

# EXPLANATORY STATEMENT

Approved by the Australian Communications and Media Authority

*Radiocommunications Act 1992*

## ***Australian Radiofrequency Spectrum Plan 2021***

### **Authority**

The Australian Communications and Media Authority (the **ACMA**) has made the *Australian Radiofrequency Spectrum Plan 2021* (the **Spectrum Plan**) under section 30 of the *Radiocommunications Act 1992* (the **Act**).

Section 30 of the Act provides that the ACMA may, by legislative instrument, prepare a spectrum plan. Pursuant to section 30 of the Act, a spectrum plan must divide the spectrum into such number of frequency bands as is considered necessary by the ACMA for the purpose of regulating radiocommunications under the Act. A spectrum plan must also designate one or more bands to be used primarily for the general purposes of defence, and specify the general purpose or purposes for which other bands may be used.

The Spectrum Plan revokes and replaces the *Australian Radiofrequency Spectrum Plan 2017* (the **Spectrum Plan 2017**). Subsection 33(3) of the *Acts Interpretation Act 1901* provides that where an Act confers a power to make a legislative instrument, the power shall be construed to include a power exercisable in the like manner and subject to the like conditions (if any), to repeal, rescind, revoke, amend or vary any such instrument.

### **Purpose and operation of the instrument**

#### *Purpose of the instrument*

As required under section 30 of the Act, the Spectrum Plan divides the radiofrequency spectrum into frequency bands and specifies the purposes for which those bands may be used. This process is referred to as ‘allocation’ of frequency bands to services. The allocation process includes designating services as either primary or secondary services. The main purpose of designating services as either primary or secondary is to assist in interference management. The status of a service is indicated by use of upper case letters for ‘PRIMARY’, and lower case letters for ‘secondary’.

The Spectrum Plan provides the basis for management of the radiofrequency spectrum in Australia. The allocations effected by the Spectrum Plan are prescriptive and the ACMA issues apparatus licences consistently with the Spectrum Plan.

The Spectrum Plan is part of the way Australia’s obligations as a signatory to the Constitution and Convention of the International Telecommunication Union (ITU) are addressed in domestic law. The provisions of the Constitution and Convention are complemented by the Administrative Regulations, including the Radio Regulations, which are binding on all Member States. The Spectrum Plan provides details of the international frequency allocations agreed for the three world regions (in column 1 of the Table of Frequency Band Allocations of the Spectrum Plan). Australia is part of Region 3 (the third sub-column under column 1).

The basis for the structure of the Spectrum Plan is derived from the Table of Frequency Allocations contained in Article 5 of the Radio Regulations. While the Australian allocations are broadly aligned with the ITU requirements for Region 3, some variations do exist. Such variations are subject to the condition that the services do not cause harmful interference to the radio services or communications of other ITU Members that operate in accordance with the provisions of the Radio Regulations, and that the possibility of harmful interference from such services and communications is accepted.

### *Operation of the instrument*

The Spectrum Plan revokes and replaces the Spectrum Plan 2017. A provision-by-provision description of the instrument is set out in the notes at **Attachment A**.

The differences between the Spectrum Plan and the former plan reflect both international and domestic changes.

Changes arising from the ITU World Radiocommunication Conference 2019 (WRC-19) held in Sharm El Sheik, Egypt from 28 October to 22 November 2019 are reflected in column 1 of the Table of Frequency Band Allocations (Part 2 of the Spectrum Plan) and International Footnotes to the Table (Part 4 of the Spectrum Plan).

**Attachment B** provides details of the changes affecting Australia from WRC-19.

Domestic developments that have led to changes made in the Spectrum Plan (as compared to the Spectrum Plan 2017) are as follows:

- > Part 1 – Introductory
  - Unauthorised services
    - Subsection 10(11) is a transitional provision to enable decisions made under subsection 10(10) of the Spectrum Plan 2017 to be carried over.
- > Australian Table of Allocations and Australian Footnotes
  - Removed primary service Broadcasting and corresponding footnote AUS54 in the 7 100 – 7 200 kHz band.
  - Added footnote AUS53 to primary service Maritime Mobile in the 26 100 – 26 175 kHz band.
  - Added footnote AUS100A to the primary allocation to the Maritime Mobile-Satellite (space-to-Earth) service in the 7 375–7 750 MHz band.

