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Radiocommunications Assignment and Licensing Instruction

# Spectrum Embargoes

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### **Disclaimer**

The Australian Communications and Media Authority (ACMA) advise that these instructions reflect the current policies of the ACMA.

Prospective applicants for licences should take all necessary steps to ensure that they have access to appropriate technical or other specialist advice independently of the ACMA concerning their applications, the operation of radiocommunications equipment and services, and any other matters relevant to the operation of transmitters and services under the licences in question.

The policies of the ACMA, and the laws of the Commonwealth may change from time to time, and prospective licensees should ensure that they have informed themselves of the current policies of the ACMA and of any relevant legislation (including subordinate instruments). Prospective applicants for licences should not rely on statements made in these instructions about the policies that may be followed by other government authorities or entities, nor about the effect of legislation. These instructions are not a substitute for independent advice (legal or otherwise) tailored to the circumstances of individual applicants.

Radiocommunications Assignment and Licensing Instructions are subject to periodic review and are amended as the ACMA considers necessary. To keep abreast of developments, it is important that users ensure that they are in possession of the latest edition.

No liability is or will be accepted by the Minister or Department of Infrastructure, Transport, Regional Development and Communications, the ACMA, the Commonwealth of Australia, or its officers, servants or agents for any loss suffered, whether arising directly or indirectly, due to reliance on the accuracy or contents of these instructions.

Suggestions for improvements to Radiocommunications Assignment and Licensing Instructions may be addressed to The Manager, Spectrum Planning Section, ACMA at PO Box 78, Belconnen, ACT, 2616, or by e-mail to [freqplan@acma.gov.au](mailto:freqplan@acma.gov.au). It would be appreciated if notification to ACMA of any inaccuracy or ambiguity found be made without delay in order that the matter may be investigated and appropriate action taken.

### **RALI AUTHORISATION**

Approved 20 August 2021

Chris Worley

Manager

Spectrum Planning Section

Australian Communications and Media Authority

# Background

The object of the [Radiocommunications Act 1992](#) is to promote the long-term public interest derived from the use of the spectrum by providing for the management of the spectrum in a manner that:

- (a) facilitates the efficient planning, allocation and use of the spectrum; and
- (b) facilitates the use of the spectrum for:
  - (i) commercial purposes; and
  - (ii) defence purposes, national security purposes and other non-commercial purposes (including public safety and community purposes); and
- (c) supports the communications policy objectives of the Commonwealth Government.

In managing the spectrum, the ACMA uses a number of tools including the placement of embargoes on parts of the spectrum to support planning and other purposes. Embargoes place restrictions on frequency assignments for apparatus-licensed services in certain bands in certain geographical areas. Embargoes, together with planning, are intended to ensure that the status of the band remains stable for the durations of the planning process. The overall public benefit from spectrum use can be maximised where such planning is not constrained by the introduction of unplanned services or by their premature introduction.

Embargoes are an effective and efficient administrative tool used in conjunction with other planning tools. Their application is part of a transparent decision-making process, and the application of an embargo is reviewable.

Information about the principles that the ACMA uses when making administrative decisions can be found on the [How we plan and manage spectrum](#) page of the ACMA website.

## EXEMPTIONS

Exemptions may be given to an embargo where there is sufficient justification. All applications for frequency assignments in embargoed bands should be forwarded to the:

The Manager  
Spectrum Planning Section, ACMA  
PO Box 78, Belconnen, ACT, 2616

or by e-mail to [freqplan@acma.gov.au](mailto:freqplan@acma.gov.au)

for consideration on a case-by-case basis.

## REMARKS

This RALI replaces MS03 dated 10 February 2021. Embargo numbers are not re-used to maintain historical reference. Each new embargo is authorised by the RALI Authorisation of the delegated officer. The authorisation is updated when the embargo is amended.

# Embargoes

**EMBARGO 1**

**Status:** Lifted

**EMBARGO 2**

**Status:** Lifted

**EMBARGO 3**

**Status:** Lifted

**EMBARGO 4**

**Status:** Lifted

**EMBARGO 5**

**Status:** Lifted

**EMBARGO 6**

**Status:** Lifted

**EMBARGO 7**

**Status:** Lifted

**EMBARGO 8**

**Status:** Lifted

**EMBARGO 9**

**Status:** Lifted

**EMBARGO 10**

**Status:** Lifted

**EMBARGO 11**

**Status:** Lifted

**EMBARGO 12**

**Status:** Replaced by Embargo 15

**EMBARGO 13**

**Status:** Lifted

**EMBARGO 14**

**Status:** Lifted

**EMBARGO 15**

**Status:** Lifted

**EMBARGO 16**

**Status:** Lifted

**EMBARGO 17**

**Status:** Lifted

**EMBARGO 18**

**Status:** Replaced by Embargo 26

## EMBARGO 19

<b>FREQUENCY RANGE(S):</b>	406.11875–406.61875 MHz 408.11875–408.61875 MHz 415.56875–416.06875 MHz 417.56875–418.06875 MHz
<b>SUBJECT:</b>	Trunked land mobile radio service (TLMRS)— restriction on the assignment of certain channels in specific areas
<b>DATE OF EFFECT:</b>	September 1990 (last revised September 2007)
<b>COVERAGE:</b>	Any area outside a 100 km radius of Sydney, Melbourne, Brisbane, Adelaide, Perth and Canberra.
<b>TIME FRAME:</b>	Ongoing

### INSTRUCTIONS

No assignments are to be made to the TLMRS on the following channels except with the approval of the Manager, Spectrum Engineering Section: channels 1–40 and 161–200 for Sydney, Melbourne, Brisbane, Adelaide, Perth, and channels 1–15 for Canberra (406.11875–406.30625 MHz and 415.56875–415.75625 MHz). Refer to RALI MS22 and RALI LM8 Annex B for more detail.

### REASONS

Restrictions on the use of these channels will provide protection to 400 MHz wideband fixed service channels 2–2' and 3–3' (as detailed in RALI MS22), which overlap the TLMRS bands. As these wideband links are permitted only in areas beyond a 200 km radius of capital cities, there is effectively a 100 km "buffer zone" existing between the two areas.

This zone should ensure that mobile transmitters do not interfere with wideband links. It also allows for reasonable discretion to be used in considering cases where a proposed base station may be beyond the 100 km limit.

### HISTORY

In September 2007 the embargo was revised to include Canberra in the list of excluded areas, in recognition of an increase in the use of the TLMRS and no growth in the use of wideband links in this area over the last several years. Provision for the protection of existing links remains. The frequency range previously covered by this embargo (403–420 MHz) was refined to be more specific. Some editorial and formatting changes were also made.

### EMBARGO AUTHORISATION:

[signed] 27/09/07

Geoff McMillen  
Manager  
Spectrum Engineering Section  
Spectrum Planning Branch  
Australian Communications and Media Authority

**EMBARGO 20**

**Status:** Replaced by Embargo 23

**EMBARGO 21**

**Status:** Replaced by restrictions imposed by the 1.5 GHz Band Plan

**EMBARGO 22**

**Status:** Lifted



## EMBARGO 23

<b>FREQUENCY RANGE(S):</b>	1980–2010 MHz 2010–2110 MHz 2170–2200 MHz 2200–2300 MHz
<b>SUBJECT:</b>	Embargo on new assignments to support television outside broadcast and future replanning activities
<b>DATE OF EFFECT:</b>	April 1996 (last revised February 2021)
<b>COVERAGE:</b>	See instructions below
<b>TIME FRAME:</b>	Ongoing

### INSTRUCTIONS

1. No new assignments are to be made Australia-wide in the 1980–2010 MHz and 2170–2200 MHz frequency bands, except those for television outside broadcasting services. Licence period of any new TOB licence in this band is not to be longer than 1 year. All new licences are to include advisory note “BL: Frequency band under review — This frequency band is currently under review to accommodate changes in technology. This review may lead to a requirement to change frequency or to cease transmission”.
2. No assignments of fixed or mobile services are to be made in the 2010–2110 MHz and 2200–2300 MHz frequency bands inside the areas detailed in Attachment 1. Application for television outside broadcast services will be considered on a case-by-case basis by the Manager Spectrum Engineering Section.
3. Assignments for earth stations (earth receive and fixed earth licence options) in the frequency range 2025–2110 MHz and 2200–2300 MHz, outside the Mingenew Earth Station Protection Zone (Attachment 2), will be considered on a case-by-case basis by the Manager Spectrum Planning Section. The restrictions of Embargo 23 do not apply to new or existing earth stations located in the Mingenew Earth Station Protection Zone (Attachment 2).

### REASONS

**Instruction 1 & 2:** This serves to facilitate the introduction of television outside broadcast services in accordance with the *Television Outside Broadcast Services (1980–2110 MHz and 2170–2300 MHz) Frequency Band Plan 2012*. It also serves to preserve planning options for 1980–2010 MHz and 2170–2200 MHz while the ACMA implements outcomes of the [2 GHz replanning process](#).

**Instruction 3:** This provision supports potential planning activity associated with current public consultation on the siting of earth stations particularly in relation to those within propagation distance of areas of high density radiocommunication.

### HISTORY

Embargo 23 was originally issued in January 1993. The embargo has been revised several times between April 1994 and June 2002 and has changed significantly from its original form. More recent changes of relevance include the following:

In August 2005 the embargo was extended to include fixed and mobile assignments in the 2025–2110 and 2200–2300 MHz bands.

In October 2005 the embargo was removed from remote density areas in the 2025–2110 and 2200–2300 MHz bands.

In September 2007 the embargo was revised to remove the reference to exemptions for the Melbourne 2006 Commonwealth Games, and to include some editorial and formatting changes.

In November 2010, the embargo was extended to include Ancillary Terrestrial Component (ATC) and Complementary Ground Component (CGC) services in the 1980–2010 and 2170–2200 MHz ranges. These services provide terrestrially based supplementation of services provided by stations in the mobile-satellite service. While there was international consideration of the approval for these services, this embargo provided the ACMA the ability to consider its position.

In April 2012, the embargo was revised in included the 2010–2025 MHz frequency band. That band was previously included in Embargo 38 which has now been revoked. The embargo was also extended to facilitate the introduction of television outside broadcast services in the 1980–2110 MHz and 2170–2300 MHz frequency bands.

In May 2012, the embargo was revised to remove the area around Darwin for the 2200–2300 MHz frequency band that had been included by error.

In September 2013, instruction 1 of the embargo was revised to remove the restriction on television outside broadcast services in the bands 1980–2010 MHz and 2170–2200 MHz. The embargo on all other services is to preserve planning options while the future use of the band is under review as part of considerations future spectrum requirements for [mobile broadband](#).

In September 2013, instruction 2 was revised to allow application for television outside broadcast services to be considered on case-by-case basis by the Manager Spectrum Engineering Section pending finalisation of coordination arrangements for television outside broadcast services in the bands 2010–2110 MHz and 2200–2300 MHz.

In January 2021, instruction 1 was revised following the ACMA's announcement of outcomes from the [2 GHz replanning process](#). TOB services are permitted to continue to operate in this band during the transition period but any new or reissued licences are limited to a period of no longer than 1 year. As recorded in the [Outcomes paper](#), the ACMA's preliminary view is that a timeframe of 5 years is appropriate in capital cities and a shorter period of 3 years is feasible in regional areas where TOB usage is minimal.

In January 2021, instruction 3 was revised so this embargo no longer applies to earth stations in the Mingenew Earth Station Protection Zone (Attachment 2). Also, the lower limit of the band for this instruction was revised from 2010 MHz to 2025 MHz to reflect current planning arrangements.

In January 2021, instruction 4 was removed as the restrictions outlined in Instruction 1 are considered sufficient.

#### **EMBARGO AUTHORISATION:**

[signed] 10/2/2021

Chris Worley  
Manager  
Spectrum Planning Section  
Spectrum Planning and Engineering Branch  
Australian Communications and Media Authority

**ATTACHEMENT 1:**

1. No assignments are to be made for fixed or mobile services in the 2010–2110 MHz frequency band in the geographic area described by a circle with a radius of 210 kilometres whose centre is located at a point specified in Table 1.
2. No assignments are to be made for fixed or mobile services in the 2200–2300 MHz frequency band in the geographic area described by a circle with a radius of 210 kilometres whose centre is located at a point specified in Table 2.
3. No assignments are to be made for fixed or mobile services in the 2010–2110 MHz and 2200–2300 MHz frequency bands inside or within 60 kilometres of the geographic area whose boundary is described by the coordinates specified in Table 3.

The datum used for all geographic coordinates in this attachment is the *Geocentric Datum of Australia 1994*.

**Table 1**

<b>Point</b>	<b>Latitude</b>	<b>Longitude</b>
1	-31.950750	115.872040
2	-31.953254	115.855373
3	-32.012419	116.061762
4	-32.008252	116.083985
5	-31.878253	115.859817
6	-32.057978	115.751210
7	-12.463580	130.835066
8	-12.464135	130.844233
9	-12.448302	130.836455

**Table 2**

<b>Point</b>	<b>Latitude</b>	<b>Longitude</b>
1	-31.950750	115.872040
2	-31.953254	115.855373
3	-32.012419	116.061762
4	-32.008252	116.083985
5	-31.878253	115.859817
6	-32.057978	115.751210

**Table 3**

Point	Latitude	Longitude
1	-31.998556	136.001359
2	-31.998546	137.001345
3	-31.998537	138.001335
4	-31.998521	139.001320
5	-31.998513	140.001305
6	-31.998499	141.001291
7	-32.998503	141.001301
8	-32.998492	142.001289
9	-32.998484	143.001274
10	-33.998489	143.001286
11	-33.998479	144.001273
12	-33.998470	145.001258
13	-33.998459	146.001242
14	-33.998450	147.001227
15	-32.998449	147.001211
16	-32.998441	148.001196
17	-31.998441	148.001188
18	-30.998441	148.001176
19	-30.998435	149.001159
20	-29.998435	149.001149
21	-28.998437	149.001143
22	-28.998431	150.001125
23	-27.998425	150.001112
24	-26.998429	150.001100
25	-25.998434	150.001089
26	-24.998427	150.001086
27	-24.998434	149.001105
28	-23.998440	149.001093
29	-23.998448	148.001103
30	-22.998453	148.001095
31	-21.998461	148.001086
32	-20.998461	148.001080
33	-20.998461	147.001099
34	-20.998467	146.001113
35	-19.998468	146.001105
36	-18.998468	146.001098
37	-18.998472	145.001108
38	-17.998480	145.001094
39	-16.998479	145.001085
40	-15.998479	145.001090
41	-15.998478	146.001078
42	-15.998474	147.001067
43	-16.998469	147.001072
44	-17.998465	147.001078
45	-18.998465	147.001089
46	-18.998456	148.001071
47	-18.998451	149.001058
48	-19.998451	149.001064
49	-19.998441	150.001050
50	-20.998438	150.001056
51	-20.998432	151.001042
52	-21.998429	151.001049
53	-22.998434	151.001058
54	-22.998420	152.001041

Point	Latitude	Longitude
55	-23.998428	152.001046
56	-23.998411	153.001033
57	-23.998405	154.001018
58	-24.998402	154.001025
59	-25.998401	154.001033
60	-26.998397	154.001041
61	-27.998398	154.001049
62	-28.998397	154.001059
63	-29.998395	154.001068
64	-30.998395	154.001078
65	-31.998395	154.001088
66	-31.998405	153.001103
67	-32.998404	153.001116
68	-32.998415	152.001132
69	-33.998414	152.001145
70	-34.998416	152.001158
71	-34.998426	151.001172
72	-35.998427	151.001188
73	-36.998431	151.001203
74	-37.998434	151.001218
75	-37.998444	150.001236
76	-37.998457	149.001255
77	-38.998459	149.001268
78	-39.998464	149.001286
79	-40.998469	149.001304
80	-41.998475	149.001323
81	-42.998481	149.001343
82	-43.998488	149.001364
83	-43.998499	148.001382
84	-43.998511	147.001401
85	-43.998522	146.001418
86	-43.998534	145.001436
87	-42.998527	145.001413
88	-41.998522	145.001384
89	-41.998531	144.001408
90	-40.998524	144.001387
91	-40.998536	143.001403
92	-39.998529	143.001383
93	-38.998522	143.001358
94	-38.998534	142.001379
95	-38.998546	141.001393
96	-38.998557	140.001407
97	-37.998545	140.001384
98	-37.998562	139.001401
99	-36.998554	139.001381
100	-36.998567	138.001396
101	-36.998578	137.001408
102	-36.998590	136.001420
103	-35.998576	136.001402
104	-34.998562	136.001392
105	-33.998560	136.001384
106	-32.998557	136.001369
107	-31.998556	136.001359

**ATTACHEMENT 2:**

The Mingenew Earth Station Protection Zone is define by the following HCIS area description.

BU4B, BU1N, BU1M6, BU1M8, BU1M9, BU1O4, BU1O7, BU1O8, BU4A2, BU4A3, BU4A6, BU4C1, BU4C2, BU4C4

This area has been taken from [RALI MS44 \(Frequency coordination procedures for the earth station protection zones\)](#).

HCIS area descriptions can be converted into a Placemark file (viewable in Google Earth) through the [Convert HCIS area description to Placemark](#) facility on the ACMA website.

The HCIS is described in the [Australian Spectrum Map Grid 2012](#).

**EMBARGO 24**

**Status:** Lifted

**EMBARGO 25**

**Status:** Lifted

**EMBARGO 26**

**Status:** Replaced by RALI SM26.

**EMBARGO 27**

**Status:** Replaced by Embargo 26

**EMBARGO 28**

**Status:** Lifted

**EMBARGO 29**

**Status:** Lifted

**EMBARGO 30**

**Status:** Lifted

**EMBARGO 31**

**Status:** Replaced by provisions in the Australian Radiofrequency Spectrum Plan

## EMBARGO 32

<b>FREQUENCY RANGE(S):</b>	168–174 MHz
<b>SUBJECT:</b>	Embargo on new assignments to support the introduction of digital terrestrial television broadcasting
<b>DATE OF EFFECT:</b>	September 2000 (last revised September 2007)
<b>COVERAGE:</b>	Around the geographic locations specified in Attachment A
<b>TIME FRAME:</b>	Until further notice

### INSTRUCTIONS

No assignments for new fixed or mobile services are to be made in the frequency band 168–174 MHz within the limits specified in Table A around the sites listed in Table B of Attachment A.

