

EMBARGO 23

FREQUENCY RANGE(S):	1980–2010 MHz 2010–2110 MHz 2170–2200 MHz 2200–2300 MHz
SUBJECT:	Embargo on new assignments to support television outside broadcast and future replanning activities
DATE OF EFFECT:	April 1996 (last revised August 2022)
COVERAGE:	See instructions below
TIME FRAME:	Ongoing

INSTRUCTIONS

1. No new assignments are to be made Australia-wide in the 1980–2010 MHz and 2170–2200 MHz frequency bands, except assignments for television outside broadcasting services and assignments for space and space receive apparatus licence as outlined below.
 - a. Assignments for television outside broadcast services in accordance with the [Radiocommunications \(Mobile-Satellite Service\) \(1980–2010 MHz and 2170–2200 MHz\) Frequency Band Plan 2022](#) (the MSS Band Plan). Licences are not to authorise the operation of television outside broadcast services after:
 - i. 28 February 2026 in metropolitan area and designated areas as defined in the MSS Band Plan)
 - ii. 29 February 2024 elsewhere
 - b. Assignments for space licences in the band 2195-2200 MHz in areas outside of metropolitan and designated areas as defined in the MSS Band Plan
 - c. Assignments for space receive licences in the band 2005-2009 MHz in areas outside of metropolitan and designated areas as defined in the MSS Band Plan will be considered on a case-by-case basis as outlined in ACMA business operating procedures for Submission and processing of applications for [space and space receive apparatus licences](#). Note: assignments for space receive licences are not allowed in 2009-2010 MHz.
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: This serves to facilitate the introduction of mobile satellite services into the band 1980-2010/2170-2200 MHz and the transition of television outside broadcast

services (TOB) out of the band in accordance with the outcomes of [the 2 GHz replanning process](#) and timelines specified in the MSS Band Plan (by 1 March 2026 metropolitan and designated areas, by 1 March 2024 elsewhere). It also serves to protect adjacent band TOB services by not allowing the operation of uncoordinated earth station transmitters (via space receive apparatus licences) in the frequency range 2009-2010 MHz.

Note that under the Radiocommunications Act 1992 (the Act) operation of a radiocommunications transmitter is not authorised by a transmitter licence if it is not in accordance with the conditions of the licence (subsection 97(4) of the Act). Paragraph 108(2)(a) of the Act makes it a condition of each transmitter licence that the licensee, and any person authorised to operate a radiocommunications transmitter under the licence, must not operate, or permit the operation, of the transmitter for a purpose that is inconsistent with a purpose of a kind specified in the appropriate frequency band plan (if any).¹ The MSS Band Plan is relevant in this regard.

Instruction 2: This serves to support the operation of television outside broadcast services in accordance with the *Television Outside Broadcast Services (2010-2110 MHz and 2200-2300 MHz) Frequency Band Plan 2022* and RALI FX 21 Television Outside Broadcasting services in the bands 1980-2110 MHz and 2170-2300 MHz.

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. It also serves to support the operation of television outside broadcast services by restricting the areas in which earth stations are supported.

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.

¹ Radiocommunications (Mobile-Satellite Service) (1980–2010 MHz and 2170–2200 MHz) Frequency Band Plan 2022 – Explanatory Statement

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.

In August 2022, instruction 1 was revised to support implementation of [2 GHz planning outcomes](#) including arrangements for [2 GHz narrowband mobile-satellite services](#) and transitional arrangements for TOB services.

EMBARGO AUTHORISATION:

[signed] 12/8/2022

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Spectrum Planning and Engineering Branch
Australian Communications and Media Authority

ATTACHMENT 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

° South	° East
31.95075	115.87204
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

Table 2

° South	° East
31.95075	115.87204
31.953254	115.855373
32.012419	116.061762
32.008252	116.083985
31.878253	115.859817
32.057978	115.751210

Table 3

° South	° East	° South	° East	° South	° East
31.998556	136.001359	17.998480	145.001094	37.998444	150.001236
31.998546	137.001345	16.998479	145.001085	37.998457	149.001255
31.998537	138.001335	15.998479	145.001090	38.998459	149.001268
31.998521	139.001320	15.998478	146.001078	39.998464	149.001286
31.998513	140.001305	15.998474	147.001067	40.998469	149.001304
31.998499	141.001291	16.998469	147.001072	41.998475	149.001323
32.998503	141.001301	17.998465	147.001078	42.998481	149.001343
32.998492	142.001289	18.998465	147.001089	43.998488	149.001364
32.998484	143.001274	18.998456	148.001071	43.998499	148.001382
33.998489	143.001286	18.998451	149.001058	43.998511	147.001401
33.998479	144.001273	19.998451	149.001064	43.998522	146.001418
33.998470	145.001258	19.998441	150.001050	43.998534	145.001436
33.998459	146.001242	20.998438	150.001056	42.998527	145.001413
33.998450	147.001227	20.998432	151.001042	41.998522	145.001384
32.998449	147.001211	21.998429	151.001049	41.998531	144.001408
32.998441	148.001196	22.998434	151.001058	40.998524	144.001387
31.998441	148.001188	22.998420	152.001041	40.998536	143.001403
30.998441	148.001176	23.998428	152.001046	39.998529	143.001383
30.998435	149.001159	23.998411	153.001033	38.998522	143.001358
29.998435	149.001149	23.998405	154.001018	38.998534	142.001379
28.998437	149.001143	24.998402	154.001025	38.998546	141.001393
28.998431	150.001125	25.998401	154.001033	38.998557	140.001407
27.998425	150.001112	26.998397	154.001041	37.998545	140.001384
26.998429	150.001100	27.998398	154.001049	37.998562	139.001401
25.998434	150.001089	28.998397	154.001059	36.998554	139.001381
24.998427	150.001086	29.998395	154.001068	36.998567	138.001396
24.998434	149.001105	30.998395	154.001078	36.998578	137.001408
23.998440	149.001093	31.998395	154.001088	36.998590	136.001420
23.998448	148.001103	31.998405	153.001103	35.998576	136.001402
22.998453	148.001095	32.998404	153.001116	34.998562	136.001392
21.998461	148.001086	32.998415	152.001132	33.998560	136.001384
20.998461	148.001080	33.998414	152.001145	32.998557	136.001369
20.998461	147.001099	34.998416	152.001158	31.998556	136.001359
20.998467	146.001113	34.998426	151.001172		
19.998468	146.001105	35.998427	151.001188		
18.998468	146.001098	36.998431	151.001203		
18.998472	145.001108	37.998434	151.001218		

ATTACHMENT 2:

Earth Station Protection Zone area definition

Area name	HCIS
Mingenew	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).