### **Documents incorporated by reference**

The Spectrum Plan incorporates references to the *Broadcasting Services Act 1992*, the *Offshore Minerals Act 1994*, the *Radiocommunications Act 1992*, the *Radiocommunications (Interpretation) Determination 2015* and the *Radiocommunications Regulations 1993*, each of which are available free of charge on the Australian Government’s Federal Register of Legislation: [www.legislation.gov.au](http://www.legislation.gov.au).

The Spectrum Plan also incorporates references to:

- > the current edition of the Radio Regulations published by the ITU – which is available free of charge from the ITU’s website: [www.itu.int](http://www.itu.int)
- > the Convention on International Civil Aviation and the Standards and Recommended Practices of the International Civil Aviation Organization – which are available free of charge from the International Civil Aviation Organization’s website: [www.icao.int](http://www.icao.int)
- > the Final Acts of the Special Regional Conference (Geneva, 1960) and the Final Acts of the Regional Administrative LF/MF Broadcasting Conference (Regions 1 and 3) (Geneva, 1975) – each of which are available free of charge from the ITU’s website: [www.itu.int](http://www.itu.int)
- > the Master International Frequency Register, which is maintained by the ITU – the ACMA can facilitate access to the Register upon request
- > a list of Radio Astronomy services in the 1668-1670 MHz band (for the purposes of international footnote 379C) – which can be provided by the ACMA upon request

- > the following ITU Recommendations: Recommendation ITU-R P.452, Recommendation ITU-R RA.769, Recommendation ITU-R SA.1154-0, Recommendation ITU-R M.1174-4, Recommendation ITU-R S.1340-0, Recommendation ITU-R M.1371, Recommendation ITU-F.1613-0, Recommendation ITU-R RA.1631-0, Recommendation ITU-R M.1643-0, Recommendation ITU-R RS.1881, Recommendation ITU-R M.2010, Recommendation ITU-R RS.1260-2, Recommendation ITU-R M.1583-1, Recommendation ITU-R RS.2066-0, Recommendation ITU-R RS.2065-0, Recommendation ITU-R BO.1898 and Recommendation ITU-R M.2057 – each of which is available free of charge from the ITU’s website at: [www.itu.int](http://www.itu.int); and
- > Resolutions adopted at ITU World Radiocommunication Conferences held in 1997, 1999, 2000, 2003, 2007, 2012, 2015 and 2019 – all of which are available free of charge from the ITU’s website at: [www.itu.int](http://www.itu.int).

### **Consultation**

Section 33 of the Act requires the ACMA to publish a notice on the ACMA’s website stating that a draft of the spectrum plan is available for comment, setting out the draft plan and inviting interested persons to make representations about the draft plan by a date at least one month later than the date on which the notice is published. Such a notice was placed on the ACMA’s website on 26 August 2020 inviting representations about the draft spectrum plan by 29 September 2020. Nine submissions were received during the comment period from a mixture of government agencies, communications and broadcasting industry members, and private citizens. In making the Spectrum Plan, and in accordance with the requirements of subsection 33(4) of the Act, the ACMA gave due consideration to the representations received during the consultation period.

### **Regulatory impact assessment**

A preliminary assessment of the proposal to make the Spectrum Plan was conducted by the Office of Best Practice Regulation (**OBPR**), based on information provided by the ACMA, for the purposes of determining whether a Regulation Impact Statement (**RIS**) would be required. OBPR advised that a RIS would not be required because the proposed regulatory change is minor or machinery in nature – OBPR reference number 42862.

### **Statement of compatibility with human rights**

Subsection 9(1) of the *Human Rights (Parliamentary Scrutiny) Act 2011* requires the rule-maker in relation to a legislative instrument to which section 42 (disallowance) of the *Legislation Act 2003* (the **LA**) applies to cause a statement of compatibility with human rights to be prepared in respect of that legislative instrument.

The statement of compatibility set out below has been prepared to meet that requirement.

### **Overview of the instrument**

The *Australian Radiofrequency Spectrum Plan 2021* (the Spectrum Plan) is a disallowable legislative instrument for the purposes of the *Legislation Act 2003*.

The Spectrum Plan is prepared under section 30 of the *Radiocommunications Act 1992* and revokes and replaces the *Australian Radiofrequency Spectrum Plan 2017* (the Spectrum Plan 2017).