### REASONS

Operation of fixed or mobile services in this band in the vicinity of the television broadcasting sites listed in Table B of Attachment A may be affected by the introduction of digital terrestrial television broadcasting (DTTB).

### COMMENTS

The VHF land mobile spectrum adjacent to TV channel 6 may be affected by out-of-band emissions from DTTB services on TV channel 6. As planning of DTTB services Australia-wide is not complete, the list of sites has been compiled from completed digital channel plans and a list of existing analog TV channel 7 sites which could potentially have channel 6 DTTB services associated with them.

Table B will be revised as DTTB planning progresses.

### HISTORY

In December 2001 the embargo was revised to include an update of the frequency bands and exclusion distances in Table A based on new information on combiner filtering of the DTTB transmitter out-of-band emissions. The list of sites in Table B was also updated to include information available in digital channel plans completed since the initial release of this embargo.

The March 2002, July 2002, May 2003 and August 2003 revisions also included updates to Table B based on digital channel plans completed since the previous update of this embargo.

In September 2007 the embargo was revised to update Table B based on information available in digital channel plans completed since the previous release of this embargo, and has limited the inclusion of sites to those where channel 7 analog television services currently operate with ERPs of 500 W or more. Some editorial and formatting changes were also made.

### EMBARGO AUTHORISATION:

[signed] 27/09/2012

Geoff McMillen  
Manager  
Spectrum Engineering Section  
Spectrum Planning Branch  
Australian Communications and Media Authority

**Attachment A:**

No assignments for new fixed or mobile services should be made in the frequency band 168–174 MHz within the frequency/distance limits specified in Table A of the sites listed in Table B.

**Table A**

Frequency band	Exclusion distance from site in Table B
168.0–172.8 MHz	3 km
172.8–173.3 MHz	10 km
173.3–174.0 MHz	60 km

**Table B**

Site name	Latitude (DMS)	Longitude (DMS)
<b>ACT</b>		
Canberra – Black Mountain	-35 16 38	149 05 48
<b>NSW</b>		
Sydney – Artarmon	-33 48 25	151 10 49
Sydney – Willoughby	-33 48 48	151 11 41
Murrumbidgee Irrigation Area – Mt Bingar	-34 07 23	146 14 02
Bourke – Mt Oxley	-30 12 03	146 14 22
<b>VIC</b>		
Melbourne – Mt Dandenong – HSV7 site	-37 50 13	145 20 47
Melbourne – Mt Dandenong – ATV10 site	-37 50 20	145 20 43
Western Victoria – Mt Dundas	-37 27 37	141 54 53
<b>QLD</b>		
Brisbane – Mt Cootha – BTQ7 site	-27 28 05	152 56 32
Brisbane – Mt Cootha – Q10 site	-27 27 53	152 56 49
Cairns – Mt Bellenden Ker	-17 15 57	145 51 09
Roma – Timbury Hills	-26 34 27	148 50 56
Jericho – Colorado	-23 37 35	146 15 18
Weipa	-12 37 30	141 53 00
<b>SA</b>		
Adelaide – Mt Lofty – 7 / 10 site	-34 58 57	138 42 24
Adelaide – Mt Lofty – 9 site	-34 59 02	138 42 25
Ceduna	-32 09 14	133 45 14
<b>WA</b>		
Perth – Bickley	-32 00 34	116 04 58
Perth – Carmel	-32 00 50	116 03 37
Port Hedland	-20 22 15	118 33 42
Katanning – Fairfield	-33 47 34	117 30 58
Carnarvon	-24 54 25	113 43 07
<b>NT</b>		
Katherine	-14 28 25	132 16 40
Alice Springs – West Gap	-23 43 26	133 51 19
Tennant Creek	-19 38 13	134 13 48



**EMBARGO 33**

**Status:** Replaced by provisions in the Australian Radiofrequency Spectrum Plan

**EMBARGO 34**

**Status:** Superseded by Embargo 64

**EMBARGO 35**

**Status:** Superseded by Embargo 50

**EMBARGO 36**

**Status:** Superseded by Embargo 50

**EMBARGO 37**

**Status:** Replaced by Embargo 23

**EMBARGO 38**

**Status:** Lifted

## EMBARGO 39

<b>FREQUENCY RANGE(S):</b>	5725–5850 MHz
<b>SUBJECT:</b>	Embargo on fixed service assignments to provide limited support to 5.8 GHz fixed links and to protect radiolocation receivers
<b>DATE OF EFFECT:</b>	25 November 2004 (last revised September 2007)
<b>COVERAGE:</b>	As specified in Tables A and B of <u>Attachment 1</u>
<b>TIME FRAME:</b>	Ongoing

### INSTRUCTIONS

No fixed service assignments are to be made in the frequency ranges/geographic areas specified in Table A and Table B of Attachment 1.

### REASONS

This embargo has been introduced to:

1. preserve opportunities for devices authorised under class licensing arrangements in the subject band (in particular in larger population areas defined in Table B1 of Attachment 1); and
2. provide protection for radiolocation receivers used for defence purposes within areas defined in Table B2 of Attachment 1.

### COMMENTS

The 5725–5850 MHz band is used, or is available for use, by:

- the radiolocation service (under a primary allocation that provides that the use is principally for the purposes of defence);
- the amateur and amateur-satellite (space-to-Earth) services (under secondary allocations);
- a wide variety of short range devices under class licensing arrangements; and
- industrial, scientific and medical (ISM) applications which use radiofrequency energy locally for non-radiocommunication purposes.

### HISTORY

In September 2007 the embargo was revised to include editorial and formatting changes.

### EMBARGO AUTHORISATION:

[signed] 27/09/2007

Geoff McMillen  
Manager  
Spectrum Engineering Section  
Spectrum Planning Branch  
Australian Communications and Media Authority

## Attachment 1

1. No fixed service assignments should be made in the frequency ranges specified in Table A.

**Table A**

Frequency range	Exclusion area
5725–5735 MHz	Australia-wide
5755–5775 MHz	Australia-wide
5795–5850 MHz	Australia-wide

2. In the frequency ranges specified in Table B, no fixed service assignments should be made in the geographic areas specified in Table B.

**Table B**

Frequency range	Exclusion zones (to be applied simultaneously)
5735–5755 MHz 5775–5795 MHz	High density areas and medium density areas as defined in Schedule 1 of the <a href="#">Radiocommunications (Transmitter Licence Tax) Determination 2015<sup>1</sup></a> .  Within the circles defined by the centroid coordinates and radii listed in Table B1.  Within the areas enclosed by polygons defined by coordinates listed in Table B2.

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<sup>1</sup> Diagrams illustrating these areas can be found in Appendix F of the [Apparatus Licence Fee Schedule](#).

**Table B1**

State/ territory	Site name	Centroid coordinates		Radius (km)
		Latitude	Longitude	
ACT/NSW	Canberra/Queanbeyan (Capital Hill)	-35.310000	149.120000	25
NSW	Armidale	-30.516667	151.666667	20
NSW	Bathurst	-33.416667	149.583333	20
NSW	Coffs Harbour	-30.300000	153.133333	20
NSW	Dubbo	-32.250000	148.616667	20
NSW	Goulburn	-34.750000	149.716667	20
NSW	Lismore	-28.816667	153.266667	20
NSW	Nowra	-34.883333	150.600000	20
NSW	Orange	-33.283333	149.100000	20
NSW	Port Macquarie	-31.450000	152.916667	20
NSW	Tamworth	-31.083333	150.933333	20
NSW	Wagga Wagga	-35.116667	147.366667	20
NSW/VIC	Albury/Wodonga (Wodonga town centre)	-36.116667	146.883333	20
VIC	Ballarat	-37.566667	143.850000	20
VIC	Bendigo	-36.766667	144.283333	20
VIC	Mildura	-34.183333	142.166667	20
VIC	Shepparton/Mooroopna	-36.383333	145.400000	20
VIC	Warrnambool	-38.383333	142.483333	20
QLD	Bundaberg	-24.866667	152.350000	20
QLD	Cairns	-16.916667	145.766667	20
QLD	Caloundra/Kawana Waters	-26.800000	153.133333	20
QLD	Gladstone	-23.850000	151.266667	20
QLD	Hervey Bay	-25.290000	152.850000	20
QLD	Mackay	-21.150000	149.183333	20
QLD	Maroochydore/Mooloolaba/Buderim	-26.650000	153.100000	20
QLD	Maryborough	-25.533333	152.700000	20
QLD	Mt Isa	-20.733333	139.483333	20
QLD	Rockhampton	-23.366667	150.533333	20
QLD	Tewantin-Noosa	-26.400000	153.066667	20
QLD	Toowoomba	-27.566667	151.950000	20
QLD	Townsville/Thuringowa (centre of Townsville urban area)	-19.260000	146.810000	20
SA	Mt Gambier	-37.833333	140.783333	20
SA	Whyalla	-33.033333	137.600000	20
WA	Albany	-35.000000	117.866667	20
WA	Bunbury	-33.333333	115.633333	20
WA	Geraldton	-28.766667	114.616667	20
WA	Mandurah	-32.533333	115.716667	20
WA	Kalgoorlie/Boulder	-30.750000	121.466667	20
TAS	Devonport	-41.183333	146.350000	20
TAS	Hobart—New Town	-42.860000	147.300000	25
TAS	Launceston	-41.450000	147.166667	20
NT	Alice Springs	-23.700000	133.866667	20
NT	Darwin-Palmerston (Palmerston town centre)	-12.482222	130.982778	25

**Table B2 (in five parts)**

<b>Shoalwater Bay—QLD</b>		
<b>Point</b>	<b>Latitude</b>	<b>Longitude</b>
1	-22.767211	150.765770
2	-22.758374	150.767852
3	-22.744160	150.720385
4	-22.757631	150.715294
5	-22.743752	150.641557
6	-22.750821	150.620010
7	-22.759017	150.624735
8	-22.850781	150.613412
9	-22.850338	150.584197
10	-22.897435	150.594082
11	-22.884900	150.474451
12	-22.844289	150.475202
13	-22.818367	150.334494
14	-22.832383	150.309875
15	-22.849077	150.220907
16	-22.807859	150.195470
17	-22.765399	150.236231
18	-22.754388	150.234519
19	-22.752759	150.143073
20	-22.730292	150.147919
21	-22.709445	150.143000
22	-22.634488	150.090591
23	-22.457819	150.094766
24	-22.252500	150.011111
25	-22.100000	150.500000
26	-22.100000	150.750000
27	-22.801876	150.983349

<b>Woomera—SA</b>		
<b>Point</b>	<b>Latitude</b>	<b>Longitude</b>
1	-27.833333	133.833333
2	-28.566667	133.833333
3	-29.116667	134.366667
4	-29.116667	134.950000
5	-28.716667	135.166667
6	-28.716667	135.750000
7	-29.300000	136.600000
8	-30.325556	136.983056
9	-30.533333	137.283333
10	-30.678333	137.333889
11	-30.866667	137.400000
12	-31.197222	137.357222
13	-31.581389	137.009722
14	-31.387778	136.352222
15	-31.111667	136.214167
16	-30.561667	133.921944
17	-30.430278	132.260000
18	-30.083333	132.000000
19	-29.900000	131.500000
20	-28.133333	131.500000
21	-28.133333	132.000000
22	-27.833333	132.000000

<b>Zone 1—NT</b>		
<b>Point</b>	<b>Latitude</b>	<b>Longitude</b>
1	-12.004700	130.914700
2	-9.912200	130.868600
3	-10.403800	132.419700
4	-11.683600	133.344400
5	-12.314700	131.317500
6	-12.086900	131.159700

<b>Mt Bundy—NT</b>		
<b>Point</b>	<b>Latitude</b>	<b>Longitude</b>
1	-12.823300	131.968800
2	-12.920200	131.968800
3	-12.920200	132.070000
4	-13.173000	132.072200
5	-13.173000	131.875000
6	-12.918600	131.685000
7	-12.918000	131.783600
8	-12.857700	131.783600

<b>Zone 2—NT</b>		
<b>Point</b>	<b>Latitude</b>	<b>Longitude</b>
1	-14.000000	131.000000
2	-14.000000	131.923000
3	-14.171900	132.007500
4	-14.780800	131.936400
5	-15.023000	132.376600
6	-16.194700	132.376600
7	-16.230962	132.212901
8	-16.245936	131.810228
9	-16.046290	131.235872
10	-15.350000	131.000000
11	-15.350000	130.801410
12	-15.537610	130.801410
13	-15.556580	130.746620
14	-15.625150	130.685830
15	-15.591170	130.497560
16	-15.629770	130.428150
17	-15.559850	130.363980
18	-15.472980	130.365055
19	-15.418750	130.003790
20	-15.457090	129.943370
21	-15.431370	129.848300
22	-15.177530	129.768400
23	-14.830000	129.461600
24	-11.500500	128.171600
25	-12.289100	130.503000
26	-12.822222	130.777500
27	-14.784428	130.027045
28	-14.789580	130.175340
29	-14.893410	130.266630
30	-14.825000	130.633300
31	-14.929100	130.741600
32	-14.929100	131.000000

**EMBARGO 40**

**Status:** Lifted

## EMBARGO 41

<b>FREQUENCY RANGE(S):</b>	70 MHz–25.25 GHz
<b>SUBJECT:</b>	Embargo for a Radio Quiet Zone
<b>DATE OF EFFECT:</b>	11 April 2005 (last revised and 19 December 2014)
<b>COVERAGE:</b>	For the frequency range 70 MHz–25.25 GHz, within 70 km radius, of Latitude 26° 42' 15" South, longitude 116° 39' 32" East <sup>2</sup> (Near Boolardy Station, Western Australia).
<b>TIME FRAME:</b>	Ongoing

### INSTRUCTIONS

No new assignments are to be made within the frequency range 70 MHz–25.25 GHz, within 70 km radius, of Latitude 26° 42' 15" South, longitude 116° 39' 32" East<sup>2</sup>. The embargo applies to all apparatus licensed, coordinated terrestrial stations and earth stations that are located within the specified zone<sup>3</sup>. Existing licensed services may continue to operate. However, assignment proposals that seek to expand or modify existing apparatus licensed services are subject to the embargo.

Exceptions to this embargo require case-by-case consideration and the approval of the Manager, Spectrum Planning and Engineering Section. For cases involving the bands managed under the *Broadcasting Services Act 1992*, approval must be obtained from the Manager, Broadcast Engineering Section. Sections 100B, 102 and 102A of the *Radiocommunications Act 1992* continue to apply.

### REASONS

This embargo establishes a Radio Quiet Zone (RQZ) within the areas described above, facilitating the development and use of new radio astronomy technologies. Subject to planning processes this embargo may be replaced by more detailed policy documents.

On 30 November 2005, subject to sections 100B, 102 and 102A of the *Radiocommunications Act 1992*, the scope of the embargo was extended to include the bands managed under the *Broadcasting Services Act 1992*, and the centre coordinates of the embargoed areas was adjusted to more accurately define the RQZ area.

On 30 April 2007 the central coordinates of the embargoed areas were changed to accommodate potential interference issues with new mining operations near the original site.

### EMBARGO AUTHORISATION:

[signed] 19/12/2014

Mark Arkell  
Manager  
Spectrum Engineering Section  
Spectrum Planning and Engineering Branch  
Australian Communications and Media Authority

<sup>2</sup> GDA94 datum

<sup>3</sup> Stations as defined in Article 1, ITU Radio Regulations (2004).



## EMBARGO 42

<b>FREQUENCY RANGE(S):</b>	3575–3710 MHz
<b>SUBJECT:</b>	Embargo on all new frequency assignments to support future re-planning options.
<b>DATE OF EFFECT:</b>	26 May 2005 (last revised 15 November 2019)
<b>COVERAGE:</b>	Metropolitan and regional areas specified in Attachment 1 for point-to-multipoint licences. Australia-wide for all other services.
<b>TIME FRAME:</b>	Until further notice.

### INSTRUCTIONS

No assignments are to be made for point-to-multipoint licences in the frequency range 3575–3710 MHz inside the metropolitan and regional areas detailed in Attachment 1.

For all other services, no assignments are to be made Australia-wide in the frequency range 3575–3710 MHz. This includes assignments for existing licensees seeking to expand or modify their radiocommunications systems in this range.

Licences may only be issued or re-issued in the frequency range 3575–3710 MHz (Australia-wide) for a maximum one-year period at a time until further notice. This includes point-to-multipoint licences issued and re-issued in remote areas.

The restrictions of Embargo 42 do not apply to new or existing satellite earth stations located inside the Earth Station Protection Zones defined in Appendix C of RALI MS44.

Any applications for case-by-case exemptions are to be referred to the Manager, Spectrum Engineering Section for consideration.

### REASONS

The ACMA is currently reviewing arrangements in the 3575–3700 MHz band. The purpose of the embargo is to preserve future planning options and minimise the impact that any future possible change in use might cause. The current restriction will be reconsidered once the outcomes of the 3575–3700 MHz band review are known.

### COMMENTS

Interest in the 3.6 GHz band for fixed/mobile broadband has progressed due to spectrum harmonisation developments in the International Telecommunication Union–Radiocommunication Sector (ITU-R) and Asia–Pacific Telecommunity (APT), technology standardisation progress in industry bodies such as 3GPP and considerations within individual countries leading to potential economies of scale. The progress of this consideration means it is timely to consider the potential re-planning of this band in Australia.

### HISTORY

In September 2007 the embargo was revised to include minor editorial changes.

In September 2009 the embargo was revised to allow wireless access services (point-to-multipoint services) to be licensed in regional and remote areas of Australia.

In November 2016 the embargo was revised to restrict access to the 3575–3710 MHz frequency for point to multipoint services in metropolitan and regional areas.

In September 2019 Embargo 42 was revised to allow satellite earth stations to be licenced inside the Earth Station Protection Zones defined in RALI MS44.

