

Radiocommunications Licence Conditions (Area-Wide Licence) Amendment Determination 2020 (No. 1)

The Australian Communications and Media Authority makes the following determination under paragraph 107(1)(f) of the *Radiocommunications Act 1992*.

Dated: 22 October 2020

Creina Chapman [signed] Member

Fiona Cameron [signed]
Member/General Manager

Australian Communications and Media Authority

1 Name

This is the *Radiocommunications Licence Conditions (Area-Wide Licence) Amendment Determination 2020 (No. 1).*

2 Commencement

This instrument commences at the start of the day after the day it is registered on the Federal Register of Legislation.

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

3 Authority

This instrument is made under paragraph 107(1)(f) of the *Radiocommunications Act* 1992.

4 Amendments

The instrument that is specified in Schedule 1 is amended as set out in the applicable items in that Schedule.

Schedule 1—Amendments

Radiocommunications Licence Conditions (Area-Wide Licence) Determination 2020 (F2020L00070)

1 Subsection 4(1)

Repeal the subsection, substitute:

(1) This Determination sets out the conditions to which each area-wide licence is subject, and the additional conditions to which particular classes of area-wide licences are subject.

2 Section 5

Insert:

26 GHz band spectrum licence means a spectrum licence that authorises the operation of radiocommunications devices in any part of the frequency range 25.1 GHz–27.5 GHz.

fixed transmitter means a radiocommunications transmitter located at a fixed point on land or sea and not designed or intended for use while in motion.

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

Hierarchical Cell Identification Scheme or *HCIS* means the cell grouping hierarchy scheme used to describe geographic areas in the *Australian Spectrum Map Grid 2012* published by the ACMA.

Note: The Australian Spectrum Map Grid 2012 is available, free of charge, from the ACMA's website: www.acma.gov.au.

indoor transmitter means a radiocommunications transmitter that:

- (a) is in an enclosed space; and
- (b) has, at every point that is 2 metres from the outside surface of the enclosed space, a power flux density that:
 - (i) if the transmitter transmits within the frequency range 27 GHz–27.5 GHz and is located inside an inner-footprint area is less than or equal to -9 dBW/m² per occupied bandwidth;
 - (ii) if the transmitter transmits in the frequency range 27.5 GHz-30 GHz is less than or equal to -9 dBW/m² per occupied bandwidth;
 - (iii) in any other case is less than or equal to -7 dBW/m² per occupied bandwidth.

inner-footprint area means an area specified in Schedule 2.

ITU Radio Regulations means the Radio Regulations published by the International Telecommunication Union.

Note: The ITU Radio Regulations are available free of charge from the website of the International Telecommunication Union: www.itu.int.

ITU-R Resolution 242 (WRC-19) means the "ITU-R Resolution 242 Terrestrial component of international mobile telecommunications in the frequency band 24.25-27.5 GHz" published by the ITU, as existing on the date it was first published.

Note: ITU-R Resolution 242 (WRC-19) is available free of charge from the website of the International Telecommunication Union: www.itu.int.

3 Section 5, definition of licensee

Repeal the definition, substitute:

licensee:

- (a) in relation to an apparatus licence, means:
 - (i) the holder of the apparatus licence; or
 - (ii) a person authorised by the holder of the apparatus licence to operate a station under the licence;
- (b) in relation to a spectrum licence, means:
 - (i) the person specified in the licence as the licensee, whether the licence was originally issued to that person or subsequently assigned to them; or
 - (ii) a person authorised by the person specified in the licence as the licensee to operate a station under the licence.

4 Section 5

Insert:

low risk transmitter: see subclause 4(2) of Schedule 1.

managing interference includes, but is not limited to:

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

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

outer-footprint area means an area specified in Schedule 3.

RALI MS 46 means the Radiocommunications Assignment and Licensing Instruction No. MS 46 published by the ACMA.

Note: All Radiocommunications Assignment and Licensing Instructions made by the ACMA are available, free of charge, from the ACMA's website: www.acma.gov.au.

substantial interference means an interference level exceeding -93 dBm per 50 MHz for more than 5% of the time in any 1 hour period, measured at the input of the receiver.

total radiated power, in relation to a device, means the integral of the power transmitted in different directions over the entire radiation sphere. It is measured considering the combination of all radiating elements on an antenna panel or individual device.

unwanted emission, in relation to the operation of a radiocommunications transmitter authorised by an area-wide licence, means an emission outside the upper or lower frequency limits set out in the licence.

uplink-downlink configuration means an uplink-downlink configuration that is consistent with the uplink-downlink configuration set out in Appendix A of RALI MS 46

Note: All RALIs made by the ACMA are available, free of charge, from the ACMA's website: www.acma.gov.au.

5 Note 2 to section 5

Repeal the note, substitute:

Note 2: In accordance with section 64 of the *Australian Communications and Media Authority Act 2005*, other expressions in this Determination have the same meaning as in the *Radiocommunications (Interpretation) Determination 2015*, including:

- area-wide licence
- area-wide station
- communal site
- earth station
- EIRP
- harmful interference
- mobile station

6 After section 5

Insert:

5A References to other instruments

In this Determination, unless the contrary intention appears:

- (a) a reference to another legislative instrument is a reference to that other legislative instrument as in force from time to time; and
- (b) a reference to any other kind of instrument or writing is a reference to that other instrument or writing as in force or existing 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 and are accessible free of charge.

Note 3: See section 314A of the Act.

5B References to frequency ranges

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

7 Section 6

Repeal the section, substitute:

6 Conditions

For paragraph 107(1)(f) of the Act:

- (a) every area-wide licence is subject to the condition in section 7; and
- (b) every area-wide licence which authorises the operation of radiocommunications devices in any part of the frequency range 24.7 GHz–30 GHz is subject to the conditions specified in Schedule 1.

8 At the end of the instrument

At the end of the instrument, add:

Schedule 1 Conditions for radiocommunications devices authorised to operate in the frequency range 24.7 GHz–30 GHz

(paragraph 6(b))

1 Maximum total radiated power – transmitters other than earth stations

- (1) A licensee must not operate a radiocommunications transmitter at a total radiated power greater than 45 dBm/200 MHz if the transmitter:
 - (a) operates in the frequency range 24.7 GHz–27 GHz; or
 - (b) operates in the frequency range 27 GHz–27.5 GHz and is not located inside an inner-footprint area or an outer-footprint area.
- (2) A licensee must not operate a radiocommunications transmitter located inside an outer-footprint area in the frequency range 27 GHz–27.5 GHz at a total radiated power greater than 42 dBm/200 MHz.
- (3) A licensee must not operate a radiocommunications transmitter at a total radiated power greater than 30 dBm/200 MHz if it:
 - (a) operates in the frequency range 27 GHz–27.5 GHz and it is located inside an inner-footprint area; or
 - (b) operates in the frequency range 27.5 GHz–29.5 GHz.
- (4) Subclauses (1), (2) and (3) do not apply in relation to a radiocommunications transmitter that is an earth station.

2 Operation only at fixed locations

A licensee must not operate a radiocommunications transmitter in the frequency range 27.5 GHz–30 GHz while the transmitter is in motion (whether on land, on or in water, or in the air).

3 Operation in the frequency range 29.5 GHz to 30 GHz

The licensee must not operate a radiocommunications transmitter other than an earth station in the frequency range 29.5 GHz–30 GHz.

4 Recording devices in the Register

- (1) A licensee must not operate a radiocommunications transmitter under an area-wide licence (*the relevant licence*) unless:
 - (a) the following details in relation to the transmitter have been entered in the Register:
 - (i) the details about the transmitter set out in subsection 10(5) of the *Radiocommunications (Register of Radiocommunications Licences)*Determination 2017 (**Register Determination**); and
 - (ii) the details about the use of spectrum by the transmitter set out in subsection 10(4) of the Register Determination; and
 - (iii) the details about the antenna for the transmitter set out in subsection 10(6) of the Register Determination; and
 - (iv) the details about the site where the transmitter is located set out in subsection 10(7) of the Register Determination; and

(b) the transmitter complies with the details in relation to it that have been entered in the Register.

Note: Subclause (1) is a condition of the kind referred to in subsections 10(4A), (5A), (6A) and (7A) of the Register Determination. The Register Determination is available, free of charge, on the Federal Register of Legislation: www.legislation.gov.au.

- (2) Subclause (1) does not apply in relation to any of the following radiocommunications transmitters (each a *low risk transmitter*):
 - (a) a radiocommunications transmitter that operates with a maximum total radiated power that is less than or equal to 23 dBm per occupied bandwidth; or
 - (b) an indoor transmitter; or
 - (c) a fixed transmitter that:
 - (i) is not a base station; and
 - (ii) operates with a maximum total radiated power that is:
 - (A) greater than 23 dBm per occupied bandwidth; and
 - (B) less than or equal to 35 dBm per occupied bandwidth.
- (3) Subclause (1) does not require the entry in the Register of details in relation to a radiocommunications transmitter if the operation of the transmitter would not comply with a condition of the relevant licence (other than the condition in subclause (1)).

Note: A low risk transmitter must still comply with the total radiated power limits in the condition in clause 1, and with other applicable conditions in this Determination.

5 Compliance with RALI MS 46

A licensee must not operate a radiocommunications transmitter if its operation would be inconsistent with any requirement in RALI MS 46 in relation to one or more of the following matters:

- (a) coordination of a fixed transmitter with radiocommunications receivers included in the Register before the transmitter was first operated;
- (b) coordination of radiocommunications transmitters with other radiocommunications devices;
- (c) power flux density limits for a radiocommunications transmitter;
- (d) the permitted location of the device boundary for a radiocommunications transmitter in relation to the named areas in the *Radiocommunications (Spectrum Re-allocation 26 GHz Band) Declaration 2019*, as in force on the day it commenced;
- (e) interference with the Canberra Deep Space Communications Complex or the New Norcia Deep Space Ground Station;
- (f) the maximum number of radiocommunication transmitters authorised by an areawide licence within a particular area or within any area of a particular size.