The Spectrum Plan divides the radiofrequency spectrum into frequency bands and specifies the purposes for which those bands may be used. The Spectrum Plan reflects changes to the International Telecommunication Union’s treaty level Radio Regulations resulting from the 2019 World

Radiocommunication Conference, as well as changes that have occurred domestically since the Spectrum Plan 2017 was made.

***Human rights implications***

The ACMA has assessed whether the Spectrum Plan is compatible with human rights, being the rights and freedoms recognised or declared by the international instruments listed in subsection 3(1) of the *Human Rights (Parliamentary Scrutiny) Act 2011* as they apply to Australia.

Having considered the likely impact of the Spectrum Plan and the nature of the applicable rights and freedoms, the ACMA has formed the view that the Spectrum Plan does not engage any of those rights or freedoms.

***Conclusion***

The Spectrum Plan is compatible with human rights as it does not raise any human rights issues.

## Notes to the *Australian Radiofrequency Spectrum Plan 2021*

### Part 1—Introductory

Part 1 contains definitions of services and provisions which give effect to the various parts of the Table of Frequency Band Allocations ('the Table') in Part 2 and the Australian footnotes in Part 3. It also contains provisions which provide for the use of frequency bands other than in accordance with the Table.

#### Section 1 Name of Spectrum Plan

Section 1 provides for the citation of the Spectrum Plan as the *Australian Radiofrequency Spectrum Plan 2021*.

#### Section 2 Commencement

Section 2 provides for the commencement of the Spectrum Plan at the start of the day after the day it is registered on the Federal Register of Legislation.

#### Section 2A Revocation

Section 2A revokes the *Australian Radiofrequency Spectrum Plan 2017*.

#### Section 3 Definitions

Section 3 contains definitions and interpretation provisions. It provides the meaning of terms used in the Spectrum Plan, particularly the various kinds of "services". Many of these are derived from the Radio Regulations published by the ITU. Expressions not defined in the Spectrum Plan will have the meaning given by the *Radiocommunications (Interpretation) Determination 2015* or the *Radiocommunications Regulations 1993*.

Subsection 3(5) of the Spectrum Plan is intended to reflect that the Australian and International footnotes should be read as parts of the Spectrum Plan and not simply as being for information only.

#### Section 4 Division of spectrum into frequency bands

Section 4 divides the radiofrequency spectrum into the frequency bands set out in column 2 of the Table for the purposes of section 30 of the Act.

Column 1 is only included in the Table to allow for comparison with column 2.

#### Section 5 How the Table refers to services

Section 5 provides the method by which the primary and secondary services in a frequency band are expressed, including any limitations, modes of operation or operational restrictions, in column 2 of the Table.

#### Section 6 Primary and secondary services — frequency band plans

Section 6 provides that if a frequency band is specified for a primary service, the frequency band may also be specified for a secondary service in a separate frequency band plan.

## **Section 7 Primary services — spectrum licences**

Section 7 provides that services operating under a spectrum licence are generally taken to be primary services. This section ensures that spectrum licences are generally afforded particular interference protection over any class or apparatus licences that might be operating in that band as secondary services.

## **Section 8 Use of frequency bands — general**

Section 8 provides that if a frequency band is part of a frequency band plan, the frequency band must be used only for the purpose specified in the frequency band plan and in a way mentioned in section 9 or 10.

## **Section 9 Use of frequency bands — spectrum licensing and class licensing**

Subsection 9(1) provides that a frequency band may be used for a service that is operating in accordance with a spectrum licence and is an unspecified service.

Subsection 9(2) provides that a frequency band may be used by a device that is operating in accordance with a class licence and is not consistent with a service specified in column 2 of the Table for the frequency band.

## **Section 10 Use of frequency bands — other circumstances**

Section 10 provides flexibility for circumstances in which a frequency band may be used for a service that is not specified in column 2 of the Table.

Subsection 10(1) provides for a frequency band to be used for an unspecified service if that service is used to support a service specified in column 2 of the Table.

Subsection 10(2) provides for the better support of certain practical configurations of radiocommunications systems. Examples of this are provided in the subsection.

Subsection 10(3) supports the use of a frequency band for broadcasting purposes where fixed and mobile services are allocated to that band.

Subsection 10(4) provides flexibility in the use of a frequency band to assist in the planning and implementation of new radiocommunication services.

