX3F3, KX3G1, KX3G2, KX3G3, KX3H1, KX3H2, KX3H3, LX1E1, LX1E2, LX1E3, KX3F4, KX3F5, KX3F6, KX3G4, KX3G5, KX3G6, LX1E5, LX1E6, LX1J2, LX1J3, LX1K1, LX1K2, LX1K3, LX1K5, LX1K6, LX1K8, LX1K9, KX3M1, KX3M2, KX3M3, KX3M4, KX3M5, KX3M7, KX6A1, KX6A4, KX6A7, KX6E1, LX4F3, KX6E4, LX4F6, KX6E7, LX4F9, KX6I1, LX4J3, KX6I4, LX4J6, KX6I7, LX4J9, KW5O1, KW5O4, KW5O7, KW8D1, KW8D4, LW9N4, LW9N5, LW9N6, LW9O4, LW9O5, LW9O6, MW7N4, MW7N5, LW8M8, LW9N7, LW9N8, LW9N9, LW9O7, LW9O8, LW9O9, MW7N7, MW7N8, MW7N9, MW7O7, MW7O8, LX2A2, LX2A5, LX2A6, LX2B4, LX2B5, LX2B6, LX2C4, LX2C5, LX2C6, LX2A8, LX2A9, LX2B7, LX2B8, LX2B9, LX2C7, LX2C8, LX2C9, MX1D4, MX1D5, MX1D7, MX1D8, MX1D9, MX2A7, MX2A8, MX2A9, MX2B7, MX2G4, MX2G5, MX2G6, MX2G7, MX2G8, MX2G9, MX2H7, MX2H8, MX2H9
Tasmania	KY2, KY3, KY6, LY1, LY2, LY3, LY4, LY5, LY6, LY7, LY8, LY9, LZ1, LZ2, LZ3, MY1, MY4, MY7, MZ1
Regional South Australia	GV1, GV2, GV3, GV6, HV1, HV2, HV4, HV5, HV6, HV8, HV9, HW3, HW6, IV4, IV5, IV6, IV7, IV8, IV9, IW1, IW2, IW4, IW5, IW7, IW8, IW9, JV4, JV5, JV7, JV8, JW2, JW4, JW5, JW7, JW8, JX1, JX2, JX5, IW3A, IW3B, IW3C, IW3D, IW6I, IW6J, IW6K, IW6L, IW6M, IW6N, IW6O, IW6P, JW1A, JW1B, JW1C, JW1D, JW1F, JW1G, JW1H, JW1J, JW1K, JW1L, JW1N, JW1O, JW1P, IW3E1, IW3E2, IW3E3, IW3E4, IW3E7, IW3I1, IW3I4, IW3I7, IW3M1, IW3M4, IW3M7, IW6A1, IW6A4, IW6A7, IW6E1, IW6E4, IW6E7, IW3F1, IW3F2, IW3F3, IW3G1, IW3G2, IW3G3, IW3H1, IW3H2, IW3H3, JW1E1, JW1E2, JW1E3, JW1E5, JW1E6, JW1E8, JW1E9, JW1I2, JW1I3, JW1I5, JW1I6, JW1I8, JW1I9, JW1M2, JW1M3, JW1M5, JW1M6, JW1M7, JW1M8, JW1M9
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,

Geographic areas	HCIS identifiers
	BV5M8, BV5M9, BV5N7, BV5N8, BV5N9
Adelaide	IW3J, IW3K, IW3L, IW3N, IW3O, IW3P, IW6B, IW6C, IW6D, IW6F, IW6G, IW6H, IW3E5, IW3E6, IW3E8, IW3E9, IW3F4, IW3F5, IW3F6, IW3F7, IW3F8, IW3F9, IW3G4, IW3G5, IW3G6, IW3G7, IW3G8, IW3G9, IW3H4, IW3H5, IW3H6, IW3H7, IW3H8, IW3H9, IW3I2, IW3I3, IW3I5, IW3I6, IW3I8, IW3I9, IW3M2, IW3M3, IW3M5, IW3M6, IW3M8, IW3M9, IW6A2, IW6A3, IW6A5, IW6A6, IW6A8, IW6A9, IW6E2, IW6E3, IW6E5, IW6E6, IW6E8, IW6E9, JW1E4, JW1E7, JW1I1, JW1I4, JW1I7, JW1M1, JW1M4

Indicative Pictorial Representation

Figure 1 shows the shaded areas which correspond with the lots offered by way of a pictorial representation. Refer to the HCIS identifiers specified in table 1 of this Schedule for the HCIS description of the lots.