Note 1: For paragraph (d), the 'device boundary' for a radiocommunications transmitter is a measurement of certain power levels at points surrounding the transmitter.

Note 2: All RALIs made by the ACMA are available, free of charge, from the ACMA's website: www.acma.gov.au.

Note 3: The *Radiocommunications (Spectrum Re-allocation – 26 GHz Band) Declaration 2019* is available, free of charge, from the Federal Register of Legislation: www.legislation.gov.au.

6 Synchronisation requirement

- (1) If:
 - (a) interference occurs between:
 - (i) a radiocommunications device (the *first device*), other than an earth station, operated under an area-wide licence (the *first licence*); and
 - (ii) one or more radiocommunications devices that are not earth stations (the *other devices*) operated under another area-wide licence or a 26 GHz spectrum licence (the *other licence*); and
 - (b) one or more of the other devices causes substantial interference to the first device, or the first device causes substantial interference to one or more of the other devices;
 - (c) either the licensee of the first licence or the licensee of the other licence wishes to resolve the interference; and
 - (d) no agreement between the licensee and each person operating one or more of the other devices can be reached on how to manage the interference;

then, by the end of the day specified in subclause (2), the licensee of the first licence is required to manage the interference by:

- (e) either:
 - (i) operating the first device with the uplink-downlink configuration; or
 - (ii) operating the first device using a sequence and duration of radio emissions that is consistent with those configurations (disregarding any time at which the device is not making a radio emission); and
- (f) synchronising the timing of the uplink-downlink configuration or other sequence of radio emissions of the first device with the timing of the uplink-downlink configuration or other sequence of radio emissions of each of the other devices (disregarding any device at a time at which the device is not making a radio emission).
- (2) For the purposes of subclause (1), the later of the following days is specified:
 - (a) the day occurring 14 days after the day the interference was first reported in writing to the licensee of the first licence; or
 - (b) if an alternative day is agreed with the licensee of the other licence that alternative day.

Note 1: The synchronisation requirement only applies when an interference issue occurs and where there is no other measure agreed by the licensees to resolve the interference. This means synchronisation can be done on a site/cell specific basis. During any period in which the licensee of an area-wide licence and another licensee are taking steps to resolve the interference issue or synchronise, the ACMA will generally give priority to the radiocommunications device registered first in time in any interference dispute, meaning that the radiocommunications device or devices registered later in time will generally be required to accept any interference or to cease causing interference during this time.

Note 2: This condition applies equally to all area-wide licences which authorise the operation of radiocommunications devices in any part of the frequency range 24.7 GHz–29.5 GHz. For example, if interference occurs between two radiocommunications devices operated under two area-wide licences, each licensee must comply with this condition.

7 Co-sited radiocommunications devices

If:

- (a) interference occurs between:
 - (i) a radiocommunications device (the *first device*) operated under an area-wide licence (the *first licence*); and
 - (ii) a radiocommunication device (the *other device*) operated under a spectrum licence or another apparatus licence (the *other licence*);

- when the measured separation between the phase centre of the antenna used with each device is less than 200 metres; and
- (b) that interference is not the result of operation of a radiocommunications device in a manner that does not comply with the conditions of the relevant licence; and
- (c) either the licensee of the first licence or the licensee of the other licence wishes to resolve the interference;

the licensee of the first licence must manage the interference with:

- (e) the licensee of the other licence; or
- (f) if a site manager is responsible for managing interference at the location of the other device that site manager.

Note: This condition applies equally to all area-wide licences which authorise the operation of radiocommunications devices in any part of the frequency range 24.7 GHz–30 GHz. For example, if interference occurs between two radiocommunications devices operated under two area-wide licences, each licensee must comply with this condition.

8 Responsibility to manage interference

The licensee of an area-wide licence must manage interference between:

- (a) radiocommunications devices operated under the licence; and
- (b) radiocommunications devices operated under any other licence held by the licensee, or operated by the licensee under a class licence.

9 Harmful interference

The licensee of an area-wide licence must ensure that the operation of a low risk transmitter does not cause harmful interference to a radiocommunications device operated under a spectrum licence or an apparatus licence held by any other person.

10 Co-existence with space receive stations

Compliance with ITU-R Resolution 242 (WRC-19)

(1) The licensee of an area-wide licence must operate a radiocommunications device under the licence in accordance with the provisions detailed in *resolves* 2.1 and 2.2 of ITU-R Resolution 242 (WRC-19), where the operation of the device is in the frequency range 24.7 GHz–27.5 GHz.

Note 1: ITU-R Resolution 242 (WRC-19) is available free of charge from the website of the International Telecommunication Union: www.itu.int.

Note 2: In *resolves* 2.2 of ITU-R Resolution 242 (WRC-19), the phrase 'the direction of maximum radiation of any antenna', in relation to separation from the geostationary-satellite orbit, is taken to mean the maximum radiation from an antenna when the antenna is being electronically steered.

(2) Subclause (1) does not apply in relation to a radiocommunications transmitter that is an earth station.

Operation in the 24.7 GHz to 27 GHz frequency range

- (3) The licensee of an area-wide licence must not operate a radiocommunications transmitter if:
 - (a) the transmitter is connected to an antenna that has its highest gain directed above the horizontal plane when the antenna is not being electrically steered; or
 - (b) the transmitter directs its antenna beam via electrical steering to an elevation angle above the horizontal plane; or

- (c) the transmitter operates with a radiated maximum true mean power, measured over the specified bandwidth and in the direction of the geostationary orbit, exceeding the limits set out in Table 1, where *el* is the angle above the horizontal plane at which the radiated maximum true mean power limit in Table 1 applies.
- (4) Subclause (3) only applies in relation to a radiocommunications transmitter that is:
 - (a) not an indoor transmitter;
 - (b) not an earth station;
 - (c) operating within the frequency range 24.7 GHz–27 GHz; and
 - (d) operating with a total radiated power greater than 40 dBm/200 MHz.

Table 1: Radiated maximum true mean power for specified elevation angles above the horizontal plane – 24.7 GHz to 27 GHz

Column 1	Column 2	Column 3
Elevation angle above the horizontal plane (<i>el</i>)	Radiated maximum true mean power towards the geostationary orbit (dBm EIRP)	Specified bandwidth
5 degrees $\leq el < 90$ degrees	60	200 MHz

Operation in the 27 GHz to 27.5 GHz frequency range outside both inner-footprint and outer-footprint areas

- (5) The licensee of an area-wide licence must not operate a radiocommunications transmitter if:
 - (a) the transmitter is connected to an antenna that has its highest gain directed above the horizontal plane when the antenna is not being electrically steered; or
 - (b) the transmitter directs its antenna beam via electrical steering to an elevation angle above the horizontal plane; or
 - (c) the transmitter operates with a radiated maximum true mean power, measured over the specified bandwidth and in the direction of the geostationary orbit, exceeding the limits set out in Table 2, where *el* is the angle above the horizontal plane at which the radiated maximum true mean power limit in Table 2 applies.
- (6) Subclause (5) only applies in relation to a radiocommunications transmitter that is:
 - (a) not an indoor transmitter;
 - (b) not an earth station;
 - (c) operating within the frequency range 27 GHz–27.5 GHz; and
 - (d) not located inside an inner-footprint area or outer-footprint area; and
 - (e) operating with a total radiated power greater than 40 dBm/200 MHz.

Table 2: Radiated maximum true mean power for specified elevation angles above the horizontal plane – 27 GHz to 27.5 GHz, outside both inner-footprint areas and outer-footprint areas

Column 1	Column 2	Column 3
Elevation angle above the horizontal plane (<i>el</i>)	Radiated maximum true mean power towards the geostationary orbit (dBm EIRP)	Specified bandwidth
5 degrees $\leq el < 15$ degrees	60	200 MHz
15 degrees $\leq el < 25$ degrees	49	200 MHz
25 degrees ≤ el < 40 degrees	49 - 0.43(el - 25)	200 MHz
40 degrees $\leq el \leq 90$ degrees	42.5	200 MHz

Operation in the 27 GHz to 27.5 GHz frequency range inside outer-footprint areas

- (7) The licensee of an area-wide licence must not operate a radiocommunications transmitter if:
 - (a) the transmitter is connected to an antenna that has its highest gain directed above the horizontal plane when the antenna is not being electrically steered; or
 - (b) the transmitter directs its antenna beam via electrical steering to an elevation angle above the horizontal plane; or
 - (c) the transmitter operates with a radiated maximum true mean power, measured over the specified bandwidth and in the direction of the geostationary orbit, exceeding the limits set out in Table 3, where *el* is the angle above the horizontal plane at which the radiated maximum true mean power limit in Table 3 applies.
- (8) Subclause (7) only applies in relation to a radiocommunications transmitter that is:
 - (a) not an indoor transmitter;
 - (b) not an earth station;
 - (c) operating within the frequency range 27 GHz–27.5 GHz;
 - (d) located inside an outer-footprint area; and
 - (e) operating with a total radiated power greater than 37 dBm/200 MHz.

Table 3: Radiated maximum true mean power for specified elevation angles above the horizontal plane – 27 GHz to 27.5 GHz, inside an outer-footprint area

Column 1 Elevation angle above the horizontal plane (el)	Column 2 Radiated maximum true mean power towards the geostationary orbit	Column 3 Specified bandwidth
15 degrees $\leq el < 25$ degrees	(dBm EIRP) 39	200 MHz
25 degrees $\leq el < 40$ degrees	39 - 0.43(el - 25)	200 MHz
$40 \text{ degrees} \le el \le 90 \text{ degrees}$	32.5	200 MHz

Operation in the 27 GHz to 27.5 GHz frequency range inside inner-footprint areas

- (9) The licensee of an area-wide licence must not operate a radiocommunications transmitter if:
 - (a) the transmitter is connected to an antenna that has its highest gain directed above the horizontal plane when the antenna is not being electrically steered; or
 - (b) the transmitter directs its antenna beam via electrical steering to an elevation angle above the horizontal plane; or
 - (c) the transmitter operates with a radiated maximum true mean power, measured over the specified bandwidth and in the direction of the geostationary orbit, exceeding the limits set out in Table 4, where *el* is the angle above the horizontal plane at which the radiated maximum true mean power limit in Table 4 applies.
- (10) Subclause (9) only applies in relation to a radiocommunications transmitter that is:
 - (a) not an indoor transmitter:
 - (b) not an earth station;
 - (c) operating within the frequency range 27 GHz–27.5 GHz;
 - (d) located inside an inner-footprint area; and
 - (e) operating with a total radiated power greater than 25 dBm/200 MHz.