## **EMBARGO AUTHORISATION:**

Approved 15/11/2019

Zarko Krusevac

Acting Manager

Spectrum Engineering Section

Spectrum Planning & Engineering Branch

Communications Infrastructure Division

Australian Communications & Media Authority

## **ATTACHMENT 1**

For the purposes of Embargo 42, metropolitan and regional areas are defined by the following HCIS area description:

BV, CV, DV, IV, IW, JV, JW, KQ, KV, KW, LR, LV, LW, LX, LY, MS, MT, MU, MV, MW, NT, NU, AV9, AW3, BV3, BV6, BV7, BV8, BV9, BW1, BW2, BW3, BW5, BW6, CW1, CW2, CW3, CW4, DW1, DW2, DW3, EV1, EV2, EV3, EV4, EV5, EV6, EV7, FV1, FV2, FV3, FV4, FV5, GV1, GV2, GV3, GV6, HV1, HV2, HV3, HV4, HV5, HV6, HV8, HV9, HW3, HW6, IW1, IW2, IW4, IW5, IW7, IW8, IW9, JW2, JW3, JW4, JW5, JW6, JW7, JW8, JW9, JX1, JX2, JX3, JX5, JX6, KO1, KO4, KO5, KO7, KO8, KP1, KP2, KP4, KP5, KP6, KP7, KP8, KP9, KX1, KX2, KX3, KX4, KX5, KX6, KX8, KX9, KY2, KY3, KY6, LP4, LP7, LQ1, LQ2, LQ4, LQ5, LQ7, LQ8, LZ1, LZ2, LZ3, MR1, MR4, MR5, MR7, MR8, MR9, MV1, MV2, MV3, MV4, MV5, MV6, MV7, MV8, MW1, MW2, MW6, MW7, MW8, MW9, MX1, MX2, MX3, MX4, MX7, MY1, MY4, MY7, MZ1, NS4, NS7, NS8, NS9, NT1, NT2, NT3, NT4, NT7, NU1, NU4, NU5, NU6, NU7, NU8, NU9, NV1, NV2, NV3, NV4, NV5, NV7, NW1

HCIS area descriptions can be converted into a Placemark file (viewable in Google Earth) through the [Convert HCIS area description to Placemark](#) facility on the ACMA website.

The HCIS is described in the [Australian Spectrum Map Grid 2012](#).

**EMBARGO 43**

**Status:** Replaced by Embargo 26

## EMBARGO 44

<b>FREQUENCY RANGE(S):</b>	5950–6200 kHz 7100–7300 kHz 9500–9900 kHz 11650–12050 kHz 13600–13800 kHz 15100–15600 kHz 17550–17900 kHz 21450–21850 kHz 25670–26100 kHz
<b>SUBJECT:</b>	Embargo on new frequency assignments to support domestic broadcasting services using DRM technology
<b>DATE OF EFFECT:</b>	18 September 2006 (last revised September 2007)
<b>COVERAGE:</b>	Australia-wide
<b>TIME FRAME:</b>	Ongoing

### INSTRUCTIONS

No new assignments are to be made Australia-wide in the frequency bands listed above. This includes assignments for existing licensees seeking to expand or modify their communications systems in the bands.

The frequency requirements of existing licensees of overseas HF broadcasting services will continue to be licensed for those frequencies coordinated in accordance with Article 12 of the *Radio Regulations* of the International Telecommunication Union (ITU).

Exceptions to this embargo require case-by-case consideration and the approval of the Manager, Spectrum Engineering Section. ACMA will consider licence applications for trials to investigate use of the bands for Digital Radio Mondiale (DRM).

### REASONS

The purpose of this embargo is to support planning of the bands to accommodate domestic broadcasting services using DRM technology. ACMA is currently considering international developments of DRM using these bands and needs to preserve the availability of the bands for potential future use by DRM services in Australia.

The bands are embargoed to ensure that ACMA's ability to implement the resulting planning arrangements is not constrained by the use of the bands by additional radiocommunications services.

### COMMENTS

DRM is a digital broadcasting system that has received wide international support, including the development of receivers by international equipment manufacturers and international trials of the technology since 2003. The extent of the developments, trial outcomes, and interest in use of the band for DRM by Australian parties requires ACMA to assess DRM developments and preserve the bands while planning occurs.

Existing ITU arrangements for the bands will need to be considered in light of current interests in the band for DRM.

### HISTORY

In September 2007 the embargo was revised to include editorial changes.

**EMBARGO AUTHORISATION:**

[signed]

27/09/2007

Geoff McMillen  
Manager  
Spectrum Engineering Section  
Spectrum Planning Branch  
Australian Communications and Media Authority

## EMBARGO 45

<b>FREQUENCY RANGE(S):</b>	518–520 MHz
<b>SUBJECT:</b>	Embargo on new frequency assignments to support the expansion of UHF TV channel 27 and to preserve planning options for adjacent channel sharing
<b>DATE OF EFFECT:</b>	6 October 2006 (last revised September 2007)
<b>COVERAGE:</b>	Australia-wide
<b>TIME FRAME:</b>	Until further notice

### INSTRUCTIONS

No new assignments are to be made Australia-wide in the frequency band 518–520 MHz. This includes assignments for existing licensees seeking to expand or modify their communications systems in the bands.

Exemptions to this embargo require case-by-case consideration and the approval of the Manager, Spectrum Engineering Section. Applications for exemption in remote areas will be considered; it is anticipated that no exemptions will be granted in high, medium or low density geographic locations.

### REASONS

The purpose of the embargo on 519–520 MHz is to support the expansion of UHF television channel 27. This channel is currently 6 MHz wide; a channel of 7 MHz width is required to accommodate a standard analog or digital television emission.

The purpose of the embargo on 518–519 MHz is to preserve planning options for adjacent channel sharing. These parameters will be established once the future of channel 27 is decided.

The band is embargoed to ensure that ACMA's ability to implement the resulting planning arrangements is not constrained by the use of the bands by additional radiocommunications services.

### HISTORY

In September 2007 the embargo was revised to include editorial and formatting changes.

### EMBARGO AUTHORISATION:

[signed] 27/09/2007

Geoff McMillen  
Manager  
Spectrum Engineering Section  
Spectrum Planning Branch  
Australian Communications and Media Authority

## EMBARGO 46

<b>FREQUENCY RANGE(S):</b>	5900–5950 kHz 7300–7350 kHz 9400–9500 kHz 11600–11650 kHz 12050–12100 kHz 13570–13600 kHz 13800–13870 kHz 15600–15800 kHz 17480–17550 kHz 18900–19020 kHz
<b>SUBJECT:</b>	Embargo on new frequency assignments to encourage the introduction of digitally modulated emissions for broadcasting services in HF bands
<b>DATE OF EFFECT:</b>	6 February 2007 (last revised September 2007)
<b>COVERAGE:</b>	Australia-wide
<b>TIME FRAME:</b>	Ongoing

### INSTRUCTIONS

No new frequency assignments are to be made for any location in Australia or its Territories and adjacent areas in the frequency bands listed above. This includes frequency assignments for existing licensees seeking to expand or modify their radiocommunications systems in the bands.

Exceptions to this embargo require case-by-case consideration and the approval of the Manager, Spectrum Engineering Section. ACMA will consider licence applications for frequency assignments for existing licensees of overseas HF broadcasting services using digitally modulated emissions in accordance with the provisions of Resolution 517 of the International Telecommunication Union (ITU) for those frequencies coordinated in accordance with Article 12 of the *Radio Regulations* of the ITU.

### REASON

The World Administrative Radio Conference of the ITU held in 1992 made decisions concerning the above frequency bands that from 1 April 2007 will result in changed status for existing fixed and mobile services with the introduction of broadcasting services. In Australia, existing services may continue to operate provided that their communication is limited to within the boundary of Australia and on the condition that harmful interference is not caused to the broadcasting service. In addition, existing services must accept interference from broadcasting services.

The ITU World Radiocommunication Conference held in 2003 urged administrations to use the above bands to facilitate the introduction of digitally modulated emissions for broadcasting services in accordance with the provisions of ITU Resolution 517 (Rev. WRC-03).

In addition, ACMA intends to implement the intention of the Australian Government to facilitate the introduction of digital radio by inclusion of the above bands in its planning for the introduction of digital radio.

Considering these reasons it is necessary to regulate use of the bands to facilitate these outcomes. This embargo is intended to do this by encouraging the introduction of digitally modulated emissions for broadcasting services and limiting the use of other emissions.

### COMMENTS

Digitally modulated emissions for broadcasting services potentially provide efficiencies in spectrum use and provide significant benefits for users including greater program quality and

service availability. The radiofrequency spectrum is a finite resource of significant value to the Australian community. ACMA responsibilities include its management for the overall public benefit to which end ACMA facilitates its efficient use and methods to improve services it supports.

## **HISTORY**

In September 2007 the embargo was revised to include minor editorial changes.

## **EMBARGO AUTHORISATION:**

[signed]                      27/09/2007

Geoff McMillen  
Manager  
Spectrum Engineering Section  
Spectrum Planning Branch  
Australian Communications and Media Authority



## EMBARGO 47

<b>FREQUENCY RANGE(S):</b>	7250–7750 MHz 7900–8400 MHz 10.95–12.75 GHz 13.75–14.50 GHz
<b>SUBJECT:</b>	Embargo on new frequency assignments for stations in terrestrial services near Geraldton
<b>DATE OF EFFECT:</b>	24 September 2007
<b>COVERAGE:</b>	Within 75 km of latitude 28° 41' 38" south, longitude 114° 50' 43" east (GDA94)
<b>TIME FRAME:</b>	Until further notice

### INSTRUCTIONS

No new assignments are to be made in the frequency bands 7250–7750 MHz, 7900–8400 MHz, 10.95–12.75 GHz and 13.75–14.5 GHz within 75 km of latitude 28° 41' 38" south, longitude 114° 50' 43" east (near Kojarena, Western Australia). The embargo applies to all apparatus-licensed terrestrial stations (including those in the fixed and mobile services) located within the specified zone. This includes assignments for existing licensees seeking to expand or modify their radiocommunications systems in the bands.

This embargo does not apply to assignments for satellite Earth stations consistent with relevant planning arrangements.

Exceptions to this embargo require case-by-case consideration and the approval of the Manager, Spectrum Engineering Section. Exemptions will only be granted if the proposed assignments can be shown to successfully coordinate with planned geostationary satellite orbit Earth station operations at this location.

### REASON

The purpose of the embargo is to support planned activities at the Australian Defence Satellite Communication Station (ADSCS) located at Kojarena, near Geraldton, WA.

### EMBARGO AUTHORISATION:

[signed] 26/09/2007

Geoff McMillen  
Manager  
Spectrum Engineering Section  
Spectrum Planning Branch  
Australian Communications and Media Authority

## EMBARGO 48

<b>FREQUENCY RANGE:</b>	5850–5925 MHz
<b>SUBJECT:</b>	Embargo on new frequency assignments to support planning for the introduction of intelligent transport systems
<b>DATE OF EFFECT:</b>	24 April 2008
<b>COVERAGE:</b>	Australia-wide
<b>TIME FRAME:</b>	Until further notice

### INSTRUCTIONS

No new frequency assignments are to be made in the frequency band 5850–5925 MHz. The embargo applies to all apparatus-licensed stations for any location in Australia or its Territories. This includes frequency assignments for existing licensees seeking to expand or modify their radiocommunications systems in the band.

This embargo also applies to proposed services, any part of whose necessary emission bandwidth is within the embargoed frequency band, and includes channel 1 of the interleaved channelling plan for the 6 GHz band described in the Radiocommunications Assignment and Licensing Instruction (RALI) FX 3.

Exceptions to this embargo require case-by-case consideration and the approval of the Manager, Spectrum Engineering Section.

### REASON

The purpose of the embargo is to support planning for the introduction of intelligent transport systems (ITS) into Australia. ACMA is considering the international development of regulatory and channelling arrangements, and the development of Australian requirements, for ITS in the band; and needs to preserve the availability of the band for future use by ITS in Australia.

### COMMENTS

ITS involves the application of information and communications technology (ICT) to solve transport issues such as safety, mobility and pollution. ITS uses a broad range of wireless technologies intended to be incorporated in transport system infrastructure and in vehicles. ITS uses dedicated short-range communications (DSRC) technologies and typically involves data transfer over short distances between infrastructure and vehicles, and between vehicles. The introduction of ITS and the planning of its spectrum requirements is supported by Australian road safety and planning authorities.

### EMBARGO AUTHORISATION:

[signed] 24/04/2008

Geoff McMillen  
Manager  
Spectrum Engineering Section  
Spectrum Planning Branch  
Australian Communications and Media Authority

## EMBARGO 49

<b>FREQUENCY RANGE(S):</b>	2015–2100 MHz 2100–2130 MHz 2190–2280 MHz 2280–2310 MHz 6700–7075 MHz 7135–7245 MHz 7250–7750 MHz 7900–8390 MHz 8390–8460 MHz 8460–8510 MHz 8540–8660 MHz 10700–14800 MHz 15349–15410 MHz 15430–15630 MHz 17200–21400 MHz 22200–22510 MHz 24750–25250 MHz 25500–31000 MHz 33400–36000 MHz 37500–43500 MHz 47200–51400 MHz 52590–59300 MHz
<b>SUBJECT:</b>	Embargo on new frequency assignments for terrestrial radiocommunication services
<b>DATE OF EFFECT:</b>	2 April 2009 (last revised 2 August 2019)
<b>COVERAGE:</b>	Within the following distances from Depot Hill Road site, Yarragadee, 18.5 kilometres NW of Mingenew, Western Australia (29 degrees, 2 minutes, 47 seconds South Latitude and 115 degrees, 20 minutes, 35 seconds East Longitude): <ul style="list-style-type: none"><li>• 300 kilometres for 2100–2130 MHz, 2280–2310 MHz;</li><li>• 190 kilometres for 7135–7200 MHz and 8390–8460 MHz; otherwise</li><li>• 150 kilometres for bands below 12 GHz;</li><li>• 100 kilometres for bands above 12 GHz.</li></ul>
<b>TIME FRAME:</b>	Until further notice

### INSTRUCTIONS

No new frequency assignments for terrestrial services are to be made within the specified distances of the Mingenew site, Western Australia in the frequency bands listed above. This includes assignments for existing licensees seeking to expand or modify their communications systems in the bands.

Terrestrial services are all services other than the space research service and Earth stations communicating with space objects (GSO and non-GSO communications satellites).

The embargo does not apply to stations operated by Australian Defence Force or the Department of Defence in the band 8500–8510 MHz.

Exceptions to this embargo require case-by-case consideration and the approval of the Manager, Spectrum Planning Section.

## **REASONS**

The purpose of this embargo is to support the development of space communications facilities in the general area of the Mingenew site. Space communications stations typically have particular interference protection requirements and can result in unacceptably large areas of spectrum denial to terrestrial services. In addition, consequences of communications failure due to interference can have unacceptable consequences for some space activities particularly space exploration in the space research service. The potential impact of space communications services on spectrum availability for other services is such that ACMA encourages restriction of their operation to locations beyond propagation range of areas of significant spectrum use by other services.

## **COMMENTS**

Lead times for planning space communications, including deep space for space research, are typically many years. In order for such planning to have certainty of spectrum access it is necessary for spectrum to be withheld from other services for considerable periods of time. This requirement can be difficult to satisfy in areas of spectrum demand by terrestrial services. Considering this, ACMA encourages the siting of such stations at locations beyond propagation range of areas of spectrum demand in order to minimise the impact on spectrum availability for other services. The Mingenew site is one such location which ACMA intends to protect for space related communications activities.

The 300 kilometres criterion for 2100–2130 MHz and 2280–2310 MHz and the 190 kilometres criterion for 7135–7200 MHz and 8390–8460 MHz recognise the particular requirements for deep-space communications involving space exploration missions and the interference protection levels specified in the Radio Regulations of the International Telecommunication Union.

Note that embargo 23 also applies limitation on the bands 2190–2300 MHz and 2015–2110 MHz to facilitate the introduction of television outside broadcast services. Arrangements for the coordination and operation of TOB services with respect to Mingenew are contained in RALI FX 21 and that RALI should be referred to when considering assignments for TOB services in bands covered by this embargo.

## **HISTORY**

This embargo was put in place in April 2009 to support the development of space communications facilities in low spectrum impact areas.

This embargo was updated in July 2015 to include minor additions (2015–2025 MHz, 2190–2200 MHz, 7200–7245 MHz and 8500–8510 MHz) to existing frequency ranges to further encourage the support the development of space communications facilities in the general area of the Mingenew site.

In August 2019, 3400–4200 MHz and 5850–6700 MHz bands were removed from embargo 49. These bands are now subject to the coordination procedures contained in RALI MS 44.

## **EMBARGO AUTHORISATION:**

Approved 2/08/2019

Zarko Krusevac  
Manager, Spectrum Planning Section  
Spectrum Planning and Engineering Branch  
Australian Communications & Media Authority

## EMBARGO 50

<b>FREQUENCY RANGES:</b>	403–403.9875 MHz 405.0125–406 MHz 409.0375–410.5375 MHz 412.4625–413.4375 MHz 414.4625–415.5625 MHz 418.4875–420 MHz 420–420.75 MHz 421.25–424.75 MHz 425.25–427.75 MHz 428.25–430 MHz 457.5–459.9875 MHz 467.5–469.9875 MHz
<b>SUBJECT:</b>	Embargo on new frequency assignments to support arrangements for harmonised government spectrum primarily to support national security, law enforcement and emergency services
<b>DATE OF EFFECT:</b>	2 April 2009 (last revised 30 April 2010)
<b>COVERAGE:</b>	Australia-wide
<b>TIME FRAME:</b>	Ongoing

### INSTRUCTIONS

No new assignments are to be made in the frequency bands 403–403.9875 MHz, 405.0125–406 MHz, 408.6375–410.5375 MHz, 412.4625–413.4375 MHz, 414.4625–415.4375 MHz, 418.0875–420 MHz, 420–420.75 MHz, 421.25–424.75 MHz, 425.25–427.75 MHz and 428.25–430 MHz, except to Federal, State and Territory government agencies involved in national security, law enforcement or the provision of emergency services operating in accordance with the C.O.A.G approved national framework for government radiocommunications interoperability.

New assignments to other parts of Federal, State and Territory government are permitted provided assignments for government agencies involved in the national security, law enforcement or the provision of emergency services have been accommodated.