Subsection 10(5) provides for experimental stations to use a frequency band on a secondary basis where the band's allocation(s) do not otherwise support their use.

Subsection 10(6) provides for atmospheric and ionospheric sounders to use a frequency band on a secondary basis where the band's allocation(s) do not otherwise support their use.

Subsection 10(7) provides for use of a service where that use is in the public interest for the purposes of defence or national security.

Subsection 10(8) provides that a frequency band may be used for radio astronomy services in circumstances where the ACMA has made provision for that use in a frequency band plan.

Subsection 10(9) provides that a frequency band may be used by an earth receive station in a frequency band allocated for the fixed-satellite service (space-to-Earth) where that station is in motion, or in a stationary position at an unspecified point on land, on water or in the air.

Subsection 10(10) provides that a frequency band may be used for an unspecified service if, prior to that use, the ACMA, being satisfied that the unspecified service is unlikely to cause harmful interference to another service, has approved the unspecified service in writing and given notice of that approval on its website.

Subsection 10(11) provides that decisions made under subsection 10(10) of the Spectrum Plan 2017 are taken to have been approved and published under subsection 10(10) of the Spectrum Plan.

### **Section 11 Harmful interference — general**

Subsection 11(1) provides that if an allocation to a service in the Table is subject to the requirement that the use does not cause harmful interference to another service, then the first-mentioned service may not claim protection from harmful interference caused by the second-mentioned service.

Subsection 11(2) provides that if an allocation to a service in the Table is subject to the requirement that the use may not claim protection from interference caused by another service, then the first-mentioned service must not cause harmful interference to the second-mentioned service.

Subsection 11(3) provides that a service operating otherwise than in accordance with the ITU Radio Regulations must not cause harmful interference to a station outside Australia operating in accordance with the Radio Regulations.

Subsection 11(4) provides that if a service is operating otherwise than in accordance with the ITU Radio Regulations it must not cause harmful interference to a foreign vessel or foreign aircraft that is travelling on a voyage and operating in accordance with the Radio Regulations.

### **Section 12 Harmful interference — secondary services**

Section 12 provides that services that have a secondary status in the Table must not cause harmful interference to other services and cannot claim protection from harmful interference caused by a primary service using the band, but may however claim protection from harmful interference from certain other secondary services.

### **Section 13 Interpretation of the Table**

Section 13 provides information to assist in interpreting the Table.

Subsection 13(1) explains how a frequency band is identified.

Subsection 13(2) explains that the numbers used to identify bands refer to kilohertz, megahertz or gigahertz, and that the range is taken to include the higher but not the lower number.

Subsections 13(3), (4), (5) and (6) explain that numbers (with or without letters) constitute a reference to the footnotes. Services with a footnote reference are subject to service conditions or restrictions. Frequency bands with a footnote reference are subject to conditions or restrictions across that band.

## **Part 2—Table of Frequency Band Allocations**

This part comprises two columns. Column 1 reproduces the Table of Frequency Allocations in Article 5 of the ITU Radio Regulations. Column 2 is the Australian Table of Allocations setting out frequency bands as required by section 30 of the Act. Both columns divide the spectrum into bands, and provide for services which are allocated to those bands. Column 2 includes numbers which are called footnotes which comprise both Australian (denoted as AUS) footnotes and International footnotes.

### **Part 3–Australian Footnotes**

This part sets out text for the Australian footnotes specified in column 2 of the Table of Frequency Band Allocations. All of the Australian footnotes begin with the prefix AUS, which distinguishes them from the International footnotes, which do not have this prefix. Whilst the Australian allocations are broadly aligned with the ITU requirements, a number of variations exist.

### **Part 4–International Footnotes**

This part sets out the International footnotes. These are the footnotes mentioned in Article 5 of the ITU Radio Regulations. These footnotes appear in both columns 1 and 2 of the Table of Frequency Band Allocations and, where included in the column 2 frequency bands, apply to Australian allocations.



### Table of changes affecting Australia arising from WRC-19

The following table lists the changes that have been made to the Australian column of the Table of Frequency Band Allocations due to the outcomes of the 2019 World Radiocommunication Conference, as described in the WRC-19 Final Acts.