Table 4: Radiated maximum true mean power for specified elevation angles above the horizontal plane – 27 GHz to 27.5 GHz inside an inner-footprint area

Column 1	Column 2	Column 3
Elevation angle above the horizontal plane (<i>el</i>)	Radiated maximum true mean power towards the geostationary orbit (dBm EIRP)	Specified bandwidth
15 degrees $\leq el < 25$ degrees	34	200 MHz
25 degrees $\leq el < 40$ degrees	34 - 0.43(el - 25)	200 MHz
$40 \text{ degrees} \le el \le 90 \text{ degrees}$	27.5	200 MHz

- (11) The licensee of an area-wide licence must not operate a radiocommunications transmitter if:
 - (a) the transmitter is connected to an antenna that has its highest gain directed above the horizontal plane when the antenna is not being electrically steered; or
 - (b) the transmitter directs its antenna beam via electrical steering to an elevation angle greater than 5 degrees above the horizontal plane for more than 5 percent (whether or not consecutive) of any 24 hour period.
- (12) Subclause (11) only applies in relation to a radiocommunications transmitter that is:
 - (a) a base station;
 - (b) not an indoor transmitter;
 - (c) not an earth station;
 - (d) operating within the frequency range 27 GHz–27.5 GHz;
 - (e) located inside an inner-footprint area; and
 - (f) operating with a total radiated power less than or equal to 25 dBm/200 MHz.

Operation in the frequency range 27.5 GHz to 29.5 GHz

- (13) The licensee of an area-wide licence must not operate a radiocommunications transmitter if:
 - (a) the transmitter is connected to an antenna that has its highest gain directed above the horizontal plane when the antenna is not being electrically steered; or
 - (b) the transmitter directs its antenna beam via electrical steering to an elevation angle above the horizontal plane; or
 - (c) the transmitter operates with a radiated maximum true mean power, measured over the specified bandwidth, exceeding the limits set out in Table 5, where *el* is the angle above the horizontal plane at which the radiated maximum true mean power limit in Table 5 applies.
- (14) Subclause (13) only applies in relation to a radiocommunications transmitter that is:
 - (a) not an indoor transmitter;
 - (b) not an earth station;
 - (c) operating in the frequency range 27.5 GHz–29.5 GHz; and
 - (d) operating with a total radiated power greater than 25 dBm/200 MHz.

Table 5: Radiated maximum true mean power for specified elevation angles above the horizontal plane – 27.5 GHz to 29.5 GHz

Column 1	Column 2	Column 3
Elevation angle above the horizontal plane (el)	Radiated maximum true mean power (dBm EIRP)	Specified bandwidth
5 degrees $\leq el < 15$ degrees	47 - 1.3(el - 5)	200 MHz
15 degrees $\leq el < 25$ degrees	34	200 MHz
25 degrees $\leq el < 40$ degrees	34 - 0.43(el - 25)	200 MHz
$40 \text{ degrees} \le el \le 90 \text{ degrees}$	27.5	200 MHz

- (15) The licensee of an area-wide licence must not operate a radiocommunications transmitter if:
 - (a) the transmitter is connected to an antenna that has its highest gain directed above the horizontal plane when the antenna is not being electrically steered; or
 - (b) the transmitter directs its antenna beam via electrical steering to an elevation angle above the horizontal plane.
- (16) Subclause (15) only applies in relation to a radiocommunications transmitter that is:
 - (a) a base station;
 - (b) not an indoor transmitter;
 - (c) not an earth station;
 - (d) operating within the frequency range 27.5 GHz-29.5 GHz; and
 - (e) operating with a total radiated power less than or equal to 25 dBm/200 MHz.

Operation of fixed transmitters which are not base stations

- (17) The licensee of an area-wide licence must not operate a radiocommunications transmitter if the transmitter directs its antenna beam to within:
 - (a) if the transmitter is connected to an antenna with a gain that is greater than or equal to 34.7 dBi 1.5 degrees of the geostationary orbit; or
 - (b) if the transmitter is connected to an antenna with a gain that is less than 34.7 dBi 25 degrees of the geostationary orbit.
- (18) Subclause (17) only applies in relation to a radiocommunications transmitter that is:
 - (a) not a base station;
 - (b) not an indoor transmitter;
 - (c) not an earth station;
 - (d) a fixed transmitter;
 - (e) directing its antenna beam to an elevation angle greater than or equal to 11 degrees above the horizontal plane; and
 - (f) either:
 - (i) both operating within the frequency range 27 GHz–27.5 GHz and located inside an inner-footprint area; or
 - (ii) operating within the frequency range 27.5 GHz–29.5 GHz.

11 Co-existence with earth receive stations

(1) The licensee of an area-wide licence must not operate a radiocommunications transmitter within the frequency range 25.5 GHz–27 GHz if the transmitter is located in any of the following HCIS identifiers: BU7K, BU7L, BU7O, BU7P, BU8E, BU8F, BU8G, BU8I, BU8J, BU8K, BU8L, BU8M, BU8N, BU8O, BU8P, BV2A, BV2B, MW4H1, MW4H2, MW4H4, MW4H5, MW4H6, MW4H7, MW4H8, MW4D7, MW4L2.

Note: The areas with HCIS identifiers that begin with B are located north and north-east of Perth. The areas with HCIS identifiers that begin with M are located in the Australian Capital Territory, and in New South Wales to the west of the Australian Capital Territory.

- (2) The licensee of an area-wide licence must not operate a fixed transmitter (the *relevant transmitter*) that:
 - (a) is not a base station; and
 - (b) is not an indoor transmitter; and
 - (c) operates with a maximum total radiated power that is:
 - (i) greater than 23 dBm per occupied bandwidth; and
 - (ii) less than or equal to 35 dBm per occupied bandwidth;

unless the relevant transmitter is coordinated, in the manner set out in RALI MS 46, with any earth receive station that was in operation before the licensee first operated the relevant transmitter.

Note: All RALIs made by the ACMA are available, free of charge, from the ACMA's website: www.acma.gov.au.

12 Co-existence with body scanners

The licensee of an area-wide licence must not operate a radiocommunications transmitter if that operation causes harmful interference to a radiocommunications device operated under the *Radiocommunications* (*Body Scanning – Aviation Security*) Class Licence 2018.

Note: The *Radiocommunications (Body Scanning – Aviation Security) Class Licence 2018* is available, free of charge, from the Federal Register of Legislation: www.legislation.gov.au.

13 Use of earth stations – consistency with spectrum plan

- (1) The licensee of an area-wide licence must not operate an earth station in the frequency range 25.25 GHz–27 GHz.
- (2) Subsection (1) does not apply to the operation of an earth station for a standard frequency and time signal-satellite service.
- (3) For the purposes of subclause (2), *standard frequency and time signal-satellite service* has the meaning given by the spectrum plan.

Note: The spectrum plan is available, free of charge, from the Federal Register of Legislation: www.legislation.gov.au.

14 Record keeping – high-powered outdoor user equipment stations

- (1) If the licensee of an area-wide licence operates a fixed transmitter that:
 - (a) is not a base station;
 - (b) is not an indoor transmitter; and
 - (c) operates with a maximum total radiated power that is:
 - (i) greater than 23 dBm, per occupied bandwidth; and
 - (ii) less than or equal to 35 dBm per occupied bandwidth;

the licensee must:

- (d) keep a record of the following information:
 - (i) the transmitter's geographic location;
 - (ii) the transmitter's emission centre frequency;
 - (iii) the transmitter's emission designator;
 - (iv) details of the transmitter's antenna, including its manufacturer, model, type, gain, polarisation, azimuth, elevation angle above the horizontal plane, and height above ground;
 - (v) the transmitter's maximum true mean power; and
 - (vi) the transmitter's maximum EIRP.
- (2) If the ACMA or an inspector requests a copy of a record kept under subclause (1), the licensee must comply with the request as soon as practicable.
- (3) Nothing in this clause limits, or is limited by, the condition in section 7.

15 Unwanted emissions

Unwanted emission limits – application

- (1) The licensee of an area-wide licence must not operate a radiocommunications transmitter that is a base station if its unwanted emissions exceed the limits in subclauses (7), (8), (9) or (10).
- (2) The licensee of an area-wide licence must not operate a radiocommunications transmitter that is an earth station if its unwanted emissions exceed the limits in subclause (11).
- (3) Subclause (2) does not apply in relation to unwanted emissions in frequencies greater than 27.5 GHz caused by an earth station located outside the named areas in the *Radiocommunications (Spectrum Re-allocation 26 GHz Band) Declaration 2019*, as in force on the day it commenced.
- (4) The licensee of an area-wide licence must not operate a radiocommunications transmitter that is an earth station if it exceeds the requirements for unwanted emissions provided in Appendix 3 of the ITU Radio Regulations.

Note: The ITU Radio Regulations are available free of charge from the website of the International Telecommunication Union: www.itu.int.

- (5) Subclause (4) does not apply in relation to:
 - (a) unwanted emissions in the frequency range 24.7 GHz–28.1 GHz caused by an earth station located inside any of the named areas in the *Radiocommunications* (Spectrum Re-allocation 26 GHz Band) Declaration 2019, as in force on the day it commenced; and
 - (b) unwanted emissions in the frequency range 24.7 GHz–27.5 GHz caused by an earth station located outside the named areas in the *Radiocommunications (Spectrum Reallocation 26 GHz Band) Declaration 2019*, as in force on the day it commenced.

