



# Television Outside Broadcast Service (1980–2110 MHz and 2170–2300 MHz) Frequency Band Plan 2012

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The AUSTRALIAN COMMUNICATIONS AND MEDIA AUTHORITY makes this Frequency Band Plan under sections 32 and 34 of the *Radiocommunications Act 1992*.

Dated 26 March 2012

*Chris Chapman* [signed] Member

*Richard Bean* [signed] ~~General Manager~~/Member

Australian Communications and Media Authority

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**1 Name of Frequency Band Plan**

This Frequency Band Plan is the *Television Outside Broadcast Service (1980–2110 MHz and 2170–2300 MHz) Frequency Band Plan 2012*.

**2 Commencement**

This Frequency Band Plan commences on the day after it is registered.

**3 Revocations**

The following Frequency Band Plans are revoked:

- (a) *Mobile-Satellite Service (2 GHz) Frequency Band Plan 2002*; and
- (b) *2.1 GHz Band Frequency Band Plan 2002*.

**4 Interpretation**

- (1) In this Frequency Band Plan:

*Act* means the *Radiocommunications Act 1992*.

*airborne television outside broadcast station* means a television outside broadcast station that is on board an aircraft.

*earth receive station* has the meaning it has in the interpretation determination.

*earth station* has the meaning it has in the interpretation determination.

*interpretation determination* means the *Radiocommunications (Interpretation) Determination 2000*.

*Perth area* means the geographic area described by a circle with a radius of 15 kilometres whose centre is located at latitude 31.802522 South and longitude 115.885160 East.

*regulations* means the *Radiocommunications Regulations 1993*.

*spectrum plan* means the *Australian Radiofrequency Spectrum Plan 2009*.

*television outside broadcast service* means a radiocommunications service that is provided by the operation of a television outside broadcast station.

*television outside broadcast station* has the meaning it has in the interpretation determination.

- (2) Unless the contrary intention appears, an expression used in this Frequency Band Plan that is defined in the spectrum plan, the interpretation determination or the regulations has the same meaning in this Frequency Band Plan as it has in the spectrum plan, the interpretation determination or the regulations.

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- (3) However:
- (a) an expression defined in the spectrum plan and in the interpretation determination or the regulations has the meaning given in the spectrum plan; and
  - (b) an expression defined in the interpretation determination and in the regulations (but not in the spectrum plan) has the meaning given in the interpretation determination.
- (4) In this Frequency Band Plan:
- (a) the range of numbers that identifies a frequency band is taken to include the higher, but not the lower, number;
  - (b) geographical coordinates describing a point are based on datum in the *Geocentric Datum of Australia 1994*; and
  - (c) where an area overlaps with an adjacent area, the first area is taken to be part of the second area.

## **5 Purpose of Frequency Band Plan**

This Frequency Band Plan makes provision for the purposes for which the following frequency bands may be used:

- (a) 1980–2110 MHz; and
- (b) 2170–2300 MHz.

## **6 Purpose for which the 1980–2010 MHz frequency band may be used – mobile satellite services (Earth-to-space)**

The frequency band 1980-2010 MHz may be used for mobile satellite services (Earth-to-space).

## **7 Purpose for which the 2170-2200 MHz frequency band may be used – mobile-satellite services (space-to-Earth)**

The frequency band 2170-2200 MHz may be used for mobile satellite services (space-to-Earth).

## **8 Purposes for which the 1980–2010 MHz and 2170–2200 MHz frequency bands may be used – fixed services**

A person must not operate a fixed service in the 1980–2010 MHz and 2170–2200 MHz frequency band unless:

- (a) at the commencement of this Frequency Band Plan, the person held a licence authorising the person to operate the fixed service in the frequency band; or
- (b) the service is a television outside broadcast service.

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**9 Purposes for which the 2010–2110 MHz and 2200–2300 MHz frequency bands may be used**

Subject to sections 10, 11 and 12, the 2010–2110 MHz and 2200–2300 MHz frequency bands may be used for:

- (a) a television outside broadcast service;
- (b) a fixed service (point-to-point);
- (c) any service that, according to the spectrum plan, may be operated in the 2010–2110 MHz and 2200–2300 MHz frequency bands.

**10 Purpose for which the 2010–2110 MHz and 2200–2300 MHz frequency bands may be used – fixed services (point-to-point) in specified areas**

- (1) After 1 November 2013, the 2010–2110 MHz and 2200–2300 MHz frequency bands must not be used for a fixed service (point-to-point) except in accordance with this section.
- (2) A person must not operate a fixed service (point-to-point) in the 2010–2110 MHz or 2200–2300 MHz frequency bands in an area described in Schedule 1.
- (3) A person must not operate a fixed service (point-to-point) in the 2010–2110 MHz frequency band in an area described in Schedule 2 if, before the commencement of this Frequency Band Plan, that service was authorised under an apparatus licence.
- (4) A person may only operate a fixed service (point-to-point) as a secondary service in the 2010–2110 MHz frequency band in an area described in Schedule 2.

**11 Purposes for which the 2025–2110 MHz and 2200–2300 MHz frequency bands may be used – earth stations and earth receive stations in the Perth area**

After 31 December 2015, a person must not operate as a primary service:

- (a) an earth station in the 2025–2110 MHz frequency band; or
  - (b) an earth receive station in the 2200–2300 MHz frequency band;
- within the Perth area.

**12 Purposes for which the 2200–2300 MHz frequency band may be used – airborne television outside broadcast station**

A person must not operate an airborne television outside broadcast station in the 2200–2300 MHz frequency band.