Licensees other than Federal, State and Territory government agencies involved in national security, law enforcement or the provision of emergency services and other government agencies accommodated in the band must cease operation or relocate outside of this spectrum by 31 December 2015 in high and medium density areas and 31 December 2018 outside high and medium density areas except in the 457.5–459.9875 MHz and 467.5–469.9875 MHz where users must cease operation or relocate outside of this spectrum by 31 December 2014 in high and medium density areas and 31 December 2015 outside high and medium density areas. Authorisation from the relevant state/territory government NCCGR authority stating that the user will be accommodated in the government band will be required to continue operation in this spectrum.

Exceptions to this embargo require case-by-case consideration and approval of the Manager, Spectrum Engineering Section.

### REASONS

The purpose of this embargo is to support arrangements for harmonised government spectrum for Federal, State and Territory governments primarily to meet the strategic communications needs of national security, law enforcement and emergency services organisations, including interoperability objectives.

If in doubt about the applicability of this embargo to any particular frequency assignment, please contact the Manager, Government Planning Section for further advice.

## **HISTORY**

The embargo was put in place in April 2009 to preserve planning options associated with the review of the 400 MHz band (403–430 MHz and 440–520 MHz).

The embargo was reviewed and amended in July 2009 to clarify its intent and applicability.

The embargo was again reviewed and amended in April 2010 to reflect the ACMA's final decision regarding the identification of harmonised government spectrum.

## **EMBARGO AUTHORISATION:**

[signed]                      16/07/2010

Geoff McMillen  
Manager  
Spectrum Engineering Section  
Spectrum Infrastructure Branch  
Australian Communications and Media Authority

## EMBARGO 51

<b>FREQUENCY RANGE(S):</b>	403–518 MHz
<b>SUBJECT:</b>	Embargo on new land mobile frequency assignments requiring channel bandwidths greater than 12.5 kHz, and on high power single frequency assignments
<b>DATE OF EFFECT:</b>	2 April 2009 (last revised September 2012)
<b>COVERAGE:</b>	Australia-wide
<b>TIME FRAME:</b>	Until further notice

### INSTRUCTIONS

No new frequency assignments for the land mobile service requiring channel bandwidths greater than 12.5 kHz are to be made in the frequency band 403–518 MHz within high density areas (HDAs) and medium density areas (MDAs)<sup>4</sup>.

No new high power frequency assignments for the single frequency land mobile service within HDAs and MDAs or on communal sites (defined as a site with more than a single licensee with assignments in the 400 MHz band at that site) outside HDAs and MDAs.

Exceptions to this embargo require case-by-case consideration and approval of the Manager, Spectrum Engineering Section.

### REASONS

The purpose of this embargo is to support measures to address congestion in HDAs and MDAs as part of planning activities in the 400 MHz band (403–430 MHz and 450–520 MHz).

If in doubt about the applicability of this embargo to any particular frequency assignment, please contact the Manager, National Interest Planning Section for further advice.

### HISTORY

The embargo was put in place in April 2009 to support planning options associated with the review of the 400 MHz band, and subsequently reviewed and amended in July 2009.

The embargo was reviewed and amended in April 2010 to reflect the ACMA's final decision regarding the identification of harmonised government spectrum.

The embargo was amended in September 2010 to limit its frequency scope to 518 MHz, to remove the wideband fixed point-to-point service from its scope and to clarify that its scope does not include to point-to-multipoint systems in any part of the 400 MHz band.

The embargo was amended in September 2012 to clarify requirements for communal sites in low and remote density areas and to remove information pertaining to existing assignments as these requirements are covered by MS22.

### EMBARGO AUTHORISATION:

[signed] 25/09/2012

Mark Arkell  
Manager  
Spectrum Engineering and Space  
Australian Communications and Media Authority

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<sup>4</sup> As defined in the ACMA [Apparatus Licence Fee Schedule](#).

## EMBARGO 52

<b>FREQUENCY RANGE(S):</b>	3400–3575 MHz 3600–3700 MHz
<b>SUBJECT:</b>	Embargo on new frequency assignments in the Woomera Prohibited Area (WPA)
<b>DATE OF EFFECT:</b>	14 September 2009 (last revised Nov. 2009)
<b>COVERAGE:</b>	Inside the designated areas, for point-to multipoint services, as specified in <a href="#">Attachment 1</a> .
<b>TIME FRAME:</b>	Ongoing

### INSTRUCTIONS

No assignments are to be made for wireless access services (WAS - point-to-multipoint services) where any part of whose necessary bandwidth is in the frequency ranges 3400–3575 MHz or 3600–3700 MHz inside the designated areas detailed in [Attachment 1](#).

Any applications for case-by-case exemptions are to be referred to the Manager, Spectrum Engineering Section for consideration.

### REASONS

The purpose of the embargo is to facilitate ongoing use of the WPA by the Department of Defence for activities that are subject to Part 1.4, Division 4 of the *Radiocommunications Act 1992*.

### COMMENTS

In regional and remote areas of Australia the 3.4 GHz (3400–3575 MHz) and 3.6 GHz (3575–3700 MHz) bands have been identified for use by wireless access services (point-to-multipoint services). This embargo limits the use of these bands by WAS to 25 MHz (3575–3600 MHz) inside the WPA.

### HISTORY

This embargo was put in place in 14<sup>th</sup> September 2009.

This embargo was amended on the 26<sup>th</sup> November 2009 to include the 3.4 GHz (3400–3575 MHz) band.

### EMBARGO AUTHORISATION:

[signed] 26/11/2009

Geoff McMillen  
Manager  
Spectrum Engineering Section  
Spectrum Planning Branch  
Australian Communications and Media Authority



## Attachment 1

### INSTRUCTIONS

No assignments are to be made for wireless access services (point-to-multipoint services) in the frequency ranges 3400–3575 MHz and 3600–3700 MHz inside the geographical areas whose boundaries are described by the locations specified in the tables below:

The datum used for all geographic coordinates in this attachment is the Geocentric Datum of Australia 1994 (GDA94).

Point	Latitude	Longitude
1	-30.410	132.000
2	-30.331	132.002
3	-30.081	132.002
4	-30.081	131.503
5	-29.999	131.502
6	-29.747	131.502
7	-29.498	131.501
8	-29.001	131.502
9	-28.499	131.502
10	-28.117	131.502
11	-28.117	132.001
12	-28.075	132.001
13	-27.999	132.002
14	-27.839	132.002
15	-27.839	132.500
16	-27.840	133.000
17	-27.839	133.501
18	-27.840	133.697
19	-27.839	133.835
20	-27.999	133.836
21	-28.531	133.839
22	-28.530	134.095
23	-28.746	134.095
24	-29.001	134.344
25	-29.011	134.358
26	-29.115	134.357
27	-29.115	134.950
28	-28.999	134.951
29	-28.742	134.951
30	-28.742	135.001

Point	Latitude	Longitude
31	-28.742	135.173
32	-28.721	135.172
33	-28.722	135.507
34	-28.723	135.838
35	-28.769	135.893
36	-28.959	136.277
37	-29.070	136.432
38	-29.292	136.601
39	-29.781	136.602
40	-29.856	136.636
41	-29.974	136.636
42	-29.993	136.669
43	-29.993	136.735
44	-30.000	136.735
45	-30.532	136.736
46	-30.532	136.842
47	-30.624	136.843
48	-30.624	136.913
49	-30.980	136.905
50	-31.193	136.869
51	-31.235	136.822
52	-31.232	136.396
53	-31.099	135.884
54	-31.001	135.817
55	-30.912	135.762
56	-30.912	135.554
57	-30.908	135.361
58	-30.844	135.360
59	-30.410	132.000

## EMBARGO 53

<b>FREQUENCY RANGES:</b>	406.1–408.6375 MHz 410.5375–412.4625 MHz 415.5625–418.0875 MHz 450–450.4875 MHz 452.5–457.50625 MHz 462–467.50625 MHz 469.9875–476.4125 MHz 477.41875–518 MHz
<b>SUBJECT:</b>	Embargo on new frequency assignments to national security, law enforcement and emergency services
<b>DATE OF EFFECT:</b>	30 April 2010 (last revised September 2012)
<b>COVERAGE:</b>	Australia-wide
<b>TIME FRAME:</b>	Ongoing

### INSTRUCTIONS

No new assignments are to be made to Federal, State and Territory government agencies for the purposes of national security, law enforcement or the provision of emergency services in the frequency bands 406.1–408.6375 MHz, 410.5375–412.4625 MHz, 415.5625–418.0875 MHz, 450–450.4875 MHz, 452.5–457.50625 MHz, 462–467.50625 MHz, 469.9875–476.4125 MHz and 477.41875–518 MHz.

New assignments to Federal, State and Territory government agencies are permitted in the frequency ranges above provided it can be demonstrated that they cannot be accommodated in spectrum set aside for government purposes.

Exemptions from this embargo require case-by-case consideration and approval by the Manager, Spectrum Engineering Section.

### REASONS

The purpose of this embargo is to support arrangements for harmonised government spectrum for Federal, State and Territory governments primarily to meet the strategic communications needs of national security, law enforcement and emergency services organisations, including interoperability objectives.

If in doubt about the applicability of this embargo to any particular frequency assignment, please contact the Manager, Spectrum Engineering Section for further advice.

### HISTORY

The embargo was put in place in April 2010 to support the identification of harmonised government spectrum in the 400 MHz band (403–430 MHz and 450–520 MHz).

The embargo was amended in July 2011 to extend its applicability to all government services, to excise segments Q, R, U and V and its upper limit was reduced to 518 MHz from 520 MHz.

The embargo was amended in June 2012 to exclude the UHF Citizen Band (segment EE) from its scope.

### EMBARGO AUTHORISATION:

[signed] 25/09/2012

Mark Arkell  
Manager  
Spectrum Engineering Section  
Australian Communications and Media Authority

**EMBARGO 54**

**Status:** Lifted

**EMBARGO 55**

**Status:** Lifted

**EMBARGO 56**

**Status:** Lifted

**EMBARGO 57**

**Status:** Not used

**EMBARGO 58**

**Status:** Not used

## EMBARGO 59

<b>FREQUENCY RANGE(S):</b>	7250–7750 MHz 7900–8400 MHz
<b>SUBJECT:</b>	Embargo on new frequency assignments for stations in terrestrial services near Kapooka, NSW
<b>DATE OF EFFECT:</b>	22 June 2010
<b>COVERAGE:</b>	Within 75 km of latitude 35° 10' 16" south, longitude 147° 15' 43" east (GDA94)
<b>TIME FRAME:</b>	Until further notice

### INSTRUCTIONS

No new assignments are to be made in the frequency bands 7250–7750 MHz and 7900–8400 MHz within 75 km of latitude 35° 10' 16" south, longitude 147° 15' 43" east (Kapooka, NSW). The embargo applies to all apparatus-licensed terrestrial stations (including those in the fixed and mobile services) located within the specified zone. This includes assignments for existing licensees seeking to expand or modify their radiocommunications systems in the bands.

This embargo does not apply to assignments for satellite Earth stations consistent with relevant planning arrangements.

Exceptions to this embargo require case-by-case consideration and approval of the Manager, Spectrum Engineering Section. Exemptions will only be granted if the proposed assignments can be shown to successfully coordinate with planned geostationary satellite orbit Earth station operations at this location.

### REASON

The purpose of the embargo is to support potential development of a Defence satellite Earth station at Kapooka, near Wagga Wagga, NSW.

### EMBARGO AUTHORISATION:

[signed] 22/06/2010

Geoff McMillen  
Manager  
Spectrum Engineering Section  
Spectrum Infrastructure Branch  
Australian Communications and Media Authority

## EMBARGO 60

<b>FREQUENCY RANGES:</b>	408.6375–409.04375 MHz 418.0875–418.49375 MHz 450.050 MHz
<b>SUBJECT:</b>	Embargo on new frequency assignments to support formalising arrangements for the rail industry
<b>DATE OF EFFECT:</b>	16 July 2010 (revised September 2012)
<b>COVERAGE:</b>	Australia-wide
<b>TIME FRAME:</b>	Ongoing

### INSTRUCTIONS

No new assignments are to be made in the frequency bands 408.6375–409.04375 MHz and 418.0875–418.49375 MHz and the frequency 450.050 MHz except to organisations in the rail industry. In determining these organisations, the ACMA will be guided by advice from the Australasian Railway Association. All assignments for the land mobile service on the frequency 450.050 MHz shall be 12.5 kHz bandwidth or less.

Exceptions to this embargo require case-by-case consideration and approval of the Manager, Spectrum Engineering Section. The Australasian Railway Association will be consulted in considering any exception to this embargo.

### REASONS

The purpose of this embargo is to support planning options to support formalising arrangements for the rail industry as discussed in the ACMA paper *The Way Ahead- Decisions and implementation options for the 400 MHz Band5*.

If in doubt about the applicability of this embargo to any particular frequency assignment, please contact the Manager, Spectrum Engineering Section for further advice.

### HISTORY

This embargo was put in place in July 2010 to preserve planning options associated with the outcomes of the review of the 400 MHz band (403–430 MHz and 440–520 MHz). It was amended in August 2012 to correct frequency ranges.

### EMBARGO AUTHORISATION:

[signed] 25/09/2012

Mark Arkell  
Manager  
Spectrum Engineering Section  
Australian Communications & Media Authority

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<sup>5</sup> Available at [www.acma.gov.au/theACMA/ifc-112010-the-way-ahead-decisions-and-implementation-options-for-the-400-mhz-band](http://www.acma.gov.au/theACMA/ifc-112010-the-way-ahead-decisions-and-implementation-options-for-the-400-mhz-band)

## EMBARGO 61

<b>FREQUENCY RANGE(S):</b>	3492.5–3542.5 MHz
<b>SUBJECT:</b>	Embargo on all new frequency assignments to support future planning for terrestrial fixed and mobile services
<b>DATE OF EFFECT:</b>	21 January 2011
<b>COVERAGE:</b>	Australia-wide
<b>TIME FRAME:</b>	Until further notice

### INSTRUCTIONS

No assignments are to be made Australia-wide in the frequency range 3492.5–3542.5 MHz.

Any applications for case-by-case exemptions are to be referred to the Manager, Spectrum Engineering Section for consideration.

### REASONS

The purpose of the embargo is preserve future planning options in the band for terrestrial fixed and mobile services.

### COMMENTS

Internationally the band 3400–3600 MHz was identified for the implementation of IMT at WRC-07 by over 100 countries and, in a number of these and other countries, for other types of terrestrial wireless access. Currently there are relatively few assignments in the 3492.5–3542.5 MHz band Australia-wide.

### HISTORY

This embargo was put in place in January 2011.

### EMBARGO AUTHORISATION:

[signed] 14/01/2011

Geoff McMillen  
Manager  
Spectrum Engineering Section  
Australian Communications and Media Authority

## EMBARGO 62

<b>FREQUENCY RANGE(S):</b>	1710–1785 MHz 1805–1880 MHz
<b>SUBJECT:</b>	Embargo on apparatus licence frequency assignments to support use of the band for PTS
<b>DATE OF EFFECT:</b>	21 January 2011 (last revised January 2016)
<b>COVERAGE:</b>	Major metropolitan and regional areas for PTS apparatus licences, Australia-wide for all other services
<b>TIME FRAME:</b>	Until further notice

### INSTRUCTIONS

No assignments are to be made for Apparatus Licences Australia-wide in the frequency ranges 1710–1785 MHz and 1805–1880 MHz, with the exception of Apparatus Licences for Public Telecommunication Services (PTS) outside the area described in Attachment 1. This limits PTS licences to remote areas of Australia.

Any applications for case-by-case exemptions are to be referred to the Manager, Spectrum Engineering Section for consideration.

### REASONS

The purpose of the embargo is to preserve future planning options in the defined frequency ranges for terrestrial mobile services.

The purpose of the January 2016 update is to facilitate PTS in remote Australia.

### COMMENTS

Consultation on the use of the band for PTS began in 2012, as a result of which, Apparatus Licences for PTS in the 1800 MHz Band in remote Australia are permitted. Coordination and licensing procedures for Apparatus Licensed mobile services in the 1800 MHz Band are detailed in [RALI MS 34](#).

### EMBARGO AUTHORISATION:

Approved 12/01/2016

Mark Arkell  
Manager  
Spectrum Engineering Section  
Australian Communications and Media Authority

## **ATTACHEMENT 1:**

Apparatus Licences for PTS are permitted outside the area described by the following HCIS:

BV, IW, LX, LY, MW, NT, NU, AU9, AV9, AW3, BU7, BU8, BU9, BW1, BW2, BW3, BW5, BW6, CV4, CV7, CW1, CW4, GV1, GV2, GV3, GV6, HV1, HV2, HV4, HV5, HV6, HV8, HV9, HW3, HW6, IV4, IV5, IV6, IV7, IV8, IV9, JV4, JV5, JV7, JV8, JW1, JW2, JW4, JW5, JW6, JW7, JW8, JW9, JX1, JX2, JX3, JX5, JX6, KW4, KW5, KW6, KW7, KW8, KW9, KX1, KX2, KX3, KX4, KX5, KX6, KX8, KX9, KY2, KY3, KY6, LQ1, LQ2, LQ4, LQ5, LQ7, LQ8, LR2, LR3, LR5, LR6, LV9, LW2, LW3, LW4, LW5, LW6, LW7, LW8, LW9, LZ1, LZ2, LZ3, MR1, MR4, MR5, MR7, MR8, MR9, MS1, MS2, MS3, MS4, MS5, MS6, MS8, MS9, MT3, MT6, MT9, MU3, MU5, MU6, MU8, MU9, MV2, MV3, MV4, MV5, MV6, MV7, MV8, MV9, MX1, MX2, MX3, MX4, MX7, MY1, MY4, MY7, MZ1, NS4, NS7, NS8, NS9, NV1, NV2, NV3, NV4, NV5, NV7, NW1, GO7C, GO7D, GO7G, GO7H, GO7K, GO7L, GO8A, GO8E, GO8I

HCIS area descriptions can be converted into a Placemark file (viewable in Google Earth) through the [Convert HCIS area description to Placemark](#) facility on the ACMA website.

The HCIS is described in the [Australian Spectrum Map Grid 2012](#).