Note: The *Radiocommunications (Spectrum Re-allocation – 26 GHz Band) Declaration 2019* is available, free of charge, from the Federal Register of Legislation: www.legislation.gov.au.

(6) The licensee of an area-wide licence must not operate a radiocommunications transmitter that is neither a base station nor an earth station if its unwanted emissions exceed the limits in subclauses (12), (13), (14) or (15).

Radiocommunications transmitters that are base stations – outside 23.6 GHz to 24 GHz

- (7) The unwanted emission limit in Table 6, measured over the specified bandwidth, applies at frequencies:
 - (a) outside the upper or lower frequency limits set out in the licence;

- (b) offset from the upper and lower frequency limits set out in the licence; and
- (c) outside the frequency range 23.6 GHz-24 GHz;

where

 $BW_{occupied}$ means the occupied bandwidth of the radiocommunications transmitter;

 f_{offset} means the frequency offset from the upper or lower frequency limit set out in the licence. The closest -3dB point of the specified bandwidth to the upper and lower frequency limits set out in the licence is placed at f_{offset} .

Note: This subclause applies to base stations – see subclause (1).

Table 6: Base station unwanted emission limit – outside the frequency range 23.6 GHz to 24 GHz, with frequency offset less than or equal to $0.1 \times BW_{occupied}$

Column 1	Column 2	Column 3
Frequency range (foffset)	Total radiated power (dBm)	Specified bandwidth
$0 \text{ MHz} \le f_{offset} \le 0.1 \text{ x BW}_{occupied}$	-5	1 MHz

- (8) The unwanted emission limits in Table 7, measured over the specified bandwidth for the relevant frequency range, apply at frequencies:
 - (a) greater than $0.1 \times BW_{occupied}$ from the upper or lower frequency limits set out in the licence:
 - (b) outside the frequency range 23.6 GHz-24 GHz;

where $BW_{occupied}$ means the occupied bandwidth of the radiocommunications transmitter.

Note: This subclause applies to base stations – see subclause (1).

Table 7: Base station unwanted emission limits – outside the frequency range 23.6 GHz to 24 GHz, with frequency offset greater than $0.1~x~BW_{occupied}$

Column 1	Column 2	Column 3
Frequency range (f)	Total radiated power (dBm)	Specified bandwidth
$30 \text{ MHz} \le f < 1 \text{ GHz}$	-13	100 kHz
$1 \text{ GHz} \leq f \leq 59 \text{ GHz}$	-13	1 MHz

Radiocommunications transmitters that are base stations – inside 23.6 GHz to 24 GHz

(9) The unwanted emission limits in Table 8, measured over the specified bandwidth, apply at frequencies within the frequency range 23.6 GHz–24 GHz for radiocommunications transmitters first operated under an area-wide licence before 1 September 2027.

Note: This subclause applies to base stations – see subclause (1).

Table 8: Base station unwanted emission limits – in the frequency range 23.6 GHz to 24 GHz, first operated before 1 September 2027

Column 1 Transmitter operating frequency range (f)	Column 2 Total radiated power (dBm)	Column 3 Specified bandwidth
$24.7 \text{ GHz} \le f < 27.5 \text{ GHz}$	-3	200 MHz
$27.5 \text{ GHz} \le f \le 29.5 \text{ GHz}$	-13	1 MHz

(10) The unwanted emission limits in Table 9, measured over the specified bandwidth, apply at frequencies within the frequency range 23.6 GHz–24 GHz for radiocommunications transmitters first operated under an area-wide licence on or after 1 September 2027.

Note: This subclause applies to base stations – see subclause (1).

Table 9: Base station unwanted emission limits – in the frequency range 23.6 GHz to 24 GHz, first operated on or after 1 September 2027

Column 1 Transmitter operating frequency range (f)	Column 2 Total radiated power (dBm)	Column 3 Specified bandwidth
24.7 GHz ≤ <i>f</i> < 27.5 GHz	-9	200 MHz
27.5 GHz ≤ f ≤ 29.5 GHz	-13	1 MHz

Radiocommunications transmitters that are earth stations

- (11) The unwanted emission limit in Table 10, measured over the specified bandwidth, applies at frequencies:
 - (a) outside the upper or lower frequency limits set out in the licence;
 - (b) offset from the upper and lower frequency limits set out in the licence; and
 - (c) inside the frequency range 24.7 GHz-28.1 GHz;

where:

 $BW_{occupied}$ means the occupied bandwidth of the radiocommunications transmitter;

 f_{offset} means the frequency offset from the upper or lower frequency limit set out in the licence. The closest -3dB point of the specified bandwidth to the upper and lower frequency limits set out in the licence is placed at f_{offset} .

Note: This subclause applies to some earth stations – see subclauses (2) and (3).

Table 10: Earth station unwanted emission limit – inside the frequency range 24.7 GHz to 28.1 GHz

Column 1	Column 2	Column 3
Frequency range (f _{offset})	Radiated maximum true mean power in the horizontal plane (dBm EIRP)	Specified bandwidth
$0 \text{ MHz} \le f_{offset} \le 0.1 \text{ x BW}_{occupied}$	18	1 MHz
$f_{offset} > 0.1 \text{ x BW}_{occupied}$	10	1 MHz

Radiocommunications transmitters that are not base stations or earth stations

- (12) The unwanted emission limit in Table 11, measured over the specified bandwidth, applies at frequencies:
 - (a) outside the upper or lower frequency limits set out in the licence; and
 - (b) offset from the upper and lower frequency limits set out in the licence;

where f_{offset} means the frequency offset from the upper or lower frequency limit set out in the licence. The closest -3dB point of the specified bandwidth to the upper and lower frequency limits set out in the licence is placed at f_{offset} .

Note: This subclause does not apply to base stations or earth stations – see subclause (6).

Table 11: Unwanted emission limit for radiocommunications transmitters that are not base stations or earth stations – frequencies less than or equal to an offset of 40 MHz from the upper or lower frequency limits for the licence

Column 1	Column 2	Column 3
Frequency range (f _{offset})	Total radiated power (dBm)	Specified bandwidth
$0 \text{ MHz} \leq f_{offset} \leq 40 \text{ MHz}$	-5	1 MHz

- (13) The unwanted emission limits in Table 12, measured over the specified bandwidth for the relevant frequency range, apply at frequencies:
 - (a) greater than 40 MHz offset from the upper or lower frequency limits set out in the licence:
 - (b) outside the frequency range 23.6 GHz-24 GHz.

Note: This subclause does not apply to base stations or earth stations – see subclause (6).

Table 12: Unwanted emission limits for radiocommunications transmitters that are not base stations or earth stations – frequencies greater than an offset of 40 MHz from the upper or lower frequency limits for the licence, outside the frequency range 23.6 GHz to 24 GHz

Column 1	Column 2	Column 3
Frequency range (f)	Total radiated power (dBm)	Specified bandwidth
$30 \text{ MHz} \le f < 1 \text{ GHz}$	-36	100 kHz
1 GHz ≤ <i>f</i> < 12.75 GHz	-30	1 MHz
12.75 GHz ≤ <i>f</i> < 23.6 GHz	-13	1 MHz
24 GHz ≤ <i>f</i> ≤ 59 GHz	-13	1 MHz

(14) The unwanted emission limits in Table 13, measured over the specified bandwidth, apply at frequencies within the frequency range 23.6 GHz–24 GHz for radiocommunications transmitters first operated under an area-wide licence before 1 September 2027.

Note: This subclause does not apply to base stations or earth stations – see subclause (6).

Table 13: Unwanted emission limits for radiocommunications transmitters that are not base stations and not earth stations – in the frequency range 23.6 GHz to 24 GHz, first operated before 1 September 2027

Column 1	Column 2	Column 3
Transmitter operating frequency range (f)	Total radiated power (dBm)	Specified bandwidth
24.7 GHz ≤ <i>f</i> < 27.5 GHz	1	200 MHz
27.5 GHz ≤ <i>f</i> ≤ 29.5 GHz	-13	1 MHz

(15) The unwanted emission limits in Table 14, measured over the specified bandwidth, apply at frequencies within the frequency range 23.6 GHz–24 GHz for radiocommunications transmitters first operated under an area-wide licence on or after 1 September 2027.

Note: This subclause does not apply to base stations or earth stations – see subclause (6).

Table 14: Unwanted emission limits for radiocommunications transmitters that are not base stations and not earth stations—in the frequency range 23.6 GHz to 24 GHz, first operated on or after 1 September 2027

Column 1	Column 2	Column 3	
Transmitter operating frequency range (f)	Total radiated power (dBm)	Specified bandwidth	
24.7 GHz ≤ <i>f</i> < 27.5 GHz	-3	200 MHz	
27.5 GHz $\leq f \leq$ 29.5 GHz	-13	1 MHz	

Schedule 2 Inner-footprint areas

(section 5)

Each area in column 1 of the table below is an *inner-footprint area* that consists of the aggregation of block areas represented by the HCIS identifiers in the corresponding entry in column 2.

Note: Refer to the *Australian Spectrum Map Grid 2012* for a complete description of the naming convention referred to as the HCIS. The *Australian Spectrum Map Grid 2012* is available, free of charge, from the ACMA's website: www.acma.gov.au.