Schedule 4 Emission limits outside of the area

(subsection 3.6 (3) and paragraph 4.6 (a))

1. Where a written agreement specifying the maximum permitted level of radio emission 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 purposes of paragraph 1 in force, the licensee must comply with paragraph 3.

3. (1) The licensee must ensure that the maximum permitted level of radio emission 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 sub-paragraph 3(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 5 Emission limits outside the band

(subsection 3.6 (4) and paragraph 4.6 (b))

1. Where a written agreement specifying the maximum permitted level of radio emission 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 purposes of paragraph 1 in force, the licensee must comply with paragraphs 3 to 9.

Non spurious emission limits

3. (1) Subject to sub-paragraph 3(2), the licensee must ensure that radiocommunications devices operated under the licence do not exceed the non spurious emission limits in paragraphs 4 and 5.

   (2) For any frequency where an emission limit described in paragraph 6 is less than an emission limit described in paragraphs 4 or 5, the emission limit in paragraph 6 applies instead of the emission limits in paragraphs 4 and 5.

4. 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 frequency 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

5. 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

6. 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

Spurious emission limits

7. The licensee must ensure that radiocommunications devices operated under the licence do not exceed the spurious emission limits in paragraphs 8 and 9.

8. 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.

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

9. 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.

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 6 Specified fixed licences

(paragraph 3.7 (2) (a) and subsection 3.7 (4))

Table 1

Licence Number	Link ID	A-End Site ID	A-End Location	B-End Site ID	B-End Location	State/Territory
80701	18997	14874	TAROOM	16462	COCKATOO	QLD
83532	20451	25218	CALCA	25240	STREAKY BAY	SA
85312	21377	28255	WAGIN	28267	WAGIN	WA
85408	21427	28255	WAGIN	150999	WAGIN	WA
85601	21531	29001	TARWONGA	29002	TARWONGA	WA
85631	21537	29002	TARWONGA	29003	WANERIE	WA
85896	21668	38462	HORDERN VALE	36661	YUULONG	VIC
513721	95903	31366	MAYA EAST	31357	WUBIN	WA
515985	97975	53923	UNICUP	53924	NOOBIJUP	WA
515997	97977	53924	NOOBIJUP	53925	BOKERUP	WA
1218418	222784	203352	CHURENING SPRING	29177	QUAIRADING	WA
1218421	222786	29190	BAANDEE DOODLAKINE	203352	CHURENING SPRING	WA
1305499	424324	12092	BEMM RIVER	12096	DONALD KNOB	VIC
1403997	130938	19314	DALBEG	19306	MILLAROO	QLD
1501799	135372	24999	KARKOO	24956	BROOKER	SA
1601796	137682	28354	CRANBROOK	600505	FRANKLAND	WA
1601797	137684	600505	FRANKLAND	54920	FRANKLAND	WA
1700141	140876	33781	KING ISLAND	38702	KING ISLAND	TAS
71979	14743	16325	REDVALE	16321	CHILTERN HILL	QLD
75531	16300	16451	MUNDUBBERA	16466	CSIRO NARAYEN	QLD
75533	16301	16466	CSIRO NARAYEN	38218	MONOGORILBY	QLD
77393	17304	14788	WYCHIE	14787	CHINCHILLA	QLD
78993	18128	7242	WATERCOURSE	7237	BUNNOR	NSW
79479	18375	29158	KELLERBERRIN	29190	BAANDEE DOODLAKINE	WA
80109	18692	16404	MAIDENWELL	16325	REDVALE	QLD
80403	18819	29111	MECKERING	29157	CUNDERDIN	WA
82294	19808	14768	DUNMORE	14751	DURABILLA	QLD
82308	19815	28235	NARROGIN	28964	NARROGIN	WA
82672	20010	38121	BOX RIDGE	6189	MUSWELLBROOK	NSW
82742	20037	28654	DUMBLEYUNG	28657	DUMBLEYUNG	WA
83566	20470	31357	WUBIN	31342	DALWALLINU	WA
84233	20839	28385	GNOWELLEN	28588	NALYERLUP	WA
84235	20840	28387	KOJANEERUP SOUTH	28588	NALYERLUP	WA