**EMBARGO 63**

**Status:** Lifted

**EMBARGO 64**

**Status:** Lifted

## EMBARGO 65

<b>FREQUENCY RANGE(S):</b>	2300–2302 MHz
<b>SUBJECT:</b>	Embargo on all new frequency assignments to support expansion of the 2.3 GHz spectrum licence.
<b>DATE OF EFFECT:</b>	25 September 2012
<b>COVERAGE:</b>	Australia-wide
<b>TIME FRAME:</b>	Until further notice

### INSTRUCTIONS

No new frequency assignments are to be made in the band 2300–2302 MHz.

Any applications for case-by-case exemptions are to be referred to the Manager, Spectrum Engineering and Space Section for consideration.

### REASONS

The purpose of the embargo is to support the designation of the band 2300–2302 MHz for spectrum licensing Australia-wide. It is intended that this designation will extend the existing 2.3 GHz (2302–2400 MHz) spectrum licence band to cover the 2300–2400 MHz band Australia-wide.

### COMMENTS

On 14 January 2000 the band 2302–2400 MHz was designated for spectrum licensing throughout Australia in the [Radiocommunications \(Spectrum Designation\) Notice No. 1 of 2000](#).

The ACMA has previously indicated it would review options to expand the 2.3 GHz spectrum licence band from 98 MHz to 100 MHz Australia-wide, most recently in the [Five-year spectrum outlook](#) 2012–2016.

### EMBARGO AUTHORISATION:

[signed] 25/09/2012

Mark Arkell  
Manager  
Spectrum Engineering and Space  
Australian Communications and Media Authority

**EMBARGO 66**

**Status:** Lifted

## EMBARGO 67

<b>FREQUENCY RANGE(S):</b>	45–52 MHz 56–70 MHz 85–87.5 MHz 137–144 MHz
<b>SUBJECT:</b>	Embargo on new frequency assignments for broadcasting licence types
<b>DATE OF EFFECT:</b>	6 February 2014 (last revised 31 March 2017)
<b>COVERAGE:</b>	Australia-wide
<b>TIME FRAME:</b>	Until further notice

### INSTRUCTIONS

No new frequency assignments for any broadcasting licence types (including narrowcasting) are to be made in the above mentioned bands corresponding to former analog television channels 0, 1, 2, 3 (in part) and 5A Australia-wide.

An exemption applies to licences issued for 30 days or less to facilitate the use of this spectrum for special events.

Any applications for case-by-case exemptions are to be referred to the Manager, Spectrum Engineering Section for consideration.

### REASONS

The purpose of the embargo is to preserve planning options for the future use of these bands while they are under review.

### COMMENTS

The ACMA intends to undertake a review into future use of VHF broadcasting bands vacated by analog television services.

Non-broadcasting usage of these bands is permitted, consistent with the Australian Radiofrequency Spectrum Plan and any other planning and licensing requirements. Such use in each band is enabled by section 34 'drop throughs' (Broadcasting Services Act).

The embargo does not cover the 87.5–108 MHz FM radio broadcasting band in which a limited number of analog television services operated on channels 3, 4 and 5.

### HISTORY

In March 2017, this embargo was revised to include the band 85–87.5 MHz. When the initial embargo was put in place this band was governed by a statutory band plan *VHF mid band frequency band plan 1991* which limited the potential usage of this band for broadcasting. That frequency band plan has sunset and been replaced by RALI MS42 which under some circumstances would appear to permit broadcasting assignments. To clarify that broadcasting is not intended to occur in this band until a review is undertaken the embargo was extended to explicitly include the 85–87.5 MHz band.

### EMBARGO AUTHORISATION:

Approved 31/03/2017

Mark Arkell  
Manager  
Spectrum Engineering and Space  
Australian Communications and Media Authority

## EMBARGO 68

<b>FREQUENCY RANGE(S):</b>	3400–3425 MHz
<b>SUBJECT:</b>	Embargo on all new frequency assignments to support future planning for possible terrestrial fixed and mobile services.
<b>DATE OF EFFECT:</b>	12 May 2014
<b>COVERAGE:</b>	Australia-wide
<b>TIME FRAME:</b>	Until further notice

### INSTRUCTIONS

No assignments are to be made Australia-wide in the frequency range 3400–3425 MHz.

Any applications for case-by-case exemptions are to be referred to the Manager, Spectrum Engineering Section for consideration.

### REASONS

The purpose of the embargo is preserve future planning options in the band for possible terrestrial fixed and mobile services.

### COMMENTS

Internationally the band 3400–3600 MHz was identified for the implementation of IMT at WRC-07 by over 100 countries and, in a number of these and other countries, for other types of terrestrial wireless access.

Currently there are relatively few assignments in the 3400–3425 MHz band Australia-wide.

### EMBARGO AUTHORISATION:

[signed] 12/05/2014

Mark Arkell  
Manager  
Spectrum Engineering  
Australian Communications and Media Authority

**EMBARGO 69**

**Status:** Lifted

## EMBARGO 70

<b>FREQUENCY RANGE(S):</b>	1427–1518 MHz
<b>SUBJECT:</b>	Restriction on all new frequency assignments to preserve future planning options in the identified frequency range.
<b>DATE OF EFFECT:</b>	20 April 2016
<b>COVERAGE:</b>	Metropolitan and Regional Areas
<b>TIME FRAME:</b>	Until further notice

### INSTRUCTIONS

No assignments are to be made in defined Metropolitan and Regional Areas (refer to Attachment 1 for a description) for apparatus licences in the frequency range 1427–1518 MHz. Case-by-case exemptions are to be referred to the Manager, Spectrum Engineering Section for consideration.

Any new/existing licences in the 1427–1518 MHz band will be issued/renewed for a maximum period of one-year at a time. This policy applies Australia-wide (i.e. including remote areas).

### REASONS

The purpose of the embargo is to preserve future planning options in the identified frequency range and minimise the impact that a future possible change in highest value use of the band might cause.

### COMMENTS

The 1427–1518 MHz frequency range is currently used for a mix of mobile (aeronautical) and terrestrial fixed services. WRC-15 identified the 1427–1452 MHz and 1492–1518 MHz frequency ranges world-wide for the implementation of International Mobile Telecommunications (IMT). The 1452–1492 MHz frequency range was also identified in Region 2 (North and South America), Region 3 (Asia-Pacific) and numerous Region 1 countries (African and Middle East Nations) for the implementation of IMT.

Given significant global interest in the 1427–1518 MHz frequency range for IMT, the ACMA intends to review arrangements in the bands.

It is noted that the *Radiocommunications [1.5 GHz Frequency Band Plan 2015](#)* already applies to the 1452–1492 MHz frequency band. This embargo restricts the issue of any new licences except point-to-multipoint services operated on specific frequencies and used for the delivery of public telecommunications services in a rural or remote area.

### EMBARGO AUTHORISATION:

[approved] 20/04/2016

Mark Arkell  
Manager  
Spectrum Engineering  
Australian Communications and Media Authority

## ATTACHMENT 1:

For the purpose embargo 70, Metropolitan and Regional areas are described by the following HCIS area description:

BV, JW, IW, KW, LX, LY, MV, MW, NT, NU, AU2, AU3, AU6, AU9, AV9, AW3, BU1, BU2, BU4, BU5, BU7, BU8, BU9, BW1, BW2, BW3, BW5, BW6, CV4, CV7, CW1, CW4, GV1, GV2, GV3, GV6, HV1, HV2, HV4, HV5, HV6, HV8, HV9, HW3, HW6, IV4, IV5, IV6, IV7, IV8, IV9, JV4, JV5, JV7, JV8, JV9, JX1, JX2, JX3, JX5, JX6, KV7, KX1, KX2, KX3, KX4, KX5, KX6, KX8, KX9, KY2, KY3, KY6, LQ1, LQ2, LQ4, LQ5, LQ7, LQ8, LR2, LR3, LR5, LR6, LV9, LW1, LW2, LW3, LW4, LW5, LW6, LW7, LW8, LW9, LZ1, LZ2, LZ3, MR1, MR4, MR5, MR7, MR8, MR9, MS1, MS2, MS3, MS4, MS5, MS6, MS8, MS9, MT3, MT6, MT9, MU3, MU5, MU6, MU8, MU9, MX1, MX2, MX3, MX4, MX7, MY1, MY4, MY7, MZ1, NS4, NS7, NS8, NS9, NV1, NV2, NV3, NV4, NV5, NV7, NW1, GO7C, GO7D, GO7G, GO7H, GO7K, GO7L, GO8A, GO8E, GO8I

HCIS area descriptions can be converted into a Placemark file (viewable in Google Earth) through the [Convert HCIS area description to Placemark](#) facility on the ACMA website.

The HCIS is described in the [Australian Spectrum Map Grid 2012](#).



**EMBARGO 71**

**Status:** Lifted

## EMBARGO 72

<b>FREQUENCY RANGES:</b>	2025–2110 MHz 2200–2290 MHz
<b>SUBJECT:</b>	Embargo on new frequency assignments for terrestrial radiocommunication services in parts of regional NSW and regional Queensland.
<b>DATE OF EFFECT:</b>	18 July 2018 (Last revised 2 August 2019)
<b>COVERAGE:</b>	Area 1, Area 2, Area 3 and Area 4. Refer to Attachment 1 for descriptions of Area 1, Area 2, Area 3 and Area 4.
<b>TIME FRAME:</b>	It is expected that embargo 72 will be reviewed before December 2020.

### INSTRUCTIONS

For the bands listed above no new frequency assignments for terrestrial services are to be made within Area 1, Area 2, Area 3 and Area 4 for all bands.

This includes assignments for existing licensees seeking to expand or modify their communications systems in the bands. Existing licences are not affected by this embargo.

For the purposes of this embargo, terrestrial services include all services other than Earth stations communicating with space objects (GSO and non-GSO satellites).

Exceptions to this embargo require case-by-case consideration and the approval of the Manager, Spectrum Planning Section.

Other embargoes and assignment restrictions should be considered in conjunction with this embargo. Particularly attention is drawn to embargo 23 which contains guidance regarding assignments for Earth station in 2025–2110 and 2200–2290 MHz.

### REASONS

The purpose of this embargo is to support the development of one or more areas providing long-term certainty and flexibility for the operation of commercial space communications teleport facilities in east Australia. Following on from the outcomes of the consultation on the future use of the 3.6 GHz band<sup>6</sup>, the ACMA has initially identified areas around Moree, Quirindi and Roma for further consideration as possible locations. These are described by Area 2, Area 3 and Area 4 respectively. Area 1 has been developed as protection zones of 150 km around each of Area 2, Area 3 and Area 4 to facilitate earth stations facilities being deployed in the areas.

It is recommended that, where possible, prospective commercial earth station licensees consider locating their facilities within Area 2, Area 3 or Area 4 and engaging with the ACMA in the process of choosing one or more eventual long-term earth station protection zones. These areas (2, 3 and 4) are currently the most likely areas to be identified to support the deployment and long-term operation of space communications teleport facilities in east Australia.

It is noted that if one or more of these sites are found to be unsuitable, embargo 72 will be reviewed to remove any assignment restrictions associated with the location(s).

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<sup>6</sup> [https://www.acma.gov.au/theACMA/future-approach-to-the-3\\_6-ghz-band](https://www.acma.gov.au/theACMA/future-approach-to-the-3_6-ghz-band)

## COMMENTS

Lead times for planning space communications are typically many years. In order for such planning to have certainty of spectrum access it is necessary for spectrum to be withheld from other services for considerable periods of time. This requirement can be difficult to satisfy in areas of high demand for spectrum by terrestrial services. Considering this, the ACMA encourages the siting of such stations at locations of low demand for access to spectrum in order to minimise the impact on spectrum availability for other services.

As consideration of each area (2, 3 and 4) progresses, the ACMA, where appropriate, will work with industry to replace the embargo with coordination requirements. It is expected that any such arrangements will be developed on a band by band basis. This will protect space communications and limit the effect on access to spectrum for terrestrial services within the listed bands. The bands included in embargo 72 will continue to be revised and reviewed depending on demand and associated protection requirements for satellite services.

## HISTORY

In July 2018 this embargo was revised to remove frequency ranges subject to defence footnotes AUS100, AUS100A (FIXED SATELLITE), AUS101 or AUS101A (FIXED SATELLITE) that is the 4500–4800, 7250–7750, 7900–8400, 147145–14800, 20200–21200, 30000–31000 and 33400–36000 MHz bands. Previously this advice was contained in the instructions by reference to the footnotes only. The July 2018 revision avoids any ambiguity as to what frequency ranges are subject to the embargo.

Also in July 2018 the 3575–4200 and 5850–6700 MHz bands were removed from embargo 72. These bands are now subject to the coordination procedures contained in RALI MS44.

In August 2019, the 5091–5250 MHz, 6700–7075 MHz, 10700–11700 MHz, 12200–13250 MHz, 13750–14714.5 MHz, 15430–15630 MHz, 17300–20200 MHz, 24650–25250 MHz, 27000–30000 MHz, 37500–43500 MHz, 47200–50200 MHz and 50400–51400 MHz bands were removed from embargo 72. These bands are now subject to the coordination procedures contained in RALI MS44.

## EMBARGO AUTHORISATION:

Approved                      2/08/2019

Zarko Krusevac

Manager  
Spectrum Planning Section  
Australian Communications and Media Authority

## ATTACHMENT 1:

For the purpose of embargo 72, Area 1 is defined by the following HCIS area description:

LT6, MT1, MT7, MT8, MU2, MU4, MU8, MU9, MV2, MV6, NV1, LT3H, LT3K, LT3L, LT3N, LT3O, LT3P, LT9B, LT9C, LT9D, LT9F, LT9G, LT9H, LT9K, LT9L, LT9P, MT2A, MT2B, MT2E, MT2F, MT2G, MT2H, MT2I, MT2J, MT2K, MT2L, MT2M, MT2N, MT2O, MT2P, MT3I, MT3M, MT4A, MT4B, MT4C, MT4D, MT4E, MT4I, MT4M, MT4N, MT5A, MT5B, MT5C, MT5D, MT5F, MT5G, MT5H, MT5J, MT5K, MT5L, MT5N, MT5O, MT5P, MT6A, MT6B, MT6E, MT6F, MT6I, MT6J, MT6M, MT6N, MT9A, MT9B, MT9E, MU1C, MU1D, MU1G, MU1H, MU1J, MU1K, MU1L, MU1N, MU1O, MU1P, MU3A, MU3B, MU3C, MU3E, MU3F, MU3G, MU3H, MU3I, MU3J, MU3K, MU3L, MU3M, MU3N, MU3O, MU3P, MU5A, MU5B, MU5E, MU5F, MU5I, MU5J, MU5M, MU5N, MU5O, MU5P, MU6B, MU6C, MU6D, MU6F, MU6G, MU6H, MU6J, MU6K, MU6L, MU6M, MU6N, MU6O, MU6P, MU7B, MU7C, MU7D, MU7F, MU7G, MU7H, MU7K, MU7L, MV1H, MV1L, MV3A, MV3B, MV3E, MV3I, MV3M, MV3N, MV5A, MV5B, MV5C, MV5D, MV5F, MV5G, MV5H, MV5K, MV5L, MV5P, NU1I, NU1M, NU1N, NU4A, NU4B, NU4E, NU4F, NU4G, NU4I, NU4J, NU4K, NU4M, NU4N, NU7A, NU7B, NU7E, NU7F, NU7G, NU7H, NU7I, NU7J, NU7K, NU7L, NU7M, NU7N, NU7O, NU7P, NU8I, NU8M, NV2A, NV2B, NV2E, NV2F, NV2I, NV2J, NV2M, NV2N, NV4A, NV4B, NV4C, NV4D, NV4E, NV4F, NV4G, NV4H, NV4I, NV4J, NV4K, NV4L, NV4M, NV4N, NV5A, NV5B, NV5E, LT3C9, LT3D5, LT3D6, LT3D7, LT3D8, LT3D9, LT3F9, LT3G2, LT3G3, LT3G4, LT3G5, LT3G6, LT3G7, LT3G8, LT3G9, LT3I9, LT3J2, LT3J3, LT3J4, LT3J5, LT3J6, LT3J7, LT3J8, LT3J9, LT3M3, LT3M5, LT3M6, LT3M8, LT3M9, LT5H3, LT5H6, LT5H9, LT5L3, LT5L6, LT5L9, LT5P3, LT5P6, LT9A1, LT9A2, LT9A3, LT9A4, LT9A5, LT9A6, LT9A8, LT9A9, LT9E2, LT9E3, LT9E6, LT9E9, LT9J1, LT9J2, LT9J3, LT9J5, LT9J6, LT9J9, LT9O1, LT9O2, LT9O3, LT9O5, LT9O6, LU3D2, LU3D3, LU6H3, LU6H6, LU6H9, LU6L3, LU6L6, LU6L9, MS7N8, MS7N9, MS7O7, MS7O8, MS7O9, MS7P7, MS7P8, MS7P9, MS8M7, MS8M8, MS8M9, MT2C4, MT2C5, MT2C6, MT2C7, MT2C8, MT2C9, MT2D7, MT3E4, MT3E7, MT3E8, MT3J4, MT3J7, MT3J8, MT3N1, MT3N2, MT3N4, MT3N5, MT3N6, MT3N7, MT3N8, MT3N9, MT4F1, MT4F2, MT4F3, MT4F4, MT4F5, MT4F6, MT4F7, MT4F8, MT4G1, MT4J1, MT4J2, MT4J4, MT4J5, MT4J7, MT4J8, MT4J9, MT4O4, MT4O5, MT4O7, MT4O8, MT4O9, MT4P6, MT4P7, MT4P8, MT4P9, MT5E1, MT5E2, MT5E3, MT5E5, MT5E6, MT5E8, MT5E9, MT5I3, MT5I6, MT5I8, MT5I9, MT5M2, MT5M3, MT5M4, MT5M5, MT5M6, MT5M7, MT5M8, MT5M9, MT6C1, MT6C4, MT6C7, MT6G1, MT6G4, MT6G7, MT6G8, MT6K1, MT6K2, MT6K4, MT6K5, MT6K7, MT6K8, MT6O1, MT6O4, MT6O7, MT9C1, MT9C4, MT9F1, MT9F2, MT9F3, MT9F4, MT9F5, MT9F7, MT9F8, MT9I1, MT9I2, MT9I3, MT9I4, MT9I5, MT9I6, MT9I7, MT9I8, MT9J1, MT9M1, MT9M4, MT9M5, MT9M6, MT9M7, MT9M8, MT9M9, MT9N4, MT9N5, MT9N7, MT9N8, MT9N9, MT9O7, MT9O8, MU1A1, MU1A2, MU1A3, MU1A5, MU1A6, MU1B1, MU1B2, MU1B3, MU1B4, MU1B5, MU1B6, MU1B9, MU1F6, MU1F8, MU1F9, MU1I6, MU1I9, MU1M2, MU1M3, MU1M5, MU1M6, MU1M7, MU1M8, MU1M9, MU3D1, MU3D4, MU3D5, MU3D6, MU3D7, MU3D8, MU3D9, MU5C1, MU5C2, MU5C3, MU5C4, MU5C5, MU5C6, MU5C7, MU5D1, MU5D2, MU5D3, MU5D4, MU5D5, MU5D6, MU5K7, MU6A1, MU6A2, MU6A3, MU6A4, MU6A5, MU6A6, MU6A8, MU6A9, MU6E3, MU6E6, MU6E9, MU6I3, MU6I6, MU6I8, MU6I9, MU7A1, MU7A2, MU7A3, MU7A5, MU7A6, MU7A8, MU7A9, MU7E3, MU7J2, MU7J3, MU7J6, MU7O3, MU7P1, MU7P2, MU7P3, MU7P4, MU7P5, MU7P6, MU7P8, MU7P9, MV1D2, MV1D3, MV1D4, MV1D5, MV1D6, MV1D7, MV1D8, MV1D9, MV1P1, MV1P2, MV1P3, MV1P4, MV1P5, MV1P6, MV1P8, MV1P9, MV3C1, MV3C2, MV3C3, MV3C4, MV3C5, MV3C6, MV3C7, MV3D1, MV3D2, MV3D3, MV3D4, MV3D5, MV3D6, MV3D8, MV3D9, MV3F1, MV3F2, MV3F4, MV3F7, MV3J1, MV3J4, MV3J7, MV3J8, MV3O4, MV3O5, MV3O6, MV3O7, MV3O8, MV3O9, MV3P2, MV3P3, MV3P4, MV3P5, MV3P6, MV3P7, MV3P8, MV3P9, MV4D2, MV4D3, MV4D5, MV4D6, MV4D9, MV4H3, MV5E1, MV5E2, MV5E3, MV5E4, MV5E5, MV5E6, MV5E8, MV5E9, MV5I3, MV5I6, MV5J1, MV5J2, MV5J3, MV5J4, MV5J5, MV5J6, MV5J8, MV5J9, MV5N3, MV5O1, MV5O2, MV5O3, MV5O4, MV5O5, MV5O6, MV5O9, MV8D3, MV9A1, MV9A2, MV9A3, MV9A6, MV9B1, MV9B2, MV9B3, MV9B4, MV9B5, MV9B6, MV9C1, MV9C2, MV9C3, MV9C4, MV9C5, MV9C6, MV9D1, MV9D2, MV9D3, MV9D4, MV9D5, MV9D6, NU1A7, NU1E1, NU1E2, NU1E4, NU1E5, NU1E6, NU1E7, NU1E8, NU1E9, NU1F7, NU1J1, NU1J2, NU1J4, NU1J5, NU1J6, NU1J7, NU1J8, NU1J9, NU1O1, NU1O4, NU1O7, NU1O8, NU4C1, NU4C2, NU4C4, NU4C5, NU4C7, NU4C8, NU4C9, NU4O1, NU4O2, NU4O3, NU4O4, NU4O5, NU4O7, NU4O8, NU7C1, NU7C2, NU7C4, NU7C5, NU7C6, NU7C7, NU7C8, NU7C9, NU7D7, NU7D8, NU8E4, NU8E7, NU8E8, NU8J4, NU8J7, NU8J8, NU8N1, NU8N2, NU8N4, NU8N5, NU8N6, NU8N7,