Column 1	Column 2
Inner-footprint area	HCIS identifiers
Bourke	LU4F, LU4G, LU4H, LU4J, LU4K, LU4L, LU4M, LU4N, LU4O, LU4P, LU5E, LU5F, LU5I, LU5J, LU5K, LU5M, LU5N, LU5O, LU7A, LU7B, LU7C, LU7D, LU7F, LU7G, LU7H, LU7J, LU7K, LU7L, LU7P, LU8A, LU8B, LU8C, LU8E, LU8F, LU8G, LU8I, LU8J, LU8M, LU4B9, LU4C5, LU4C6, LU4C7, LU4C8, LU4C9, LU4D4, LU4D5, LU4D6, LU4D7, LU4D8, LU4D9, LU4E6, LU4E9, LU4I2, LU4I3, LU4I5, LU4I6, LU4I8, LU4I9, LU5A4, LU5A5, LU5A6, LU5A7, LU5A8, LU5A9, LU5B7, LU5B8, LU5G4, LU5G7, LU5G8, LU5L7, LU5P1, LU5P4, LU5P7, LU7E2, LU7E3, LU7E5, LU7E6, LU7E8, LU7E9, LU7I3, LU7N2, LU7N3, LU7O1, LU7O2, LU7O3, LU7O4, LU7O5, LU7O6, LU7O9, LU8D1, LU8D4, LU8D7, LU8H1, LU8H4, LU8H7, LU8K8, LU8K1, LU8K2, LU8K3, LU8N4, LU8N5, LU8N6, LU8O1
Broken Hill	JV2L, JV2P, JV3B, JV3C, JV3D, JV3E, JV3F, JV3G, JV3H, JV3I, JV3J, JV3K, JV3L, JV3M, JV3N, JV3O, JV3P, JV5D, JV5H, JV6A, JV6B, JV6C, JV6D, JV6E, JV6F, JV6G, JV6H, JV6I, JV6J, JV6K, JV6L, KV1E, KV1I, KV1M, KV1N, KV4A, KV4E, JU9N8, JU9N9, JU9O7, JU9O8, JU9O9, JU9P7, JV2D6, JV2D8, JV2D9, JV2G9, JV2H2, JV2H3, JV2H4, JV2H5, JV2H6, JV2H7, JV2H8, JV2H9, JV2K3, JV2K6, JV2K8, JV2K9, JV2O2, JV2O3, JV2O5, JV2O6, JV2O8, JV2O9, JV3A2, JV3A3, JV3A4, JV3A5, JV3A6, JV3A7, JV3A8, JV3A9, JV5C2, JV5C3, JV5C5, JV5C6, JV5C9, JV5G3, JV5G6, JV5L1, JV5L2, JV5L3, JV5L5, JV5L6, JV5L9, JV6M1, JV6M2, JV6M3, JV6N1, JV6N2, JV6N3, JV6N4, JV6N5, JV6N6, JV6O1, JV6O2, JV6O3, JV6O4, JV6O5, JV6O6, JV6P1, JV6P2, JV6P3, JV6P4, KV1A4, KV1A5, KV1A7, KV1A8, KV1A9, KV1F1, KV1F4, KV1F7, KV1F8, KV1J1, KV1J2, KV1J4, KV1J5, KV1J7, KV1J8, KV1J9,

Inner-footprint area KV4B1, KV4B2, KV4B3, K KV4B8, KV4F1, KV4F2, K KV4I2, KV4I3, KV4I4, KV4I5	identifiers
KV4B1, KV4B2, KV4B3, K KV4B8, KV4F1, KV4F2, K KV4I2, KV4I3, KV4I4, KV4I5	identifiers
KV4B8, KV4F1, KV4F2, K KV4I2, KV4I3, KV4I4, KV4I5	
O AGOD AGOD AGOE AGOG	V4B4, KV4B5, KV4B6, KV4B7, KV4F4, KV4F5, KV4F7, KV4I1, 5, KV4I6, KV4I7, KV4I8, KV4J1
AS8M, AS8N, AS8O, AS8P, A AS9I, AS9J, AS9K, AS9M, AS AT2B, AT2C, AT2D, AT2E, A AT2K, AT3A, AT3B, AT3E, AS8B5, AS8B6, AS8B7, A AS8E4, AS8E5, AS8E6, A AS9C5, AS9C7, AS9C8, A AS9L7, AS9P1, AT1C2, AS AT1C9, AT1G2, AT1G3, AS AT1K3, AT1L1, AT1L2, A AT1L9, AT2L1, AT2L2, A AT2L7, AT2L8, AT2M3, ASAT3C2, AT3C3, AT3C4, ASSATA ASSATA AT3C2, AT3C3, AT3C4, ASSATA	AS8H, AS8I, AS8J, AS8K, AS8L, AS9A, AS9B, AS9E, AS9F, AS9G, S9N, AS9O, AT1D, AT1H, AT2A, AT2F, AT2G, AT2H, AT2I, AT2J, AS5P9, AS6M7, AS6M8, AS8A9, AS8B8, AS8B9, AS8E2, AS8E3, AS8E7, AS8E8, AS8E9, AS9C4, AS9H4, AS9H7, AS9L1, AS9L4, T1C3, AT1C5, AT1C6, AT1C8, AT1C3, AT1C4, AT1L5, AT1L6, AT2L3, AT2L4, AT2L5, AT2L6, AT2N1, AT2N2, AT3F1, AT3F2, AT3C5, AT3C7, AT3F1, AT3F2, AT3I1, AT3I2, AT3I3, AT3I4
HV1L, HV1M, HV1N, HV1 HV2M, HV2N, HV5A, HV5 GV3L6, GV3L8, GV3L9, G GV3P6, GV3P7, GV3P8, G GV6L4, GV6L5, GV6L6, G GV6P6, HV1B8, HV1B9, H HV1D8, HV1D9, HV1E5, H HV2A7, HV2A8, HV2A9, F HV2F8, HV2F9, HV2K1, H HV2O4, HV2O5, HV2O7, H HV5C5, HV5C7, HV5C8, H HV5J2, HV5J3, HV5J4, H	HV1G, HV1H, HV1I, HV1J, HV1K, HO, HV1P, HV2E, HV2I, HV2J, BB, HV5E, HV5F, HV5I, GV3L3, GV3P2, GV3P3, GV3P4, GV3P5, HV3P9, GV6L1, GV6L2, GV6L3, GV6L8, GV6L9, GV6P2, GV6P3, W1C7, HV1C8, HV1C9, HV1D7, HV1E6, HV1E7, HV1E8, HV1E9, HV2F1, HV2F4, HV2F5, HV2F7, W2K4, HV2K7, HV2O1, HV2O2, HV3C4, HV5C1, HV5C2, HV5C4, HV5C1, HV5C4, HV5C1, HV5C4, HV5C1, HV5C4, HV5C1, HV5C2, HV5C4, HV5C1, HV5C4, HV5C1, HV5C2, HV5C4, HV5C1, H
LY8K, LY8L, LY8M, LY8I LY9F, LY9G, LY9I, LY9J, LY LZ2A, LZ2B, LZ2C, LZ2D, I LZ2J, LZ2K, LZ2L, LZ2N, L LZ3D, LZ3E, LZ3F, LZ3G, I LZ3M, LZ3N, LZ3O, LY5N9, LY5P8, LY5P9, LY6M7, LY LY7L5, LY7L6, LY7L8, L LY7P6, LY7P8, LY7P9, LY LY9B2, LY9B4, LY9B5, LY LY9C4, LY9C7, LY9C8, LY LY9L4, LY9L5, LY9L7, LY LZ1D5, LZ1D6, LZ1D8, LZ LZ1H6, LZ1H9, LZ1L3, LZ LZ2M5, LZ2M6, LZ2M9, S	LY8F, LY8G, LY8H, LY8I, LY8J, N, LY8O, LY8P, LY9A, LY9E, Y9K, LY9M, LY9N, LY9O, LY9P, LZ2E, LZ2F, LZ2G, LZ2H, LZ2I, LZ2O, LZ2P, LZ3A, LZ3B, LZ3C, LZ3H, LZ3I, LZ3I, LZ3K, LZ3L, LY5O7, LY5O8, LY5O9, LY5P7, Y6M8, LY6M9, LY7H9, LY7L3, LY7L9, LY7P2, LY7P3, LY7P5, Y8A6, LY8A8, LY8A9, LY9B1, LY9B6, LY9B7, LY9B8, LY9B9, LY9B6, LY9H7, LY9L1, LY9L2, LY9L8, LY9L9, LZ1D3, LZ1D3, LZ1D9, LZ1H2, LZ1H3, LZ1H5, LZ1H6, LZ2M1, LZ2M2, LZ2M3, LZ3P1, LZ3P2, LZ3P3, LZ3P4, L3P8, MZ1A1, MZ1A4, MZ1A7, L111, MZ114
	L, CU9O, CU9P, CV3B, CV3C,