Licence Number	Link ID	A-End Site ID	A-End Location	B-End Site ID	B-End Location	State/Territory
84237	20841	28584	MAGITUP	28565	BORDEN	WA
84239	20842	28565	BORDEN	28588	NALYERLUP	WA
84569	21012	28787	PINGARING	28789	LAKE GRACE	WA
84880	21166	23996	BORRIKA	23525	KAROONDA	SA
84884	21168	23639	KEITH	23670	SHERWOOD	SA
85050	21253	7321	GARAH	7320	GARAH	NSW
85180	21306	28518	PINGRUP	28523	PINGRUP	WA
85419	21432	14787	CHINCHILLA	14803	GLENHOPE	QLD
85523	21481	24006	PATA	24135	BERRI	SA
85900	21670	23639	KEITH	23616	MONKOORA	SA
86169	21798	11347	MUDGEE	36251	MT BOCOBLE	NSW
86666	22035	38522	GOONDIWINDI	7384	MUNDINE	QLD
87183	22308	28693	NEWDEGATE	28609	LAKE GRACE	WA
87185	22309	38578	NEWDEGATE	28693	NEWDEGATE	WA
87319	22381	7238	GARAH	7321	GARAH	NSW
87378	22405	28892	CORRIGIN	28909	CORRIGIN	WA
87379	22406	28903	CORRIGIN	28909	CORRIGIN	WA
87380	22407	28903	CORRIGIN	28906	CORRIGIN	WA
87381	22408	28898	CORRIGIN	28906	CORRIGIN	WA
87703	22585	30382	BEACON	30381	CLEARY NORTH	WA
88118	22840	7363	SPRINGFIELD	7358	NORTH STAR	NSW
88242	22906	28344	TAMBELLUP	28315	KATANNING	WA
88509	23064	33622	WEST LAUNCESTON	33429	COXES HILL	TAS
88511	23065	33429	COXES HILL	33430	BLESSINGTON	TAS
88817	23299	14755	WINDSOR	14756	MOONIE	QLD
88858	23316	28201	WANDERING	28195	PUMPHREYS BRIDGE	WA
88949	23397	30509	GINGIN	30499	BINDOON	WA
89436	23642	38794	PORT AUGUSTA	25337	COMMISSARIAT POINT	SA
89442	23645	38796	MOORA	38797	MOORA	WA
89444	23646	38798	MILING	38796	MOORA	WA
90172	24000	38578	NEWDEGATE	28760	NEWDEGATE	WA
90174	24001	28693	NEWDEGATE	38578	NEWDEGATE	WA
90664	24211	6401	MURRURUNDI	6377	MURRURUNDI	NSW
90735	24241	14787	CHINCHILLA	38950	ESCHOL	QLD
90744	24245	38953	TUCKA TUCKA	7363	SPRINGFIELD	NSW
519024	99158	54117	WICKEPIN	54118	EAST PINGELLY	WA
519151	99178	54135	WHEATLEY	54136	NORTHCLIFFE	WA
519153	99179	54137	NORTHCLIFFE	54135	WHEATLEY	WA
520001	99399	28354	CRANBROOK	54257	CRANBROOK	WA
522796	100197	54655	MARCHAGEE	53833	COOROW	WA
524848	100709	28354	CRANBROOK	54822	CRANBROOK	WA

Licence Number	Link ID	A-End Site ID	A-End Location	B-End Site ID	B-End Location	State/Territory
525138	100733	38300	GNOWANGERUP	37682	TAMBELLUP	WA
1101153	207873	19865	MUTARNEE	19779	PALUMA	QLD
1135974	152663	131399	ORCHID VALLEY	29051	KULIKUP	WA
1147734	304228	18743	GLENDEN	18744	NEWLANDS MINE	QLD
1148109	300775	500838	WILLOWIE	24345	HAMMOND	SA
1148412	301086	21955	PALM COVE	21755	WANGETTI	QLD
1149636	308961	132627	CHINCHILLA	133072	KOGAN	QLD
1180559	303935	36308	WYAGA HOMESTEAD	38118	YARRILL CREEK	QLD
1180692	304538	28876	NARAMBEEN	29275	NAREMBEEN	WA
1401945	130358	16943	CALLIOPE	17083	NAGOORIN	QLD
1401978	130367	6887	ATHOLWOOD	400244	BRACKER FOREST	NSW
1403973	207699	19703	MT FOX	20530	INGHAM	QLD
1404462	131095	38118	YARRILL CREEK	13684	CALINGUNEE	QLD
1404540	207871	36857	RAVENSWOOD	19688	MT WRIGHT	QLD
1405125	131359	14902	TARA	400457	BENNETT	QLD
1408851	158958	401132	DARR CREEK	37146	DARR CREEK	QLD
1408852	158959	38950	ESCHOL	401132	DARR CREEK	QLD
1413742	189035	16321	CHILTERN HILL	16369	BOONDOOMA	QLD
1426919	252817	17500	TOMLIN	403875	WOWAN	QLD
1451397	262017	18744	NEWLANDS MINE	18743	GLENDEN	QLD
1464069	162613	17650	OGMORE	17649	LANGDALE HILL	QLD
1465196	183920	17511	WOORABINDA	460997	DAWSON RANGE	QLD
1465197	183921	460997	DAWSON RANGE	400372	BARALABA	QLD
1500788	134852	23589	CADGEE	23716	NARACOORTE	SA
1501570	135330	25131	KIMBA	500406	KOONGAWA	SA
1501800	135373	25100	LOCK	500405	BAYLEY PLAINS	SA
1501801	135374	24999	KARKOO	25085	KAPINNIE	SA
1501802	135375	24995	MT HOPE	25085	KAPINNIE	SA
1501803	135376	24995	MT HOPE	24998	COULTA	SA
1501837	135379	25131	KIMBA	500407	WADDIKEE	SA
1502460	135481	36912	WUDINNA	25169	MT DAMPER	SA
1504567	136043	25131	KIMBA	500837	BUCKLEBOO HALL	SA
1504569	136045	500836	TAPLAN	24135	BERRI	SA
1512313	208763	18732	VALKYRIE	18735	NEBO	QLD
1569087	338063	15680	LUNDAVRA	38118	YARRILL CREEK	QLD
1601478	137445	53833	COOROW	30521	COOROW	WA
1601496	137446	600362	BENCUBBIN	600349	KOORDA	WA
1601497	137442	600349	KOORDA	600357	KOORDA	WA
1601766	137626	600486	RF KULIKUP	29051	KULIKUP	WA
1601767	137627	600487	KULIKUP	600486	RF KULIKUP	WA
1601800	137584	29158	KELLERBERRIN	600456	KELLERBERRIN	WA