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**Schedule 1                      Fixed service (point-to-point) areas**  
(subsection 10(2))

**Part 1 Areas for 2010–2110 MHz**

For the frequency band 2010–2110 MHz, the areas are each geographic area described by a circle with a radius of 150 kilometres whose centre is located at a point specified in Table 1.

**Table 1: Centre coordinates for the frequency band 2010–2110 MHz**

° South	° East
37.814048	144.971860
37.838770	144.996027
37.834878	145.348522
37.818493	144.957138
37.880993	144.999082
37.828212	145.353244
33.819533	151.185321
33.810644	151.196709
33.781756	151.070600
33.868699	151.209488
33.934533	151.156990
33.805366	151.181432
32.890085	151.538640
27.463138	152.948007
27.472304	153.025227
27.969524	153.213562
26.789806	152.918280
28.001189	153.426614
35.269830	149.158148
35.275386	149.097593
42.897395	147.236091
34.979923	138.707189
34.887980	138.613856
34.924647	138.598579
31.950754	115.872040
31.953254	115.855373
32.012419	116.061762
32.008252	116.083985
31.878253	115.859817
32.057978	115.751210
12.463580	130.835066
12.464135	130.844233
12.448302	130.836455

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## Part 2 Areas for 2200–2300 MHz

For the frequency band 2200–2300 MHz, the areas are each geographic area described by a circle with a radius of 150 kilometres whose centre is located at a point specified in Table 2.

**Table 2: Centre coordinates for the frequency band 2200–2300 MHz**

° South	° East
37.814048	144.971860
37.838770	144.996027
37.834878	145.348522
37.818493	144.957138
37.880993	144.999082
37.828212	145.353244
33.819533	151.185321
33.810644	151.196709
33.781756	151.070600
33.868699	151.209488
33.934533	151.156990
33.805366	151.181432
32.890085	151.538640
27.463138	152.948007
27.472304	153.025227
27.969524	153.213562
26.789806	152.918280
28.001189	153.426614
35.269830	149.158148
35.275386	149.097593
42.897395	147.236091
34.979923	138.707189
34.887980	138.613856
34.924647	138.598579
31.950754	115.872040
31.953254	115.855373
32.012419	116.061762
32.008252	116.083985
31.878253	115.859817
32.057978	115.751210

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**Schedule 2                      Fixed service (point-to-point) secondary areas**  
(subsections 10(3) and (4))

For the frequency band 2010–2110 MHz, the areas are each geographic area:

- (a) bounded by a line starting at the intersection of the first coordinates listed in Table 3 in relation to the area; and
- (b) passing sequentially through the intersection of each set of coordinates shown in Table 3 to the point of commencement;

but excludes:

- (c) each geographic area described by a circle with a radius of 150 kilometres whose centre is located at a point specified in Table 4.

**Table 3: Coordinates for secondary areas 2010–2110 MHz**

° South	° East	° South	° East
31.998556	136.001359	26.998429	150.001100
31.998546	137.001345	25.998434	150.001089
31.998537	138.001335	24.998427	150.001086
31.998521	139.001320	24.998425	151.001070
31.998513	140.001305	24.998429	152.001054
31.998499	141.001291	24.998417	153.001040
32.998503	141.001301	24.998402	154.001025
32.998492	142.001289	25.998401	154.001033
32.998484	143.001274	26.998397	154.001041
33.998489	143.001286	27.998398	154.001049
33.998479	144.001273	28.998397	154.001059
33.998470	145.001258	29.998395	154.001068
33.998459	146.001242	30.998395	154.001078
33.998450	147.001227	31.998395	154.001088
32.998449	147.001211	31.998405	153.001103
32.998441	148.001196	32.998404	153.001116
31.998441	148.001188	32.998415	152.001132
30.998441	148.001176	33.998414	152.001145
30.998435	149.001159	34.998416	152.001158
29.998435	149.001149	34.998426	151.001172
28.998437	149.001143	35.998427	151.001188
28.998431	150.001125	36.998431	151.001203
27.998425	150.001112	37.998434	151.001218



° South	° East
37.998444	150.001236
37.998457	149.001255
38.998459	149.001268
39.998464	149.001286
40.998469	149.001304
41.998475	149.001323
42.998481	149.001343
43.998488	149.001364
43.998499	148.001382
43.998511	147.001401
43.998522	146.001418
43.998534	145.001436
42.998527	145.001413
41.998522	145.001384
41.998531	144.001408
40.998524	144.001387
40.998536	143.001403

° South	° East
39.998529	143.001383
38.998522	143.001358
38.998534	142.001379
38.998546	141.001393
38.998557	140.001407
37.998545	140.001384
37.998562	139.001401
36.998554	139.001381
36.998567	138.001396
36.998578	137.001408
36.998590	136.001420
35.998576	136.001402
34.998562	136.001392
33.998560	136.001384
32.998557	136.001369
31.998556	136.001359

**Table 4: Centre coordinates for excluded areas 2010–2110 MHz**

° South	° East
37.814048	144.971860
37.838770	144.996027
37.834878	145.348522
37.818493	144.957138
37.880993	144.999082
37.828212	145.353244
33.819533	151.185321
33.810644	151.196709
33.781756	151.070600
33.868699	151.209488
33.934533	151.156990
33.805366	151.181432

32.890085	151.538640
27.463138	152.948007
27.472304	153.025227
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34.924647	138.598579