Column 1	Column 2
Inner-footprint area	HCIS identifiers
	CV3D, CV3G, CV3H, CV3L, DU8A, DU8E, DU8I, DU8M, DV1A, DV1B, DV1C, DV1D, DV1E, DV1F, DV1G, DV1H, DV1I, DV1J, CU9D3, CU9D5, CU9D6, CU9D7, CU9D8, CU9D9, CU9G3, CU9G5, CU9G6, CU9G7, CU9G8, CU9G9, CU9J3, CU9J6, CU9J8, CU9J9, CU9N2, CU9N3, CU9N5, CU9N6, CU9N7, CU9N8, CU9N9, CV3F1, CV3F2, CV3F3, CV3F5, CV3F6, CV3F8, CV3F9, CV3J3, CV3K1, CV3K2, CV3K3, CV3K4, CV3K5, CV3K6, CV3K8, CV3K9, CV3P2, CV3P3, DU4M8, DU4M9, DU4N4, DU4N5, DU4N6, DU4N7, DU4N8, DU4N9, DU4O4, DU4O5, DU4O6, DU4O7, DU4O8, DU4O9, DU4P4, DU4P5, DU4P6, DU4P7, DU4P8, DU4P9, DU5M7, DU5M8, DU8B4, DU8B7, DU8B8, DU8F1, DU8F2, DU8F4, DU8F5, DU8F7, DU8F8, DU8J1, DU8J2, DU8J4, DU8J5, DU8J7, DU8J8, DU8N1, DU8N2, DU8N4, DU8N5, DU8N7, DV1K1, DV1K2, DV1K3, DV1K4, DV1K5, DV1K6, DV1K7, DV1L1, DV1M1, DV1M2, DV2A1, DV2A2, DV2A3, DV2A4, DV2A5, DV2A6, DV2A7, DV2A8, DV2B1, DV2E1, DV2E2, DV2E4
Moonyoonooka	AU2L, AU2P, AU3C, AU3D, AU3E, AU3F, AU3G, AU3H, AU3I, AU3J, AU3K, AU3L, AU3M, AU3N, AU3O, AU3P, AU6A, AU6B, AU6C, AU6D, AU6E, AU6F, AU6G, AU6H, AU6I, AU6J, AU6K, BU1A, BU1B, BU1C, BU1E, BU1F, BU1G, BU1I, BU1J, BU1K, BU1M, BU1N, BU1O, BU4A, BU4B, BU4E, AT9O6, AT9O7, AT9O8, AT9O9, AT9P4, AT9P5, AT9P6, AT9P7, AT9P8, AT9P9, AU2H6, AU2H8, AU2H9, AU2K6, AU2K9, AU2O2, AU2O3, AU2O5, AU2O6, AU2O8, AU2O9, AU3A6, AU3A8, AU3A9, AU3B2, AU3B3, AU3B4, AU3B5, AU3B6, AU3B7, AU3B8, AU3B9, AU6L1, AU6L2, AU6L3, AU6L4, AU6L5, AU6L6, BT7M4, BT7M5, BT7M6, BT7M7, BT7M8, BT7M9, BT7N4, BT7N5, BT7N6, BT7N7, BT7N8, BT7N9, BT7O7, BT7O8, BU1D4, BU1D7, BU1H1, BU1H2, BU1H4, BU1H5, BU1H7, BU1H8, BU1L1, BU1L2, BU1L4, BU1L5, BU1L7, BU1E8, BU1P1, BU1P4, BU4C1, BU4C2, BU4C3, BU4C4, BU4C5, BU4C7, BU4F1, BU4F2, BU4F3, BU4F4, BU4F5, BU4I1, BU4I2
Roma	MT10, MT1P, MT2M, MT4B, MT4C, MT4D, MT4E, MT4F, MT4G, MT4H, MT4I, MT4J, MT4K, MT4L, MT4N, MT4O, MT4P, MT5A, MT5B, MT5E, MT5F, MT5I, MT5J, MT5K, MT5M, MT5N, MT5O, MT7B, MT7C, MT7D, MT7H, MT8A, MT8B, MT8E, MT1K7, MT1K8, MT1K9, MT1L7, MT1L8, MT1L9, MT1M9, MT1N2, MT1N3, MT1N4, MT1N5, MT1N6, MT1N7, MT1N8, MT1N9, MT2I7, MT2N4, MT2N5, MT2N7, MT2N8, MT2N9, MT4A2, MT4A3, MT4A4, MT4A5, MT4A6, MT4A7, MT4A8, MT4A9, MT4M1, MT4M2, MT4M3, MT4M4, MT4M5, MT4M6, MT4M8, MT4M9, MT5C1, MT5C4, MT5C7, MT5C8, MT5G1, MT5G2, MT5G4, MT5G5, MT5G6, MT5G7, MT5G8, MT5G9, MT7A2, MT7A3, MT7A6, MT7A9, MT7F1, MT7F2, MT7F3, MT7F6, MT7G1, MT7G2, MT7G3, MT7G4, MT7G5, MT7G6, MT7G8, MT7G9, MT8C1, MT8C2, MT8C4, MT8C5, MT8C7, MT8F1, MT8F2, MT8F3, MT8F4, MT8F5
Waroona	AV9D, AV9H, AV9L, BV4D, BV4F, BV4G, BV4H, BV4I,

Column 1	Column 2
Inner-footprint area	HCIS identifiers
	BV5B, BV5C, BV5E, BV5F, BV5G, BV5H, BV5I, BV5J, BV5K,
	BV5L, BV5M, BV5N, BV5O, BV5P, BV7A, BV7B, BV7C,
	BV7D, BV7E, BV7F, BV7G, BV7H, BV7I, BV7J, BV7K, BV7L,
	BV8A, BV8B, BV8C, BV8E, BV8F, BV8I, AV9C3, AV9C6,
	AV9C9, AV9G3, AV9G6, AV9G9, AV9K3, AV9P2, AV9P3,
	BV1P8, BV1P9, BV2M7, BV2M8, BV2M9, BV2N4, BV2N5,
	BV2N6, BV2N7, BV2N8, BV2N9, BV2O7, BV2O8, BV2O9,
	BV2P7, BV4B8, BV4B9, BV4C2, BV4C3, BV4C4, BV4C5,
	BV4C6, BV4C7, BV4C8, BV4C9, BV4E6, BV4E8, BV4E9,
	BV5D1, BV5D2, BV5D4, BV5D5, BV5D6, BV5D7, BV5D8,
	BV5D9, BV6A7, BV6E1, BV6E4, BV6E7, BV6E8, BV6I1,
	BV6I2, BV6I4, BV6I5, BV6I7, BV6M1, BV6M4, BV7M1,
	BV7M2, BV7M3, BV7M4, BV7M5, BV7M6, BV7N1, BV7N2,
	BV7N3, BV7N4, BV7N5, BV7N6, BV7O1, BV7O2, BV7O3,
	BV7O4, BV7O5, BV7O6, BV7P1, BV7P2, BV7P3, BV7P4,
	BV7P5, BV8D1, BV8D2, BV8D3, BV8D4, BV8D5, BV8D7,
	BV8G1, BV8G2, BV8G3, BV8G4, BV8G5, BV8G6, BV8G7,
	BV8G8, BV8H1, BV8J1, BV8J2, BV8J3, BV8J4, BV8J5, BV8J7,
	BV8M1, BV8M2
Wolumla	MW8, MW5N, MW5O, MW5P, MW7L, MW9A, MW9B,
	MW9E, MW9F, MW9I, MW9J, MW9K, MW9M, MW9N,
	MW9O, MX2A, MX2B, MX2C, MX2D, MX2E, MX2F, MX2G,
	MX2H, MX2K, MX2L, MX3A, MX3B, MX3C, MX3E, MX3F,
	MX3G, MX3I, MX3J, MW5M5, MW5M6, MW5M7, MW5M8,
	MW5M9, MW6M1, MW6M4, MW6M5, MW6M6, MW6M7,
	MW6M8, MW6M9, MW6N7, MW7D3, MW7D6, MW7D8,
	MW7D9, MW7H2, MW7H3, MW7H5, MW7H6, MW7H7,
	MW7H8, MW7H9, MW7P1, MW7P2, MW7P3, MW7P5,
	MW7P6, MW7P8, MW7P9, MW9C7, MW9G1, MW9G2,
	MW9G4, MW9G5, MW9G7, MW9G8, MW9G9, MW9L7,
	MW9P1, MW9P4, MW9P7, MX1D2, MX1D3, MX1D5,
	MX1D6, MX1D9, MX1H3, MX2I2, MX2I3, MX2I6, MX2J1,
	MX2J2, MX2J3, MX2J4, MX2J5, MX2J6, MX2J8, MX2J9,
	MX2N3, MX2O1, MX2O2, MX2O3, MX2P1, MX2P2, MX2P3,
	MX2P5, MX2P6, MX3D1, MX3D4, MX3D7, MX3K1, MX3K2,
	MX3K4, MX3M1, MX3M2, MX3M3, MX3M4, MX3N1,
	MX3N2

Schedule 3 Outer-footprint areas

(section 5)

Each area in column 1 of the table below is an *outer-footprint area* that consists of the aggregation of block areas represented by the HCIS identifiers in the corresponding entry in column 2.

Note: Refer to the *Australian Spectrum Map Grid 2012* for a complete description of the naming convention referred to as the HCIS. The *Australian Spectrum Map Grid 2012* is available, free of charge, from the ACMA's website: www.acma.gov.au.

Column 1	Column 2
Outer-footprint	HCIS identifiers
area	Treas mentiners
Bourke	KU3P, KU6C, KU6D, KU6G, KU6H, KU6K, KU6L, KU6O, KU6P, KU9C, KU9D, KU9G, KU9H, KU9H, KU9L, KU9P, KV3D, LU1I, LU1J, LU1K, LU1L, LU1M, LU1N, LU1O, LU1P, LU2I, LU2J, LU2K, LU2M, LU2N, LU2O, LU2P, LU4A, LU5C, LU5D, LU5H, LU6A, LU6E, LU6I, LU6J, LU6M, LU6N, LU7M, LU8H, LU8P, LU9A, LU9B, LU9E, LU9F, LU9I, LU9J, LU9M, LV1A, LV1B, LV1C, LV1D, LV1E, LV1G, LV1H, LV1K, LV1L, LV2A, LV2B, LV2C, LV2D, LV2E, LV2F, LV2G, LV2H, LV2I, LV2J, LV3A, KU3L6, KU3L8, KU3L9, KU3O6, KU3O8, KU3O9, KU6B9, KU6F3, KU6F6, KU6F8, KU6F9, KU6J2, KU6J3, KU6J5, KU6J6, KU6J8, KU9B2, KU9B3, KU9B5, KU9B6, KU9B8, KU9B9, KU9F2, KU9F3, KU9F5, KU9F6, KU9F8, KU9P9, KU9J2, KU9J3, KU9J5, KU9J3, KU9J6, KU9J9, KU9O2, KU9O3, KU9O4, KU9O5, KU9O6, KU9O8, KU9O9, KV3C2, KV3C3, KV3C6, KV3H2, KV3H3, KV3H6, LU1E9, LU1F6, LU1F7, LU1F8, LU1F9, LU1G4, LU1G5, LU1G6, LU1G7, LU1G8, LU1G9, LU1H4, LU1H5, LU1H6, LU1H7, LU1H8, LU1H9, LU2E4, LU2E5, LU2E6, LU2E7, LU2E8, LU2E9, LU2F4, LU2F7, LU2F8, LU2F9, LU2F4, LU2F7, LU2F8, LU4B1, LU4B2, LU4B3, LU4B4, LU4B5, LU4B6, LU4B7, LU4B8, LU4C1, LU4C2, LU4C3, LU4C4, LU4D1, LU4D2, LU4D3, LU4E1, LU4C2, LU4C3, LU5A1, LU5A2, LU5A3, LU5B4, LU5B5, LU5B6, LU5B9, LU5B1, LU5B2, LU5B3, LU5B4, LU5B5, LU5B6, LU5B9, LU5B1, LU5B2, LU5B3, LU5B4, LU5B8, LU5B9, LU5B9, LU5B9, LU5B1, LU5B2, LU5B3, LU5B4, LU5B8, LU5B9, LU5B9, LU5B1, LU5B2, LU5B3, LU5B4, LU5B8, LU5B9, LU5B9, LU5B9, LU5B9, LU5B1, LU5B2, LU5B3, LU5B4, LU5B8, LU5B9, LU5B
	LV2K5, LV2K6, LV2L1, LV2L2, LV3B1, LV3B2, LV3B4, LV3E1, LV3E2, LV3E4
Broken Hill	JU8K, JU8L, JU8N, JU8O, JU8P, JU9E, JU9F, JU9G, JU9H, JU9I, JU9J, JU9K, JU9L, JU9M, JV2B, JV2C, JV2E, JV2F, JV2I, JV2J, JV2M, JV2N, JV5A, JV5B, JV5E, JV5F, JV5I, JV5J, JV5K, JV5N, JV5O, JV5P, JV8B, JV8C, JV8D, JV8H, JV9A, JV9B, JV9C, JV9D, JV9E, JV9F, JV9G, JV9H, KU7E, KU7I, KU7J, KU7M, KU7N, KU7O, KV1B, KV1C, KV1D, KV1G, KV1H, KV1K, KV1L, KV1O, KV1P, KV4C, KV4D, KV4G, KV4H, KV4K, KV4L, KV4M, KV4N, KV4O, KV7A, KV7B, KV7C, KV7E, KV7F, JU8G8, JU8G9, JU8H3, JU8H4, JU8H5, JU8H6, JU8H7, JU8H8, JU8H9, JU8J6, JU8J8, JU8J9, JU8M6, JU8M9, JU9A9, JU9B7, JU9B8,