#	Frequency Range	Changes
1	495 – 505 kHz	Added footnote <b>82C</b> to primary service <b>Maritime Mobile</b> .
2	137 – 138 MHz	Added footnote <b>203C</b> to primary service <b>Space Operation (space-to-Earth)</b> .  Removed footnote <b>208</b> from primary service <b>Mobile-Satellite (space-to-Earth)</b> and added footnote <b>208</b> to the entire frequency range.
3	137.175 – 137.825 MHz	Added footnote <b>209A</b> to primary service <b>Space Operation (space-to-Earth)</b> .
4	148 – 149.9 MHz	Added footnote <b>218A</b> .
5	157.1875 – 157.3375 MHz 161.7875 – 161.9375 MHz	Added secondary service <b>Maritime mobile-satellite</b> and corresponding footnotes <b>208A</b> , <b>208B</b> , <b>228AB</b> and <b>228AC</b> .
6	399.9 – 400.05 MHz	Added footnotes <b>260A</b> and <b>260B</b> to primary service <b>Mobile-Satellite (Earth-to-space)</b> .
7	401 – 403 MHz	Added footnote <b>264A</b> and <b>264B</b> .
8	520 – 850 MHz	Removed footnote <b>311A</b> .
9	1 621.35 – 1 626.5 MHz	Added primary service <b>Maritime mobile-satellite (space-to-Earth)</b> and corresponding footnotes <b>373</b> and <b>373A</b> .  Modified secondary service <b>Mobile-satellite (space-to-Earth)</b> to <b>Mobile-satellite (space-to-Earth) except maritime mobile-satellite (space-to-Earth)</b> and removed corresponding footnote <b>208B</b> .  Added footnote <b>208B</b> to the entire frequency range.
10	9.3 – 9.5 GHz	Added footnote <b>475</b> to primary service <b>Radionavigation</b> and removed footnote <b>475</b> from the entire frequency range.
11	12.2 – 12.75 GHz	Removed secondary service <b>Land mobile satellite (space-to-Earth)</b> .
12	17.7 – 19.7 GHz	Added footnote <b>517A</b> to primary service <b>Fixed-Satellite (space-to-Earth)</b> .
13	21.4 – 22 GHz	Removed footnote <b>530D</b> .
14	24.25 – 27.5 GHz	Added footnotes <b>338A</b> and <b>532AB</b> to primary service <b>Mobile</b> .
15	24.65 – 24.75 GHz	Removed footnote <b>533</b> .
16	27.5 – 29.5 GHz	Added footnote <b>517A</b> to primary service <b>Fixed-Satellite (Earth-to-space)</b> .
17	31 – 31.3 GHz	Added footnote <b>543B</b> to primary service <b>Fixed</b> .
18	37 – 38 GHz 42.5 – 43.5 GHz	Added footnote <b>550B</b> to primary service <b>Mobile except aeronautical mobile</b> .

#	Frequency Range	Changes
19	37.5 – 42.5 GHz 47.2 – 50.2 GHz 50.4 – 51.4 GHz	Added footnote <b>550C</b> to primary service <b>Fixed-Satellite (space-to-Earth)</b> .
20	38 – 39.5 GHz	Added footnote <b>550D</b> to primary service <b>Fixed</b> .
21	38 – 40.5 GHz	Added footnote <b>550B</b> to primary service <b>Mobile</b> .
22	39.5 – 40.5 GHz	Added footnote <b>550E</b> .
23	40.5 – 42.5 GHz	Removed secondary service <b>Mobile</b> .  Added primary service <b>Land Mobile</b> and corresponding footnote <b>550B</b> .  Added secondary services <b>Aeronautical mobile</b> and <b>Maritime mobile</b> .
24	47.2 – 48.2 GHz	Added footnote <b>553B</b> to primary service <b>Mobile</b> .
25	51.4 – 52.4 GHz	Added primary service <b>Fixed-Satellite (Earth-to-space)</b> and corresponding footnote <b>555C</b> .  Removed footnote <b>338A</b> from primary service <b>Fixed</b> and added footnote <b>338A</b> to the entire frequency range.
26	66 – 71 GHz	Added footnote <b>559AA</b> to primary service <b>Mobile</b> .
27	155.5 – 158.5 GHz	Removed primary service <b>Earth-Exploration Satellite (passive)</b> .  Removed primary service <b>Space Research (passive)</b> and corresponding footnote <b>562G</b> .  Removed footnotes <b>562F</b> and <b>562G</b> .
28	275 – 3 000 GHz	Added footnote <b>564A</b> .