Licence Number	Link ID	A-End Site ID	A-End Location	B-End Site ID	B-End Location	State/Territory
1601801	137585	600456	KELLERBERRIN	600457	KELLERBERRIN	WA
1607431	139035	600901	YEALERING	54117	WICKEPIN	WA
1607897	139447	28354	CRANBROOK	54255	CRANBROOK	WA
1607898	139448	54255	CRANBROOK	600973	TAMBELLUP	WA
1700497	118046	33824	SCOTTSDALE	52949	KNOCKUP	TAS
1700497	118047	52949	KNOCKUP	33817	TARGA	TAS

Schedule 7 Sample spectrum licence – 1800 MHz band

(section 3.9)

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

COMMONWEALTH OF AUSTRALIA
AUSTRALIAN COMMUNICATIONS AND MEDIA AUTHORITY

Radiocommunications Act 1992

DRAFT SPECTRUM LICENCE FOR THE 1800 MHz 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.

Federal Register of Legislative Instruments F2015L01372

Definitions

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

Act means the *Radiocommunications Act 1992.*

area-adjacent licences mean 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 mean 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.

4. Unless the contrary intention appears, terms and expressions used in this licence have the meaning given to them by 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 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	1725	1730	1820	1825

Table 2: Description of the geographic areas of this licence

Geographic areas (column 1)	HCIS identifiers (column 2)
1	GO7C,GO7D,GO7G,GO7H,GO8A,GO8E,GO7K,GO7L,GO8I

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 5(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 limits in core conditions 6 and 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 $\mathbf{f_{offset}}$

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.

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.

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 area

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 15(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) 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. (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 radiocommunications transmitter has been exempted from the registration requirements under statutory condition 4 below, or
   (b) both:
      (i) the requirements of the ACMA under Part 3.5 of the Act relating to registration of the radiocommunications transmitter have been met; and
      (ii) the radiocommunications 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:
   (c) 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
   (d) 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

Interference management

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 International Telecommunication Union 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* should be read as if it referred to a spectrum licence.

Record keeping – radiocommunicatons 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 6 to the *Radiocommunications Spectrum Marketing Plan (1800 MHz Band) 2015* (a ***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 radicommunications device operated under an apparatus licence;

the licensee:

(d) must not operate any radiocommunications transmitters authorised under the spectrum licence in a manner that would be inconsistent with the protections afforded to those 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 the specified fixed services; and

(e) cannot claim protection from interference caused by such specified fixed services.

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 are cancelled at the end of the re-allocation period. The ACMA may, however, under subsection 153P(3) of the Act, issue apparatus licences that authorise the operation of the same services that were provided under the fixed licences after the end of the re-allocation period if it is satisfied that special circumstances of the particular case justify the issuing of the licence. If the ACMA does issue any such licences wholly or partly in the 1800 MHz band under subsection 153P(3), and those licences have the same parameters as the licences listed in table 1 of Schedule 6, the spectrum licensee will not be able to establish operation of, or use, any radiocommunications devices authorised by the spectrum licence in a manner that would cause interference to the operation of radiocommunications devices authorised by those fixed licences.

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.

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). Licensees (and accredited

persons) should follow the advisory guidelines before operating radiocommunications transmitters under this licence. 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.comlaw.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 this 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’”.