Column 1	Column 2
Outer-footprint area	HCIS identifiers
	JU9B9, JU9C7, JU9C8, JU9C9, JU9D7, JU9D8, JU9D9, JU9N1, JU9N2, JU9N3, JU9N4, JU9N5, JU9N6, JU9N7, JU9O1, JU9O2, JU9O3, JU9O4, JU9O5, JU9O6, JU9P1, JU9P2, JU9P3, JU9P4, JU9P5, JU9P6, JU9P8, JU9P9, JV1H6, JV1H9, JV1L3, JV1L6, JV1L9, JV1P3, JV1P5, JV1P6, JV1P8, JV1P9, JV2A2, JV2A3, JV2A5, JV2A6, JV2A7, JV2A8, JV2A9, JV2D1, JV2D2, JV2D3, JV2D4, JV2D5, JV2C7, JV2C6, JV2C7, JV2C6, JV2C7, JV2C6, JV2C7, JV2C8, JV2H1, JV2K1, JV2K2, JV2K3, JV2K4, JV2K5, JV2K7, JV2O1, JV2O4, JV2O7, JV3A1, JV4D2, JV4D3, JV4D5, JV4D6, JV4D8, JV4D9, JV4H3, JV4H6, JV4H9, JV4L3, JV4L6, JV5C1, JV5C4, JV5C7, JV5C8, JV5G1, JV5G2, JV5G4, JV5G5, JV5G7, JV5G8, JV5M5, JV5M6, JV5M8, JV5M9, JV6M5, JV5M6, JV5M6, JV5M8, JV5M9, JV6M5, JV5M6, JV5M8, JV5M9, JV6M5, JV6M6, JV6M7, JV6M8, JV6M9, JV6O7, JV6O8, JV6O9, JV6C9, JV6C9, JV6C9, JV6C9, JV6C9, JV6C9, JV8G3, JV8G4, JV8G2, JV8G3, JV8G4, JV8G5, JV8G6, JV8G8, JV8G9, JV8L1, JV8L2, JV8L3, JV8L6, JV9I1, JV9I2, JV9I3, JV9I4, JV9I5, JV9I6, JV9J1, JV9J2, JV9J3, JV9J4, JV9J5, JV9I6, JV9J1, JV9J2, JV9J3, JV9J4, JV9J5, JV9I6, JV9J1, JV9J2, JV9J3, JV9J4, JV9J5, JV9I6, JV9L1, JV9L2, JV9K3, JV9K4, JV9K5, JV9K6, JV9L1, JV9L2, JV9L3, JV9L4, JV9L5, JV9L6, KU7F4, KU7F5, KU7F7, KU7F8, KU7F9, KU7K1, KU7K2, KU7K4, KU7K5, KU7K7, KU7P8, KU7F9, KV1A1, KV1A2, KV1A3, KV1A6, KV1F2, KV1F3, KV1F5, KV1F6, KV1F9, KV1J3, KV1J6, KV2A4, KV2A7, KV2E1, KV2E4, KV2E5, KV2E7, KV2E8, KV2I1, KV2I2, KV2I4, KV2I5, KV2I7, KV2I8, KV4P1, KV4P2, KV4P3, KV4P4, KV4P5, KV4P6, KV4P7, KV4P8, KV4P3, KV4P6, KV4P7, KV4P8, KV4P1, KV4P2, KV4P3, KV4P4, KV4P5, KV4P6, KV4P7, KV4P8, KV5A1, KV5E5, KV5E7, KV5E8, KV5I1, KV5I2, KV5I4, KV5I7, KV7D1, KV7D2, KV7D4, KV7D1, KV7D2, KV
Carnarvon	AS5H, AS5I, AS5J, AS5K, AS5L, AS5M, AS5N, AS5O, AS6E, AS6F, AS6G, AS6I, AS6J, AS6K, AS6L, AS6N, AS6O, AS6P, AS9D, AT1A, AT1B, AT1E, AT1F, AT1I, AT1J, AT1M, AT1N, AT1O, AT1P, AT2O, AT2P, AT3D, AT3G, AT3H, AT3J, AT3K, AT3L, AT3M, AT3N, AT3O, AT5A, AT5B, AT5C, AT5D, AT5E, AT5F, AT5G, AT6A, BS4I, BS4M, BS4N, BS7A, BS7B, BS7E, BS7F, BS7I, BS7J, BS7M, BS7N, BT1A, BT1B, BT1E, AS5F6, AS5F7, AS5F8, AS5F9, AS5G4, AS5G5, AS5G6, AS5G7, AS5G8, AS5G9, AS5P1, AS5P2, AS5P3, AS5P4, AS5P5, AS5P6, AS5P7, AS5P8, AS6H1, AS6H4, AS6H5, AS6H6, AS6H7, AS6H8, AS6H9, AS6M1, AS6M2, AS6M3, AS6M4, AS6M5, AS6M6, AS6M9, AS8A1, AS8A2, AS8A3, AS8A4, AS8A5, AS8A6, AS8A7, AS8A8, AS8B1, AS8B2, AS8B3, AS8B4, AS8E1, AS9C1, AS9C2, AS9C3, AS9C6, AS9C9, AS9H1, AS9H2, AS9H3, AS9H5, AS9H6, AS9H8, AS9H9, AS9L2, AS9L3, AS9L5, AS9L6, AS9L8, AS9L9, AS9P2, AS9P3,

Column 1	Column 2
Outer-footprint area	HCIS identifiers
	AS9P4, AS9P5, AS9P6, AS9P7, AS9P8, AS9P9, AT1C1, AT1C4, AT1C7, AT1G1, AT1G4, AT1G7, AT1K1, AT1K2, AT1K4, AT1K5, AT1K6, AT1K7, AT1K8, AT1K9, AT1L7, AT1L8, AT2L9, AT2M1, AT2M2, AT2M4, AT2M5, AT2M6, AT2M7, AT2M8, AT2M9, AT2N4, AT2N5, AT2N6, AT2N7, AT2N8, AT2N9, AT3C6, AT3C8, AT3C9, AT3F6, AT3F8, AT3F9, AT3I5, AT3I6, AT3I7, AT3I8, AT3I9, AT3P1, AT3P2, AT3P3, AT3P4, AT3P5, AT5H1, AT5H2, AT5H3, AT5H4, AT5H5, AT5H6, AT6B1, AT6B2, AT6B3, AT6B4, AT6B5, AT6B6, AT6B7, AT6C1, AT6C2, AT6E1, AT6E2, BS4E4,
	BS4E7, BS4E8, BS4J1, BS4J4, BS4J5, BS4J7, BS4J8, BS4J9, BS4O1, BS4O4, BS4O7, BS4O8, BS7C1, BS7C2, BS7C4, BS7C5, BS7C7, BS7C8, BS7G1, BS7G2, BS7G4, BS7G5, BS7G7, BS7G8, BS7K1, BS7K2, BS7K4, BS7K5, BS7K7, BS7K8, BS7O1, BS7O2, BS7O4, BS7O7, BT1C1, BT1F1, BT1F2, BT1F4, BT1F7, BT1I1, BT1I2, BT1I3, BT1I4, BT1I5, BT1I7
Ceduna	GU9P, GV3C, GV3D, GV3F, GV3G, GV3H, GV3J, GV3K, GV3M, GV3N, GV3O, GV6A, GV6B, GV6C, GV6E, GV6F, GV6G, GV6I, GV6J, GV6K, GV6M, GV6N, GV6O, HU7J, HU7K, HU7L, HU7M, HU7N, HU7O, HU7P, HU8I, HU8J, HU8M, HU8N, HU8O, HU8P, HV1A, HV2B, HV2C, HV2D, HV2G, HV2H, HV2L, HV2P, HV3E, HV3I, HV3M, HV5D, HV5H, HV5K, HV5L, HV5O, HV5P, HV6A, HV6E, HV6I, HV8A, HV8B, GU9L9, GU9O3, GU9O5, GU9O6, GU9O7, GU9O8, GU9O9, GV3B3, GV3B5, GV3B6, GV3B8, GV3B9, GV3E9, GV3I3, GV3I5, GV3I6, GV3I8, GV3I9, GV3L1, GV3L2, GV3L4, GV3L5, GV3L7, GV3P1, GV6L7, GV6P1, GV6P4, GV6P5, GV6P7, GV6P8, GV6P9, HU7F7, HU7F8, HU7F9, HU7G5, HU7G6, HU7G7, HU7G8, HU7G9, HU7H4, HU7H5, HU7H6, HU7H7, HU7H8, HU7H9, HU7I2, HU7I3, HU7I4, HU7I5, HU7I6, HU7I7, HU7I8, HU7I9, HU8E4, HU8E5, HU8E6, HU8E7, HU8E8, HU8E9, HU8F7, HU8F8, HU8F9, HU8K1, HU8K2, HU8K4, HU8K5, HU8K6, HU8K7, HU8K8, HU8K9, HU8L4, HU8L7, HU8L8, HU9M4, HU9M7, HU9M8, HV1B1, HV1B2, HV1B3, HV1B4, HV1B5, HV1B6, HV1B7, HV1C1, HV1C2, HV1C3, HV1C4, HV1C5, HV1C6, HV1D1, HV1D2, HV1D3, HV1D4, HV1D5, HV1D6, HV1E1, HV1E2, HV1E3, HV1E4, HV2A1, HV2A2, HV2A3, HV2A4, HV2A5, HV2A6, HV2F2, HV2F3, HV2F6, HV2K2, HV2K3, HV2K5, HV2K6, HV2K8, HV3A6, HV3A7, HV3A8, HV3A9, HV3F1, HV3F4, HV3F7, HV3J1, HV3J2, HV3J4, HV3J5, HV3J7, HV3J8, HV3N1, HV3N2, HV3N4,
	HV3N5, HV3N7, HV3N8, HV5C3, HV5C6, HV5C9, HV5G2, HV5G3, HV5G5, HV5G6, HV5G8, HV5G9, HV5J9, HV5M9, HV5N2, HV5N3, HV5N4, HV5N5, HV5N6, HV5N7, HV5N8, HV5N9, HV6B1, HV6B2, HV6B4, HV6B5, HV6B7, HV6B8, HV6F1, HV6F4, HV6F7, HV6M1, HV6M2, HV6M4, HV6M5, HV6M7, HV8D1, HV8D2, HV8D3, HV8D4, HV8D5, HV8D6, HV8D7, HV8D8, HV8H1, HV8H2, HV8H4, HV8J1, HV8J2, HV8J3, HV8J4, HV8J5, HV8J6, HV8J7, HV8K1, HV8M1, HV8M2, HV9A1
Geeveston	LY4H, LY4K, LY4L, LY4N, LY4O, LY4P, LY5B, LY5C,