NU8N8, NU8N9, NV2C1, NV2C4, NV2C7, NV2G1, NV2G4, NV2G7, NV2K1, NV2K4, NV2K7, NV2O1, NV2O4, NV2O7, NV4O1, NV4O2, NV4O3, NV4O4, NV4O5, NV4O6, NV4O7, NV4O8, NV4P1, NV4P2, NV4P4, NV5F1, NV5F2, NV5F4, NV5F7, NV5I1, NV5I2, NV5I3, NV5I4, NV5I5, NV5I7, NV7A1, NV7A2, NV7A3, NV7A4, NV7A5, NV7B1, NV7B2, NV7B3

For the purpose of embargo 72 Area 2, which surrounds the town of Moree, is defined by the following HCIS area description:

MU5G, MU5H, MU5L, MU5C8, MU5C9, MU5D7, MU5D8, MU5D9, MU5K1, MU5K2, MU5K3, MU5K4, MU5K5, MU5K6, MU5K8, MU5K9, MU6A7, MU6E1, MU6E2, MU6E4, MU6E5, MU6E7, MU6E8, MU6I1, MU6I2, MU6I4, MU6I5, MU6I7

For the purpose of embargo 72 Area 3, which surrounds the town of Quirindi, is defined by the following HCIS area description:

MV3G, MV3H, MV3K, MV3L, MV3C8, MV3C9, MV3D7, MV3F3, MV3F5, MV3F6, MV3F8, MV3F9, MV3J2, MV3J3, MV3J5, MV3J6, MV3J9, MV3O1, MV3O2, MV3O3, MV3P1

For the purpose of embargo 72 Area 4, which surrounds the town of Roma, is defined by the following HCIS area description:

MT4H, MT4K, MT4L, MT4F9, MT4G2, MT4G3, MT4G4, MT4G5, MT4G6, MT4G7, MT4G8, MT4G9, MT4J3, MT4J6, MT4O1, MT4O2, MT4O3, MT4O6, MT4P1, MT4P2, MT4P3, MT4P4, MT4P5, MT5E4, MT5E7, MT5I1, MT5I2, MT5I4, MT5I5, MT5I7, MT5M1

HCIS area descriptions can be converted into a Placemark file (viewable in Google Earth) through the [Convert HCIS area description to Placemark](#) facility on the ACMA website.

The HCIS is described in the [Australian Spectrum Map Grid 2012](#).

**EMBARGO 73**

**STATUS:** Replaced by Embargo 78.

**EMBARGO 74**

**Status:** Lifted

## EMBARGO 75

<b>FREQUENCY RANGE:</b>	3425–3442.5 MHz and 3475–3492.5 MHz
<b>SUBJECT:</b>	Embargo on all new frequency assignments to support the implementation of new planning arrangements.
<b>DATE OF EFFECT:</b>	9 May 2019 (last revised 15 November 2019).
<b>COVERAGE:</b>	Metropolitan and regional areas.
<b>TIME FRAME:</b>	This embargo will be reviewed in December 2020.

### INSTRUCTIONS

No new frequency assignments for apparatus licences are to be issued in metropolitan and regional areas (defined at Attachment 1) in the 3425–3442.5 MHz and 3475–3492.5 MHz frequency ranges. The exception to this is for licensees seeking to move an existing licensed service from the 3425–3442.5 MHz frequency range to the 3475–3492.5 MHz (or 3492.5–3510 MHz) frequency range.

Licences issued or reissued in the 3425–3442.5 MHz frequency range must expire on or before 30 November 2020.

Any applications for case-by-case exemptions are to be referred to the Manager, Spectrum Planning Section for consideration.

### REASONS

The purpose of this embargo is to support the implementation of the decisions made as a result of the review of the 3400–3575 MHz band, and to aid the transition of affected services. This includes restacking point-to-multipoint licences from the 3425–3442.5 MHz frequency range to the 3475–3510 MHz frequency range in affected areas.

Details of the final planning arrangements for the 3400–3575 MHz band are available on the ACMA's website.

### COMMENTS

This embargo will be reviewed after incumbent apparatus licences have been restacked to the new planning arrangements. This is planned to occur no later than 30 November 2020.

### EMBARGO AUTHORISATION:

Approved 15/11/2019

Andrew Stewart  
Acting Manager  
Spectrum Planning Section  
Communications Infrastructure Division  
Australian Communications & Media Authority

## **ATTACHEMENT 1:**

For the purpose of Embargo 75, metropolitan and regional areas are defined by the following HCIS area description:

BV, CV, DV, IV, IW, JV, JW, KQ, KV, KW, LR, LV, LW, LX, LY, MS, MT, MU, MV, MW, NT, NU, AU9, AV9, AW3, BU7, BU8, BW1, BW2, BW3, BW5, BW6, CW1, CW2, CW3, CW4, DW1, DW2, DW3, EV1, EV2, EV3, EV4, EV5, EV6, EV7, FV1, FV2, FV3, FV4, FV5, GV1, GV2, GV3, GV6, HV1, HV2, HV3, HV4, HV5, HV6, HV8, HV9, HW3, HW6, JX1, JX2, JX3, JX5, JX6, KO1, KO4, KO5, KO7, KO8, KP1, KP2, KP4, KP5, KP6, KP7, KP8, KP9, KX1, KX2, KX3, KX4, KX5, KX6, KX8, KX9, KY2, KY3, KY6, LP4, LP7, LQ1, LQ2, LQ4, LQ5, LQ7, LQ8, LZ1, LZ2, LZ3, MR1, MR4, MR5, MR7, MR8, MR9, MX1, MX2, MX3, MX4, MX7, MY1, MY4, MY7, MZ1, NS4, NS7, NS8, NS9, NV1, NV2, NV3, NV4, NV5, NV7, NW1, AU6I, AU6J, AU6K, AU6L, AU6M, AU6N, AU6O, AU6P, BU4H, BU4I, BU4J, BU4K, BU4L, BU4M, BU4N, BU4O, BU4P, BU5E, BU5F, BU5G, BU5H, BU5I, BU5J, BU5K, BU5L, BU5M, BU5N, BU5O, BU5P, BU9A, BU9B, BU9E, BU9F, BU9I, BU9J, BU9M, BU9N

HCIS area descriptions can be converted into a Placemark file (viewable in Google Earth) through the [Convert HCIS area description to Placemark](#) facility on the ACMA website.

The HCIS is described in the [Australian Spectrum Map Grid 2012](#).



## EMBARGO 76

<b>FREQUENCY RANGE:</b>	1900–1920 MHz
<b>SUBJECT:</b>	Embargo on all new apparatus licences in specified areas.
<b>DATE OF EFFECT:</b>	15 November 2019
<b>COVERAGE:</b>	Metropolitan areas defined in Attachment 1.
<b>TIME FRAME:</b>	Indefinite.

### INSTRUCTIONS

For the 1900–1920 MHz band, no new assignments for apparatus licences are to be made within any of the areas defined in Attachment 1 to this embargo.

This includes assignments for existing licensees seeking to expand or modify their communications systems in the bands.

Any applications for case-by-case exemptions are to be referred to the Manager, Spectrum Planning Section for consideration.

### REASONS

The purpose of Embargo 76 is to preserve planning options in the 1900–1920 MHz band in metropolitan areas defined in Attachment 1.

### COMMENTS

Prior to 12 October 2017 the 1900–1920 MHz band was subject to spectrum licencing within the areas defined at Attachment 1. This restricted the issue of apparatus licences within these areas.

Since licences expired in October 2017, spectrum licence arrangements no longer apply. Embargo 76 has been put in place whilst long-term arrangements are developed.

### EMBARGO AUTHORISATION:

Approved 15/11/2019

Andrew Stewart  
Acting Manager  
Spectrum Planning Section  
Communications and Infrastructure Division  
Australian Communications and Media Authority

## ATTACHMENT 1

For the purposes of Embargo 76, the following areas are defined by HCIS area descriptions.

HCIS area descriptions can be converted into a Placemark file (viewable in Google Earth) through the [Convert HCIS area description to Placemark](#) facility on the ACMA website.

The HCIS is described in the [Australian Spectrum Map Grid 2012](#).

### Area 1—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

### Area 2—Brisbane

NT9, NT5G, NT5H, NT5K, NT5L, NT5O, NT5P, NT6E, NT6F, NT6G, NT6H, NT6I, NT6J, NT6K, NT6L, NT6M, NT6N, NT6O, NT6P, NT8C, NT8D, NT8G, NT8H, NT8K, NT8L, NT8O, NT8P, NU3A, NU3B, NU3C, NU3D, NU3F, NU3G, NU3H, NT5C4, NT5C5, NT5C6, NT5C7, NT5C8, NT5C9, NT5D4, NT5D5, NT5D6, NT5D7, NT5D8, NT5D9, NT6A4, NT6A5, NT6A6, NT6A7, NT6A8, NT6A9, NT6B4, NT6B5, NT6B6, NT6B7, NT6B8, NT6B9, NT6C4, NT6C5, NT6C6, NT6C7, NT6C8, NT6C9, NT6D4, NT6D5, NT6D6, NT6D7, NT6D8, NT6D9, NU2C1, NU2C2, NU2C3, NU2D1, NU2D2, NU2D3, NU2D5, NU2D6, NU2D8, NU2D9, NU2H2, NU2H3, NU3E1, NU3E2, NU3E3, NU3E5, NU3E6, NU3E8, NU3E9, NU3I2, NU3I3, NU3J1, NU3J2, NU3J3, NU3K1, NU3K2, NU3K3, NU3L1, NU3L2, NU3L3

### Area 3—Canberra

MW4D, MW4H, MW4L, MW5A, MW5B, MW5E, MW5F, MW5I, MW5J, MW1P4, MW1P5, MW1P6, MW1P7, MW1P8, MW1P9, MW2M4, MW2M5, MW2M6, MW2M7, MW2M8, MW2M9, MW2N4, MW2N5, MW2N6, MW2N7, MW2N8, MW2N9, MW4P1, MW4P2, MW4P3, MW5M1, MW5M2, MW5M3, MW5N1, MW5N2, MW5N3

### Area 4—Darwin

GO7C, GO7D, GO7G, GO7H, GO7K, GO7L, GO8A, GO8E, GO8I

### Area 5—Hobart

LY8L, LY8P, LY9I, LY9J, LY9K, LY9L, LY9M, LY9N, LY9O, LY9P, LZ2D, LZ2H, LZ3A, LZ3B, LZ3C, LZ3D, LZ3E, LZ3F, LZ3G, LZ3H, LY8H4, LY8H5, LY8H6, LY8H7, LY8H8, LY8H9, LY9E4, LY9E5, LY9E6, LY9E7, LY9E8, LY9E9, LY9F4, LY9F5, LY9F6, LY9F7, LY9F8, LY9F9, LY9G4, LY9G5, LY9G6, LY9G7, LY9G8, LY9G9, LY9H4, LY9H5, LY9H6, LY9H7, LY9H8, LY9H9, LZ2L1, LZ2L2, LZ2L3, LZ3I1, LZ3I2, LZ3I3, LZ3J1, LZ3J2, LZ3J3, LZ3K1, LZ3K2, LZ3K3, LZ3L1, LZ3L2, LZ3L3

### Area 6—Melbourne

KX3J, KX3K, KX3L, KX3N, KX3O, KX3P, KX6B, KX6C, KX6D, KX6F, KX6G, KX6H, KX6J, KX6K, KX6L, LX1I, LX1M, LX1N, LX1O, LX4A, LX4B, LX4C, LX4E, LX4I, KX3F7, KX3F8, KX3F9, KX3G7, KX3G8, KX3G9, KX3H4, KX3H5, KX3H6, KX3H7, KX3H8, KX3H9, KX3M6, KX3M8, KX3M9, KX6A2, KX6A3, KX6A5, KX6A6, KX6A8, KX6A9, KX6E2, KX6E3, KX6E5, KX6E6, KX6E8, KX6E9, KX6I2, KX6I3, KX6I5, KX6I6, KX6I8, KX6I9, LX1E4, LX1E7, LX1E8, LX1E9, LX1J1, LX1J4, LX1J5, LX1J6, LX1J7, LX1J8, LX1J9, LX1K4, LX1K7, LX4F1, LX4F2, LX4F4, LX4F5, LX4F7, LX4F8, LX4J1, LX4J2, LX4J4, LX4J5, LX4J7, LX4J8

**Area 7—Perth**

BV1I, BV1J, BV1K, BV1L, BV1M, BV1N, BV1O, BV1P, BV2I, BV2J, BV2M, BV2N, BV4A, BV4B, BV4C, BV4D, BV4E, BV4F, BV4G, BV4H, BV4I, BV4J, BV4K, BV4L, BV5A, BV5B, BV5E, BV5F, BV5I, BV5J, BV1E7, BV1E8, BV1E9, BV1F7, BV1F8, BV1F9, BV1G7, BV1G8, BV1G9, BV1H7, BV1H8, BV1H9, BV2E7, BV2E8, BV2E9, BV2F7, BV2F8, BV2F9, BV4M1, BV4M2, BV4M3, BV4N1, BV4N2, BV4N3, BV4O1, BV4O2, BV4O3, BV4P1, BV4P2, BV4P3, BV5M1, BV5M2, BV5M3, BV5N1, BV5N2, BV5N3

**Area 8—Sydney**

NW1, MV9I, MV9J, MV9K, MV9L, MV9M, MV9N, MV9O, MV9P, MW3C, MW3D, MW3G, MW3H, MW3K, MW3L, MW3O, MW3P, NV4N, NV4O, NV4P, NV5M, NV5N, NV5O, NV5P, NV7B, NV7C, NV7D, NV7E, NV7F, NV7G, NV7H, NV7I, NV7J, NV7K, NV7L, NV7M, NV7N, NV7O, NV7P, MV9D6, MV9D9, MV9E4, MV9E5, MV9E6, MV9E7, MV9E8, MV9E9, MV9F4, MV9F5, MV9F6, MV9F7, MV9F8, MV9F9, MV9G4, MV9G5, MV9G6, MV9G7, MV9G8, MV9G9, MV9H3, MV9H4, MV9H5, MV9H6, MV9H7, MV9H8, MV9H9, MW3B2, MW3B3, MW3B5, MW3B6, MW3B8, MW3B9, MW3F2, MW3F3, MW3F5, MW3F6, MW3F8, MW3F9, MW3J2, MW3J3, NV4I5, NV4I6, NV4I8, NV4I9, NV4J4, NV4J5, NV4J6, NV4J7, NV4J8, NV4J9, NV4K4, NV4K5, NV4K6, NV4K7, NV4K8, NV4K9, NV4L4, NV4L5, NV4L6, NV4L7, NV4L8, NV4L9, NV4M2, NV4M3, NV4M5, NV4M6, NV4M8, NV4M9, NV5I4, NV5I5, NV5I6, NV5I7, NV5I8, NV5I9, NV5J4, NV5J5, NV5J6, NV5J7, NV5J8, NV5J9, NV5K4, NV5K5, NV5K6, NV5K7, NV5K8, NV5K9, NV5L4, NV5L5, NV5L6, NV5L7, NV5L8, NV5L9, NV7A2, NV7A3, NV7A4, NV7A5, NV7A6, NV7A7, NV7A8, NV7A9

## EMBARGO 78

<b>FREQUENCY RANGE:</b>	3700–4000 MHz
<b>SUBJECT:</b>	Embargo on all new frequency assignments to support future re-planning options.
<b>DATE OF EFFECT:</b>	22 July 2020
<b>COVERAGE:</b>	Australia-wide
<b>TIME FRAME:</b>	This embargo will be reviewed in December 2021

### INSTRUCTIONS

No new frequency assignments for apparatus licences are to be issued in the 3700–4000 MHz range Australia-wide.