Column 1	Column 2
Outer-footprint	HCIS identifiers
area	
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Kalgoorlie	CU6K, CU6L, CU6N, CU6O, CU6P, CU8H, CU8L, CU8O, CU8P, CU9A, CU9B, CU9C, CU9E, CU9F, CU9I, CU9M, CV2C, CV2D, CV2G, CV2H, CV2K, CV2L, CV2O, CV2P, CV3A, CV3E, CV3I, CV3M, CV3N, CV3O, CV5D, CV6A, CV6B, CV6C, CV6D, CV6E, CV6F, CV6G, CV6H, DU4E, DU4F, DU4G, DU4H, DU4I, DU4J, DU4K, DU4L, DU5E, DU5F, DU5G, DU5I, DU5J, DU5K, DU5L, DU5N, DU5O, DU5P, DU8C, DU8D, DU8G, DU8H, DU8K, DU8L, DU8O, DU8P, DU9A, DU9E, DU9I, DV1N, DV1O, DV1P, DV2C, DV2D, DV2F, DV2G, DV2I, DV2J, DV2M, DV4A, DV4B, DV4C, DV4D, DV4E, DV4F, CU6G8, CU6G9, CU6H2, CU6H3, CU6H4, CU6H5, CU6H6, CU6H7, CU6H8, CU6H9, CU6J5, CU6J6, CU6J7, CU6J8, CU6J9, CU8D3, CU8D5, CU8D6, CU8D8, CU8D9, CU8K2, CU8K3, CU8K5, CU8K6, CU8K7, CU8K8, CU8K9, CU8N9, CU9D1,

Column 1	Column 2
Outer-footprint area	HCIS identifiers
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	CV2N3, CV2N6, CV3F4, CV3F7, CV3J1, CV3J2, CV3J4,
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	CV5H3, CV5H5, CV5H6, CV6J1, CV6J2, CV6J3, CV6K1,
	CV6K2, CV6K3, CV6L1, CV6L2, CV6L3, DU4A8, DU4A9,
	DU4B5, DU4B6, DU4B7, DU4B8, DU4B9, DU4C4, DU4C5,
	DU4C6, DU4C7, DU4C8, DU4C9, DU4D4, DU4D5, DU4D6,
	DU4D7, DU4D8, DU4D9, DU4M1, DU4M2, DU4M3,
	DU4M4, DU4M5, DU4M6, DU4M7, DU4N1, DU4N2,
	DU4N3, DU4O1, DU4O2, DU4O3, DU4P1, DU4P2, DU4P3,
	DU5A4, DU5A5, DU5A6, DU5A7, DU5A8, DU5A9, DU5B4, DU5B5, DU5B7, DU5B8, DU5B9, DU5C7, DU5C8, DU5H1,
	DU5H4, DU5H5, DU5H7, DU5H8, DU5H9, DU5M1,
	DU5M2, DU5M3, DU5M4, DU5M5, DU5M6, DU5M9,
	DU611, DU614, DU617, DU618, DU6M1, DU6M2, DU6M4,
	DU6M5, DU6M6, DU6M7, DU6M8, DU6M9, DU8B1,
	DU8B2, DU8B3, DU8B5, DU8B6, DU8B9, DU8F3, DU8F6,
	DU8F9, DU8J3, DU8J6, DU8J9, DU8N3, DU8N6, DU8N8,
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	DV5A4, DV5A5, DV5A6, DV5A7, DV5B1
Moonyoonooka	AT8O, AT8P, AT9G, AT9H, AT9I, AT9J, AT9K, AT9L,
J	AT9M, AT9N, AU2B, AU2C, AU2D, AU2E, AU2F, AU2G,
	AU21, AU2J, AU2M, AU2N, AU6M, AU6N, AU6O, AU6P,
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	BU2F, BU2G, BU2I, BU2J, BU2K, BU2M, BU2N, BU4D,
	BU4G, BU4H, BU4J, BU4K, BU4L, BU4M, BU4N, BU4O,
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	AT8L5, AT8L6, AT8L7, AT8L8, AT8L9, AT8N6, AT8N8,
	AT8N9, AT9C8, AT9C9, AT9D5, AT9D6, AT9D7, AT9D8,
	AT9D9, AT9E6, AT9E7, AT9E8, AT9E9, AT9F2, AT9F3, AT9F4, AT9F5, AT9F6, AT9F7, AT9F8, AT9F9, AT9O1,
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Column 1	Column 2
Outer-footprint	HCIS identifiers
area	nets identifiers
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	BT7N1, BT7N2, BT7N3, BT7O1, BT7O2, BT7O3, BT7O4,
	BT7O5, BT7O6, BT7O9, BT8A7, BT8A8, BT8F1, BT8F4,
	BT8F5, BT8F7, BT8F8, BT8F9, BT8K1, BT8K4, BT8K5,
	BT8K7, BT8K8, BT8K9, BT8P7, BU1D1, BU1D2, BU1D3,
	BU1D5, BU1D6, BU1D8, BU1D9, BU1H3, BU1H6, BU1H9,
	BU1L3, BU1L6, BU1L9, BU1P2, BU1P3, BU1P5, BU1P6,
	BU1P7, BU1P8, BU1P9, BU2D1, BU2D4, BU2D7, BU2H1, BU2H4, BU2H7, BU2O1, BU2O2, BU2O4, BU2O5, BU2O7,
	BU208, BU4C6, BU4C8, BU4C9, BU4F6, BU4F7, BU4F8,
	BU4F9. BU4I3. BU4I4. BU4I5. BU4I6. BU4I7. BU4I8.
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	BU5F4, BU5F7, BU5I1, BU5I2, BU5I3, BU5I4, BU5I5,
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	BU7B7, BU7C1, BU7E1, BU7E2
Roma	LT3H, LT3K, LT3L, LT3O, LT3P, LT6C, LT6D, LT6F, LT6G,
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	MT1H, MT1I, MT1J, MT2A, MT2E, MT2F, MT2G, MT2J,
	MT2K, MT2L, MT2O, MT2P, MT5D, MT5H, MT5L, MT5P,
	MT6A, MT6E, MT6I, MT6M, MT6N, MT7E, MT7I, MT7J,
	MT7K, MT7L, MT7M, MT7N, MT7O, MT7P, MT8D, MT8G,
	MT8H, MT8I, MT8J, MT8K, MT8L, MT8M, MT8N, MT8O,
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Column 1	Column 2
Outer-footprint	HCIS identifiers
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Wolumla	CV4A7, CV4E1, CV4E4, CV4E7, CV4I1 MW4G, MW4H, MW4J, MW4K, MW4L, MW4N, MW4O,
5-41114	MW4P, MW5A, MW5B, MW5C, MW5D, MW5E, MW5F, MW5G, MW5H, MW5I, MW5J, MW5K, MW5L, MW6A, MW6E, MW6F, MW6F, MW6B, MW6I, MW6J, MW6K, MW6L,

Column 1	Column 2
Outer-footprint	HCIS identifiers
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	MX1L, MX1O, MX1P, MX2M, MX3H, MX3L, MX3O, MX3P,
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	MW9C9, MW9G3, MW9G6, MW9L1, MW9L2, MW9L3,
	MW9L4, MW9L5, MW9L6, MW9L8, MW9L9, MW9P2,
	MW9P3, MW9P5, MW9P6, MW9P8, MW9P9, MX1A1,
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	MX1D4, MX1D7, MX1D8, MX1E2, MX1E3, MX1E5,
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	MX2P8, MX2P9, MX3D2, MX3D3, MX3D5, MX3D6,
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