The restrictions of Embargo 78 do not apply to new or existing satellite earth stations located inside the Earth Protection Zones as defined in Appendix C of [RALI MS44](#).

Any applications for case-by-case exemptions are to be referred to the Manager, Spectrum Planning Section for consideration using the [freqplan@acma.gov.au](mailto:freqplan@acma.gov.au) email address.

### REASONS

The ACMA is currently reviewing arrangements in the 3700–4000 MHz range. The purpose of this embargo is to preserve future planning options and minimise the effect that any future possible change in use might cause. The current restrictions will be reconsidered once the outcomes of the 3700–4200 MHz band are known.

### COMMENTS

The ACMA is currently in the process of consulting on possible changes to the wider 3700–4200 MHz band. This may result in a change to planning arrangements in the band that may affect incumbent services. Of particular concern are those services with long term requirements and/or significant infrastructure associated with them. The ACMA therefore considers it prudent to restrict the issue of new apparatus licences to preserve future planning options.

### EMBARGO AUTHORISATION:

Approved 15/07/2020

Chris Worley  
Manager  
Spectrum Planning Section  
Australian Communications and Media Authority

## EMBARGO 79

<b>FREQUENCY RANGE:</b>	24.7–30 GHz.
<b>SUBJECT:</b>	Restriction on assignment of certain apparatus licence types.
<b>DATE OF EFFECT:</b>	26 October 2020
<b>COVERAGE:</b>	25.1–27.5 GHz outside the areas defined in Attachment 1. 24.7–25.1 GHz or 27.5–30 GHz Australia-wide.
<b>TIME FRAME:</b>	Until further notice.

### INSTRUCTIONS

Only area-wide and space receive apparatus licences are to be issued in the frequency range in 25.1–27.5 GHz outside the areas defined in Attachment 1 or in 24.7–25.1 GHz and 27.5–30 GHz Australia wide. All existing apparatus licences are permitted to continue to operate and be renewed.

Any applications for case-by-case exemptions are to be referred to the Manager, Spectrum Planning Section for consideration.

### REASONS

The purpose of this embargo is to preserve the band for allocation via area-wide apparatus licences (AWLs) and Space Receive apparatus licences. The technical framework for AWLs in the range 25.1-30 GHz has been optimised to support wireless broadband services and fixed-satellite service earth stations. New space receive apparatus licences are also permitted to maintain ongoing access for ubiquitous earth stations operated under the [Radiocommunications \(Communication with Space Object\) Class Licence 2015 \(CSO class licence\)](#).

### COMMENTS

The 26 GHz band (24.25–27.5 GHz) and 28 GHz band (27.5–29.5 GHz) are key bands planned for the delivery of millimetre wave fifth generation (5G) wireless broadband services. The frequency range 27–30 GHz is also a key band for the delivery of fixed-satellite services (FSS) uplinks.

The ACMA has decided that new wireless broadband services and FSS earth stations (not otherwise authorised by space receive apparatus/CSO class licence arrangements) in the frequency range 24.7–30 GHz are to be authorised using area-wide licences. Additional information is available in the *Allocation of apparatus licences in the 26 GHz and 28 GHz bands—Applicant information pack* and in [RALI MS46](#).

### EMBARGO AUTHORISATION:

Approved 26/10/2020

Chris Worley  
Manager  
Spectrum Planning  
Australian Communications and Media Authority

## ATTACHEMENT 1:

For the purpose of embargo 79 the following areas are defined by HCIS descriptions.

HCIS area descriptions can be converted into a Placemark file (viewable in Google Earth) through the [Convert HCIS area description to Placemark](#) facility on the ACMA website.

The HCIS is described in the [Australian Spectrum Map Grid 2012](#).

Named area	HCIS area description
<b>Adelaide</b>	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, IW6K1, IW6K2, IW6K3, IW6K4, IW6K5, IW6K6, IW6L1, JW1E4, JW1E7, JW1I1, JW1I4, JW1I7, JW1M1, JW1M4
<b>Canberra</b>	MW5E, MW4D6, MW4D9, MW4H3, MW4H9, MW4L3, MW5A4, MW5A5, MW5A6, MW5A7, MW5A8, MW5A9, MW5B4, MW5B7, MW5F1, MW5F4, MW5F7, MW5I1, MW5I2, MW5I3, MW5J1
<b>Darwin</b>	GO7C, GO7D, GO7G, GO7H, GO7K, GO7L, GO8A, GO8E, GO8I
<b>Greater Brisbane/Lismore</b>	NT9, NT5G, NT5H, NT5K, NT5L, NT5O, NT5P, NT6E, NT6F, NT6G, NT6H, NT6I, NT6J, NT6K, NT6L, NT6M, NT6N, NT6O, NT6P, NT7H, NT7L, NT8C, NT8D, NT8E, NT8F, NT8G, NT8H, NT8I, NT8J, NT8K, NT8L, NT8O, NT8P, NU3A, NU3B, NU3C, NU3D, NU3F, NU3G, NU3H, NU3J, NU3K, NU3L, NU3O, NU3P, NT5C4, NT5C5, NT5C6, NT5C7, NT5C8, NT5C9, NT5D4, NT5D5, NT5D6, NT5D7, NT5D8, NT5D9, NT6A4, NT6A5, NT6A6, NT6A7, NT6A8, NT6A9, NT6B4, NT6B5, NT6B6, NT6B7, NT6B8, NT6B9, NT6C4, NT6C5, NT6C6, NT6C7, NT6C8, NT6C9, NT6D4, NT6D5, NT6D6, NT6D7, NT6D8, NT6D9, NT7G2, NT7G3, NT7G5, NT7G6, NT7G8, NT7G9, NT7K2, NT7K3, NT7K5, NT7K6, NT7K8, NT7K9, NT7O2, NT7O3, NT7O5, NT7O6, NT7P1, NT7P2, NT7P3, NT7P4, NT7P5, NT7P6, NT8M1, NT8M2, NT8M3, NT8M4, NT8M5, NT8M6, NT8N1, NT8N2, NT8N3, NT8N4, NT8N5, NT8N6, NU2C1, NU2C2, NU2C3, NU2D1, NU2D2, NU2D3, NU2D5, NU2D6, NU2D8, NU2D9, NU2H2, NU2H3, NU3E1, NU3E2, NU3E3, NU3E5, NU3E6, NU3E8, NU3E9, NU3I2, NU3I3, NU3I6, NU3I9, NU3M3, NU3M6, NU3N1, NU3N2, NU3N3, NU3N4, NU3N5, NU3N6
<b>Greater Perth</b> Note: For the frequency range 25.1 GHz–27 GHz	BV1I, BV1J, BV1K, BV1L, BV1M, BV1N, BV1O, BV1P, BV2I, BV2J, BV2M, BV2N, BV4A, BV4B, BV4C, BV4D, BV4E, BV4F, BV4G, BV4H, BV4I, BV4J, BV4K, BV4L, BV4O, BV5A, BV5B, BV5E, BV5F, BV5I, BV5J, BV7C, BV7G, BV1E7, BV1E8, BV1E9, BV1F7, BV1F8, BV1F9, BV1G7, BV1G8, BV1G9, BV1H7, BV1H8, BV1H9, BV2E7, BV2E8, BV2E9, BV2F7, BV2F8, BV2F9, BV4M1, BV4M2, BV4M3, BV4N1, BV4N2, BV4N3, BV4P1, BV4P2, BV4P3, BV4P4, BV4P5, BV4P7, BV4P8, BV5M1, BV5M2, BV5M3, BV5N1, BV5N2, BV5N3, BV7D1, BV7D2, BV7D4, BV7D5, BV7D7, BV7D8, BV7H1, BV7H2, BV7H4, BV7H5, BV7H7, BV7H8, BV7K1, BV7K2, BV7K3, BV7L1, BV7L2

<b>Named area</b>	<b>HCIS area description</b>
<b>Greater Perth</b> Note: For the frequency range 27 GHz–27.5 GHz	BV7G, BV7C4, BV7C5, BV7C6, BV7C7, BV7C8, BV7C9, BV7D4, BV7D5, BV7D7, BV7D8, BV7H1, BV7H2, BV7H4, BV7H5, BV7H7, BV7H8, BV7K1, BV7K2, BV7K3, BV7L1, BV7L2, BV1I, BV1J, BV1K, BV1L, BV1M, BV1N, BV1O, BV1P, BV2I, BV2J, BV2M, BV2N, BV4A, BV4B, BV4C, BV4D, BV4E, BV4F, BV4G, BV4H, BV4I, BV4J, BV4K, BV4L, BV5A, BV5B, BV5E, BV5F, BV5I, BV5J, BV1E7, BV1E8, BV1E9, BV1F7, BV1F8, BV1F9, BV1G7, BV1G8, BV1G9, BV1H7, BV1H8, BV1H9, BV2E7, BV2E8, BV2E9, BV2F7, BV2F8, BV2F9, BV4M1, BV4M2, BV4M3, BV4N1, BV4N2, BV4N3, BV4O1, BV4O2, BV4O3, BV4P1, BV4P2, BV4P3, BV5M1, BV5M2, BV5M3, BV5N1, BV5N2, BV5N3
<b>Hobart</b>	LY9N, LY9I8, LY9I9, LY9J7, LY9J8, LY9J9, LY9K7, LY9K8, LY9M2, LY9M3, LY9M5, LY9M6, LY9M8, LY9M9, LY9O1, LY9O2, LY9O4, LY9O5, LY9O7, LY9O8, LZ3A2, LZ3A3, LZ3B1, LZ3B2, LZ3B3, LZ3C1, LZ3C2
<b>Melbourne/Ballarat</b>	KX2L, KX3I, KX3J, KX3K, KX3L, KX3N, KX3O, KX3P, KX6B, KX6C, KX6D, KX6F, KX6G, KX6H, KX6J, KX6K, KX6L, LX1I, LX1M, LX1N, LX1O, LX4A, LX4B, LX4C, LX4E, LX4I, KX2G9, KX2H7, KX2H8, KX2H9, KX2K3, KX2K6, KX2K9, KX3E7, KX3E8, KX3E9, KX3F7, KX3F8, KX3F9, KX3G7, KX3G8, KX3G9, KX3H4, KX3H5, KX3H6, KX3H7, KX3H8, KX3H9, KX3M2, KX3M3, KX3M5, KX3M6, KX3M8, KX3M9, KX6A2, KX6A3, KX6A5, KX6A6, KX6A8, KX6A9, KX6E2, KX6E3, KX6E5, KX6E6, KX6E8, KX6E9, KX6I2, KX6I3, KX6I5, KX6I6, KX6I8, KX6I9, LX1E4, LX1E7, LX1E8, LX1E9, LX1J1, LX1J4, LX1J5, LX1J6, LX1J7, LX1J8, LX1J9, LX1K4, LX1K7, LX4F1, LX4F2, LX4F4, LX4F5, LX4F7, LX4F8, LX4J1, LX4J2, LX4J4, LX4J5, LX4J7, LX4J8
<b>Sydney/Bathurst</b>	NW1, MV8G, MV9I, MV9J, MV9K, MV9L, MV9M, MV9N, MV9O, MV9P, MW3C, MW3D, MW3G, MW3H, MW3K, MW3L, MW3O, MW3P, MW6C, MW6D, NV4N, NV4O, NV4P, NV5M, NV5N, NV5O, NV5P, NV7B, NV7C, NV7D, NV7E, NV7F, NV7G, NV7H, NV7I, NV7J, NV7K, NV7L, NV7M, NV7N, NV7O, NV7P, MV8F3, MV8F6, MV8F9, MV8H4, MV8H5, MV8H6, MV8H7, MV8H8, MV8H9, MV8J3, MV8K1, MV8K2, MV8K3, MV8L1, MV8L2, MV8L3, MV9D6, MV9D9, MV9E4, MV9E5, MV9E6, MV9E7, MV9E8, MV9E9, MV9F4, MV9F5, MV9F6, MV9F7, MV9F8, MV9F9, MV9G4, MV9G5, MV9G6, MV9G7, MV9G8, MV9G9, MV9H3, MV9H4, MV9H5, MV9H6, MV9H7, MV9H8, MV9H9, MW3B2, MW3B3, MW3B5, MW3B6, MW3B8, MW3B9, MW3F2, MW3F3, MW3F5, MW3F6, MW3F8, MW3F9, MW3J2, MW3J3, NV4I5, NV4I6, NV4I8, NV4I9, NV4J4, NV4J5, NV4J6, NV4J7, NV4J8, NV4J9, NV4K4, NV4K5, NV4K6, NV4K7, NV4K8, NV4K9, NV4L4, NV4L5, NV4L6, NV4L7, NV4L8, NV4L9, NV4M2, NV4M3, NV4M5, NV4M6, NV4M8, NV4M9, NV5I4, NV5I5, NV5I6, NV5I7, NV5I8, NV5I9, NV5J4, NV5J5, NV5J6, NV5J7, NV5J8, NV5J9, NV5K4, NV5K5, NV5K6, NV5K7, NV5K8, NV5K9, NV5L4, NV5L5, NV5L6, NV5L7, NV5L8, NV5L9, NV7A2, NV7A3, NV7A4, NV7A5, NV7A6, NV7A7, NV7A8, NV7A9
<b>Albany</b>	BW3P7, BW3P8, BW3P9, BW6D1, BW6D2, BW6D3, BW6D4, BW6D5, BW6D6, CW1M7, CW4A1, CW4A4
<b>Albury</b>	LW8D, LW5P7, LW5P8, LW5P9, LW6M7, LW9A1, LW9A4, LW9A7
<b>Armidale</b>	NU7G8, NU7G9, NU7K2, NU7K3

<b>Named area</b>	<b>HCIS area description</b>
<b>Bendigo</b>	KW9I5, KW9I6, KW9I8, KW9I9, KW9J4, KW9J5, KW9J6, KW9J7, KW9J8, KW9J9, KW9M2, KW9M3, KW9M5, KW9M6, KW9N1, KW9N2, KW9N3, KW9N4, KW9N5, KW9N6
<b>Bundaberg/Hervey Bay</b>	NS8N, NS8O, NT2B, NT2C, NS8M2, NS8M3, NS8M5, NS8M6, NS8M8, NS8M9, NT2A2, NT2A3, NT2D7, NT2D8, NT2D9, NT2G1, NT2G2, NT2G3, NT2G4, NT2G5, NT2G6, NT2H1, NT2H2, NT2H3, NT2H4, NT2H5, NT2H6
<b>Cairns</b>	LQ1O, LQ1P, LQ1K7, LQ1K8, LQ1K9, LQ1L7, LQ1L8, LQ1L9, LQ4C1, LQ4C2, LQ4C3, LQ4C4, LQ4C5, LQ4C6, LQ4D1, LQ4D2, LQ4D3, LQ4D4, LQ4D5, LQ4D6
<b>Coffs Harbour</b>	NU9A, NU9E, NU8D9, NU8H3, NU8H6, NU8H9
<b>Forster/Tuncurry</b>	NV5B6, NV5B9, NV5C4, NV5C5, NV5C7, NV5C8, NV5F3, NV5G1, NV5G2
<b>Launceston</b>	LY6E, LY5H3, LY5H6, LY5H9, LY5L3, LY5L6, LY6F1, LY6F4, LY6F7, LY6I1, LY6I2, LY6I3, LY6I4, LY6I5, LY6I6, LY6J1, LY6J4
<b>Mackay</b>	MR8A, MR5M7, MR5M8, MR5M9
<b>Margaret River</b>	AV9P6, AV9P9, AW3D3, BV7M4, BV7M5, BV7M7, BV7M8, BW1A1, BW1A2
<b>Mildura</b>	KW1A4, KW1A5, KW1A6, KW1A7, KW1A8, KW1A9, KW1E1, KW1E2, KW1E3
<b>Port Macquarie</b>	NV2H, NV2L1, NV2L2, NV2L3
<b>Rockhampton</b>	MS6F, MS6G, MS6B7, MS6B8, MS6B9, MS6C7, MS6C8, MS6C9, MS6J1, MS6J2, MS6J3, MS6K1, MS6K2, MS6K3
<b>Shepparton/Mooroopna</b>	LW7F, LW7G1, LW7G4, LW7G7, LW7J1, LW7J2, LW7J3, LW7K1
<b>Townsville</b>	LR2C, LR2D, LR2G, LR2H
<b>Traralgon/Morwell</b>	LX5A6, LX5A8, LX5A9, LX5B4, LX5B5, LX5B6, LX5B7, LX5B8, LX5B9, LX5C4, LX5C5, LX5C7, LX5C8, LX5F1, LX5F2, LX5F3, LX5G1, LX5G2
<b>Wagga Wagga</b>	LW6B
<b>Warrnambool</b>	KX4F2, KX4F3, KX4F5, KX4F6, KX4F8, KX4F9, KX4G1, KX4G2, KX4G4, KX4G5, KX4G7, KX4G8



# Annex A: Amendment history

Date of effect	Comments
20 August 2021	Embargo 26 withdrawn Embargo 69 withdrawn
10 February 2021	Embargo 23 revised
26 October 2020	Embargo 69 revised Embargo 74 withdrawn Embargo 79 created
22 July 2020	Embargo 78 created Embargo 73 withdrawn
1 July 2020	Embargo 64 withdrawn Embargo 69 revised Embargo 74 revised
27 March 2020	Embargo 26 revised
15 November 2019	Embargo 42 revised Embargo 74 revised Embargo 75 revised Embargo 76 created
2 August 2019	Embargo 49 revised Embargo 71 withdrawn Embargo 72 revised
16 May 2019	Embargo 75 created
16 April 2019	Embargo 74 created
14 February 2018	Embargo 64 revised
11 December 2017	Embargo 73 created
11 December 2017	Embargo 72 created
11 December 2017	Embargo 71 revised
18 August 2017	Embargo 71 revised
03 May 2017	Embargo 71 created
31 March 2017	Embargo 67 revised
9 November 2016	Embargo 42 revised
20 April 2016	Embargo 70 created
2 March 2016	Embargo 69 created
03 February 2016	Embargo 26 revised Embargo 54 withdrawn Embargo 56 withdrawn
12 January 2016	Embargo 62 revised
27 July 2015	Embargo 49 revised
19 December 2014	Embargo 41 revised
24 October 2014	Embargo 66 withdrawn
12 May 2014	Embargo 68 created
6 February 2014	Embargo 55 withdrawn Embargo 67 created
1 February 2014	Embargo 26 revised Embargo 66 created
19 September 2013	Embargo 23 revised
25 September 2012	Embargo 26 revised Embargo 51 revised Embargo 53 revised Embargo 60 revised

Date of effect	Comments
	Embargo 65 created
25 May 2012	Embargo 23 revised
24 April 2012	Embargo 23 revised Embargo 26 revised Embargo 38 withdrawn Embargo 43 withdrawn
6 December 2011	Embargo 64 created Embargo 24 withdrawn Embargo 34 withdrawn
29 August 2011	Embargo 63 created
19 July 2011	Embargo 53 revised Embargo 54 revised Embargo 55 revised Embargo 56 revised
21 January 2011	Embargo 61 created Embargo 62 created Embargo 38 revised
16 July 2010	Embargo 60 created Embargo 50 revised
22 June 2010	Embargo 59 created
30 April 2010	Embargo 50 revised Embargo 51 revised Embargo 53 created Embargo 54 created Embargo 55 created Embargo 56 created Embargo 35 withdrawn Embargo 36 withdrawn
14 September 2009	Embargo 52 created Embargo 42 revised
6 August 2009	Embargo 51 revised Embargo 50 revised
2 April 2009	Embargo 51 created Embargo 50 created Embargo 49 created
24 April 2009	Embargo 48 created
28 September 2007	RALI completely updated All embargoes revised, with exception of the following: Embargo 22 withdrawn Embargo 25 withdrawn Embargo 28 withdrawn Embargo 33 withdrawn Embargo 47 created
6 February 2007	Embargo 46 created
6 October 2006	Embargo 45 created Embargo 37 withdrawn Embargo 40 withdrawn
18 September 2006	Embargo 44 created
5 December 2005	Embargo 41 revised
27 October 2005	Embargo 23 revised
23 August 2005	Embargo 23 revised Embargo 25 revised Embargo 26 revised
27 June 2005	Embargo 43 created

<b>Date of effect</b>	<b>Comments</b>
27 May 2005	Embargo 24 revised
26 May 2005	Embargo 42 created
11 April 2005	Embargo 41 created
14 February 2005	Embargo 38 revised
8 February 2005	Embargo 37 revised Embargo 31 withdrawn
20 December 2004	Embargo 38 revised
17 December 2004	Embargo 36 revised
2 December 2004	Embargo 40 created
26 November 2004	Embargo 39 created
24 September 2004	Embargo 38 revised
30 June 2004	Embargo 36 revised
25 June 2004	Embargo 38 revised
26 March 2004	Embargo 38 created
16 March 2004	Embargo 37 revised
18 December 2003	Embargo 36 created
14 February 2003	Embargo 35 created
16 July 2002	Embargo 32 created
3 July 2002	Embargo 34 created
31 May 2002	Embargo 23 revised
22 March 2002	Embargo 30 withdrawn
19 December 2001	Embargo 32 revised
10 October 2001	Embargo 23 revised
26 September 2001	Embargo 26 revised
5 September 2001	Embargo 33 created
13 February 2001	Embargo 23 revised
11 November 2000	Embargo 26 revised
5 September 2000	Embargo 32 created
20 July 2000	Embargo 26 revised
20 July 2000	Embargo 24 revised
2 June 2000	Embargo 26 revised
4 May 2000	Embargo 31 created
22 February 2000	Embargo 29 withdrawn
24 January 2000	Embargo 26 revised
13 January 2000	Embargo 24 revised
12 January 2000	Embargo 30 created
21 December 1999	Embargo 26 revised
29 October 1999	Embargo 26 revised Embargo 27 withdrawn
30 July 1999	Embargo 28 revised
15 July 1999	Embargo 11 withdrawn and RALI completely updated
31 May 1999	Embargo 23 revised
18 December 1998	Embargo 24 revised Embargo 25 revised
31 August 1998	Embargo 27 revised
10 August 1998	Embargo 29 created
3 August 1998	Embargo 28 created
19 June 1998	Embargo 11 revised

Date of effect	Comments
8 May 1998	Embargo 24 revised Embargo 26 revised
10 March 1998	Embargo 27 created
7 November 1997	Embargo 24 revised
24 September 1997	Embargo 23 revised
3 September 1997	Embargo 24 revised
6 August 1997	Embargo 18 revised Embargo 26 created
14 February 1997	Embargo 11 revised
6 May 1994	RALI completely updated

## Annex B: Index of bands

Frequency band	Embargo number	Comment
5900–5950 kHz	46	Revised Sept 2007
5950–6200 kHz	44	Revised Sept 2007
7100–7300 kHz	44	Revised Sept 2007
7300–7350 kHz	46	Revised Sept 2007
9400–9500 kHz	46	Revised Sept 2007
9500–9900 kHz	44	Revised Sept 2007
11600–11650 kHz	46	Revised Sept 2007
11650–12050 kHz	44	Revised Sept 2007
12050–12100 kHz	46	Revised Sept 2007
13570–13600 kHz	46	Revised Sept 2007
13600–13800 kHz	44	Revised Sept 2007
13800–13870 kHz	46	Revised Sept 2007
15100–15600 kHz	44	Revised Sept 2007
15600–15800 kHz	46	Revised Sept 2007
17480–17550 kHz	46	Revised Sept 2007
17550–17900 kHz	44	Revised Sept 2007
18900–19020 kHz	46	Revised Sept 2007
21450–21850 kHz	44	Revised Sept 2007
25670–26100 kHz	44	Revised Sept 2007
45–52 MHz	67	Revised Mar 2017
56–70 MHz	67	Revised Mar 2017
85–87.5 MHz	67	Revised Mar 2017
70 MHz–25.25 GHz	41	Revised Dec 2014
137–144 MHz	67	Revised Mar 2017
168–174 MHz	32	Revised Sept 2007
403–403.9875 MHz	50	Revised April 2010
403–518 MHz	51	Revised Sept 2012
403–520 MHz	71	Revised Dec 2017
405.0125–406 MHz	50	Revised April 2010
406.1–408.6375 MHz	53	Revised Sept 2012
406.11875–406.61875 MHz	19	Revised Sept 2007
408.11875–408.61875 MHz	19	Revised Sept 2007
408.6375–409.04375 MHz	60	Revised Sept 2012
409.0375–410.5375 MHz	50	Revised April 2010
410.5375–412.4625 MHz	53	Revised Sept 2012
412.4625–413.4375 MHz	50	Revised April 2010
414.4625–415.5625 MHz	50	Revised April 2010
415.5625–418.0875 MHz	53	Revised Sept 2012
415.56875–416.06875 MHz	19	Revised Sept 2007
417.56875–418.06875 MHz	19	Revised Sept 2007
418.0875–418.49375 MHz	60	Revised Sept 2012
418.4875–420 MHz	50	Revised April 2010
420–420.75 MHz	50	Revised April 2010
421.25–424.75 MHz	50	Revised April 2010
425.25–427.75 MHz	50	Revised April 2010

Frequency band	Embargo number	Comment
428.25–430 MHz	50	Revised April 2010
450–450.4875 MHz	53	Revised Sept 2012
450.050 MHz	60	Revised Sept 2012
452.5–457.50625 MHz	53	Revised Sept 2012
457.5–459.9875 MHz	50	Revised April 2010
462–467.50625 MHz	53	Revised Sept 2012
467.5–469.9875 MHz	50	Revised April 2010
469.99375–476.4125 MHz	53	Revised Sept 2012
477.41875–518 MHz	53	Revised Sept 2012
518–520 MHz	45	Revised Sept 2007
520–694 MHz	71	Revised Dec 2017
694–703 MHz	71	Revised Dec 2017
748–758 MHz	71	Revised Dec 2017
803–820 MHz	71	Revised Dec 2017
1427–1518 MHz	70	Created April 2016
1710–1785 MHz	62	Revised Jan 2016
1805–1880 MHz	62	Revised Jan 2016
1900–1920 MHz	76	Created Nov 209
1980–2010 MHz	23	Revised Feb 2021
1980–2010 MHz	71	Revised Dec 2017
2010–2110 MHz	23	Revised Feb 2021
2015–2100 MHz	49	Revised Aug 2019
2025–2110 MHz	72	Revised Aug 2019
2100–2130 MHz	49	Revised Aug 2019
2170–2200 MHz	23	Revised Feb 2021
2170–2300 MHz	71	Revised Dec 2017
2190–2280 MHz	49	Revised Aug 2019
2200–2290 MHz	72	Revised Aug 2019
2200–2300 MHz	23	Revised Feb 2021
2280–2310 MHz	49	Revised Aug 2019
2300–2302 MHz	65	Created Sept 2012
3400–3425 MHz	68	Created May 2014
3400–3575 MHz	52	Revised Nov 2009
3425–3442.5 MHz	75	Revised Nov 2019
3475–3492.5 MHz	75	Revised Nov 2019
3492.5–3542.5 MHz	61	Created Jan 2011
3575–3710 MHz	42	Revised Nov 2019
3600–3700 MHz	52	Revised Nov 2009
3700–4000 MHz	78	Created July 2020
5725–5850 MHz	39	Revised Sept 2007
5850–5925 MHz	48	Created April 2008
6700–7075 MHz	49	Revised Aug 2019
7100–7425 MHz	71	Revised Dec 2017
7135–7245 MHz	49	Revised Aug 2019
7250–7750 MHz	47	Created Sept 2007
7250–7750 MHz	49	Revised Aug 2019
7250–7750 MHz	59	Created June 2010
7900–8390 MHz	49	Revised Aug 2019

<b>Frequency band</b>	<b>Embargo number</b>	<b>Comment</b>
7900–8400 MHz	47	Created Sept 2007
7900–8400 MHz	59	Created June 2010
8390–8460 MHz	49	Revised Aug 2019
8460–8510 MHz	49	Revised Aug 2019
8540–8660 MHz	49	Revised Aug 2019
10700–14800 MHz	49	Revised Aug 2019
10.95–12.75 GHz	47	Created Sept 2007
13.75–14.50 GHz	47	Created Sept 2007
15349–15410 MHz	49	Revised Aug 2019
15430–15630 MHz	49	Revised Aug 2019
17200–21400 MHz	49	Revised Aug 2019
22200–22510 MHz	49	Revised Aug 2019
24700–30000 MHz	79	Created Oct 2020
24750–25250 MHz	49	Revised Aug 2019
25500–31000 MHz	49	Revised Aug 2019
33400–36000 MHz	49	Revised Aug 2019
37500–43500 MHz	49	Revised Aug 2019
47200–51400 MHz	49	Revised Aug 2019
52590–59300 MHz	49	Revised Aug 2019

## Annex C: Withdrawn embargoes

Embargo number	Frequency band	Comment
31	3776–3800 kHz	REPLACED By provisions in the Australian Radiofrequency Spectrum Plan
22	169.3875–169.7875 MHz	LIFTED
15	402 MHz	LIFTED
1	403–420 MHz	LIFTED
2	403–520 MHz	LIFTED
71	403–520 MHz	LIFTED
11	410.75–412.25 MHz	LIFTED
35	418.0875–420 MHz	SUPERSEDED by Embargo No 50
13	419.0–420.2 MHz	REPLACED by Embargo No 15
37	420–430 MHz	LIFTED
40	450–520 MHz	LIFTED
13	451.50–452.50 MHz	LIFTED
3	451.95–453.40 MHz	LIFTED
14	452.50–453.50 MHz	LIFTED
55	452.50–453 MHz	LIFTED
54	452.5–457.50625 MHz	LIFTED
4	456.35–457.325 MHz	LIFTED
36	458.3375–459.9375 MHz	SUPERSEDED by Embargo No 50
13	461–462 MHz	LIFTED
3	461.45–462.90 MHz	LIFTED
14	462–463 MHz	LIFTED
55	462–462.5 MHz	LIFTED
54	462.5–467.50625 MHz	LIFTED
4	465.85–466.825 MHz	LIFTED
36	467.8375–469.4375 MHz	SUPERSEDED by Embargo No 50
55	469.4875–469.9875	LIFTED
56	469.9875–476.4125 MHz	LIFTED
5	472.025–472.60 MHz	LIFTED
56	477.41875–484.79375 MHz	LIFTED
56	485.19375–489.99375 MHz	LIFTED
6	500–501 MHz	LIFTED
18	501–505 MHz	REPLACED by Embargo No 26
7	505.5–507 MHz	LIFTED
6	510–511 MHz	LIFTED
18	511–515 MHz	REPLACED by Embargo No 26
7	515.5–517.0 MHz	LIFTED
71	520–694 MHz	LIFTED
71	694–703 MHz	LIFTED



Embargo number	Frequency band	Comment
26	703–748 MHz	Replaced by RALI SM26
71	748–758 MHz	LIFTED
26	758–803 MHz	Replaced by RALI SM26
71	803–820 MHz	LIFTED
64	803–825 MHz	LIFTED
8	820–960 MHz	LIFTED
29	820–825 MHz	LIFTED
26	825–845 MHz	Replaced by RALI SM26
64	845–870 MHz	LIFTED
34	857–859 MHz	SUPERSEDED by Embargo 64
34	861–865 MHz	SUPERSEDED by Embargo 64
26	870–890 MHz	Replaced by RALI SM26
34	933–935 MHz	SUPERSEDED by Embargo 64
29	865–870 MHz	LIFTED
64	890–960 MHz	LIFTED
21	1427–1535 MHz	REPLACED by restrictions in 1.5 GHz Band Plan, December 1996
20	1700–1900 MHz	REPLACED by Embargo No 23
26	1710–1785 MHz	Replaced by RALI SM26
38	1785–1805 MHz	LIFTED
26	1805–1880 MHz	Replaced by RALI SM26
38	1900–1920 MHz	LIFTED
26	1900–1980 MHz	Replaced by RALI SM26
63	1960–1920 MHz	LIFTED
71	1980–2110 MHz	LIFTED
38	2010–2025 MHz	REPLACED by Embargo No 23
9	2076–2111 MHz	LIFTED
26	2110–2170 MHz	Replaced by RALI SM26
71	2170–2300 MHz	LIFTED
9	2300–2400 MHz	LIFTED
26	2302–2400 MHz	Replaced by RALI SM26
26	2500–2570 MHz	Replaced by RALI SM26
43	2500–2690 MHz	REPLACED by Embargo No 26
26	2570–2620 MHz	Replaced by RALI SM26
26	2620–2690 MHz	Replaced by RALI SM26
49	3400–4200 MHz	Revised Aug 2019
27	3425–3442 MHz	REPLACED by Embargo No 26
26	3425–3492.5 MHz	Replaced by RALI SM26
27	3475–3492 MHz	REPLACED by Embargo No 26
26	3542.5–3575 MHz	Replaced by RALI SM26
72	3575–4200 MHz	Revised Aug 2019
73	3710–3790 MHz	Replaced by Embargo 78 July 2020
72	4500–4800 MHz	Revised Aug 2019
72	5091–5250 MHz	Revised Aug 2019
49	5850–6700 MHz	Revised Aug 2019
72	5850–7075 MHz	Revised Aug 2019
71	7100–7425 MHz	LIFTED

Embargo number	Frequency band	Comment
30	7250–7375 MHz	LIFTED
72	7250–7750 MHz	Revised Aug 2019
72	7900–8400 MHz	Revised Aug 2019
72	10.7–11.7 GHz	Revised Aug 2019
33	11.7–12.2 GHz	REPLACED by provisions in the Australian Radiofrequency Spectrum Plan
72	12.2–13.25 GHz	Revised Aug 2019
10	12.75–13.25 GHz	LIFTED
16	12.75–13.27 GHz	LIFTED
72	13.75–14.8 GHz	Revised Aug 2019
17	14.5–15.35 GHz	LIFTED
72	15.43–15.63 GHz	Revised Aug 2019
72	17.3–21.2 GHz	Revised Aug 2019
25	18.8–19.3 GHz	LIFTED
69	24.25–24.7 GHz	LIFTED
24	24.5–26.5 GHz	LIFTED
72	24.65–25.25 GHz	Revised Aug 2019
26	25.1–27.5 GHz	Replaced by RALI SM26
26	26.5–27.5 GHz	Revised February 2016
72	27–31 GHz	Revised Aug 2019
66	27.5–28.35 GHz	LIFTED
74	27.5–28.3 GHz	LIFTED
24	28.6–29.1 GHz	LIFTED
24	29.1–29.5 GHz	LIFTED
72	33.4–36 GHz	Revised Aug 2019
72	37.5–43.5 GHz	Revised Aug 2019
28	40.5–43.5 GHz	LIFTED
72	47.2–50.2 GHz	Revised Aug 2019
72	50.4–51.4 GHz	Revised Aug 2019