EXPLANATORY STATEMENT

Approved by the Australian Communications and Media Authority

Radiocommunications Act 1992

Radiocommunications (Australian Radio Quiet Zone Western Australia) Frequency Band Plan 2023

Authority

The Australian Communications and Media Authority (**the ACMA**) has made the *Radiocommunications (Australian Radio Quiet Zone Western Australia) Frequency Band Plan 2023* (**the instrument**) under the *Radiocommunications Act 1992* (**the Act**).

Section 32 of the Act provides that the ACMA may, by written instrument, prepare frequency band plans, each relating to one or more frequency bands.

Purpose and operation of the instrument

The instrument replaces the *Radiocommunications (Mid-West Radio Quiet Zone) Frequency Band Plan 2011* for the radio quiet zone (**RQZ**) in the Mid-West region of Western Australia. A provision-by-provision description of the instrument is set out in the notes at **Attachment A**.

The instrument is a disallowable legislative instrument for the purposes of the *Legislation Act 2003* (**the LA**). It is subject to the sunsetting provisions in Part 4 of Chapter 3 of the LA.

Documents incorporated by reference

Subsection 314A(2) of the Act provides that an instrument under the Act may make provision in relation to a matter by applying, adopting or incorporating (with or without modifications) matter contained in any other instrument or writing as in force or existing at a particular time, or from time to time.

The instrument incorporates the designation of the Geocentric Datum of Australia in Commonwealth of Australia *Gazette* GN 35, dated 6 September 1995 (**GDA94**), as existing on that date. Gazette GN 35 is available, free of charge, from the Federal Register of Legislation at www.legislation.gov.au.

The instrument also incorporates the *Australian Radiofrequency Spectrum Plan 2021* (**spectrum plan**), as in force from time to time, which is prepared under section 30 of the Act.

The instrument also refers to frequency band plans prepared under section 32 of the Act, in that the use of additional services in an applicable frequency band under the instrument must not be inconsistent with another frequency band plan prepared under section 32 the Act.

The instrument refers to the Act, without incorporating it by reference.

Consultation

Before the instrument was made, the ACMA was satisfied that consultation was undertaken to the extent appropriate and reasonably practicable, in accordance with section 17 of the LA. Under section 33 of the Act, the ACMA also published a notice on its website stating that a draft of the instrument is available for comment, setting out the draft, and inviting interested parties to make representations about the draft, to commence public consultation on it.

On 14 October 2022, the ACMA commenced a public consultation process to remake the *Radiocommunications (Mid-West Radio Quiet Zone) Frequency Band Plan 2011.* The ACMA issued a media release and published a page on its website describing the issues for comment, and the

process for contributing to the consultation. The ACMA provided a copy of a discussion paper and the draft instrument.

The discussion paper proposed remaking the current band plan with minor changes and to retitle it as the *Radiocommunications (Australian Radio Quiet Zone Western Australia) Frequency Band Plan 2023*.

The consultation closed on 14 November 2022. Three submissions were received. They are available on the ACMA website.

The submissions supported the proposed changes.

Regulatory impact assessment

The Office of Best Practice and Regulation (OBPR), now the Office of Impact Analysis (OIA), has advised its opinion that no regulatory impact analysis is required for the instrument. The OBPR reference number is OBPR22-02940.

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 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 instrument defines an area within which terrestrial radiocommunications emissions are constrained. This maintains the 'radio-quietness' of the area, assisting greatly in its utility for radio astronomy.

The instrument is a key part of a multi-tiered spectrum planning regulatory arrangement that facilitates the development and use of new radioastronomy technologies in a remote location in Western Australia. Since 2005, the Murchison Radioastronomy Observatory (MRO) has been developed at the centre of the Australian Radio Quiet Zone Western Australia (ARQZWA). It is home to several significant radioastronomy projects.

Because of the remoteness of the location and the low population within the scope of the instrument, its impact is low on those in the area. In addition, the instrument provides a mechanism to operate within the ARQZWA by consulting with the CSIRO.

Human rights implications

The ACMA has assessed whether the instrument 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 instrument and the nature of the applicable rights and freedoms, the ACMA has formed the view that the instrument does not engage any of those rights or freedoms.

Conclusion

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

Explanatory Statement to the Radiocommunications (Australian Radio Quiet Zone Western Australia)
Frequency Band Plan 2023

Notes to the Radiocommunications (Australian Radio Quiet Zone Western Australia) Frequency Band Plan 2023

Section 1 Name

This section provides for the instrument to be cited as the *Radiocommunications (Australian Radio Quiet Zone Western Australia) Frequency Band Plan 2023*.

Section 2 Commencement

This section provides for the instrument to commence on 1 April 2023.

Section 3 Authority

This section identifies the provision of the Act that authorises the making of the instrument, namely subsection 32(1) of the *Radiocommunications Act 1992* (the Act).

Section 4 Purpose of the frequency band plan

Section 4 provides that the purpose of the instrument is to establish a radio quiet zone (**RQZ**) to prevent harmful interference to radioastronomy services. In particular it sets out the purposes for which applicable frequency bands may be used in the RQZ.

Section 5 Interpretation

Section 5 provides definitions for terms used in the instrument.

The definition of "radio astronomy service" states that it has the same meaning as in the spectrum plan. Essentially, as provided for in subsection 3(1) of the spectrum plan, a radio astronomy service is a radiocommunication service that is used for radio astronomy. Radio astronomy is defined in the spectrum plan as astronomy based on the reception of waves of cosmic origin.

Section 5 also provides a definition for the RQZ, being the areas in which services permitted by the instrument may be used and in which prevention or control of interference to radio astronomy services is required in an applicable frequency band. A number of other expressions used in the instrument are defined in the Act.

Section 6 Meaning of applicable frequency band

Section 6 provides the meaning of *applicable frequency band* for the purposes of the instrument and refers to section 7.

Section 7 Applicable frequency band

Section 7 sets out the applicable frequency bands under the instrument by referring to Schedule 1, which lists the geographic areas affected, and the particular frequency range of an applicable frequency band. Schedule 1 provides for two zones each with a frequency range of 70 MHz to 25.25 GHz and a specified geographic area based on a central location with a particular radius. In Schedule 1 there is an inner zone with a radius of 70 kilometres from the MRO; and an outer zone based on the radii of 70-150 kilometres from the MRO.

Section 8 Permitted purposes

Subsection 8(1) provides that an applicable frequency band, as described in section 7 may be used for

- radioastronomy services; or
- additional services as provided in section 9.

As well, subsection 8(1) provides that an applicable frequency band may be reserved for prevention or control of interference with radioastronomy services.

Subsection 8(2) provides that additional services that may operate in the inner zone of the RQZ are taken to be secondary services to radioastronomy services.

Essentially, as provided for in section 12 of the spectrum plan, secondary services have a lower priority than primary services. Secondary services are required to not cause harmful interference to primary services and cannot claim protection from harmful interference from primary services.

Section 9 Additional services

Section 9 provides for the circumstances in which services other than radioastronomy services can use an applicable frequency band.

If an apparatus licence is issued, the service to which it applies may operate under this instrument so long as its use is not inconsistent with the spectrum plan or another frequency band plan.

However, if an apparatus licence is sought after the commencement of this instrument, the service can only operate in an applicable frequency band if the licence applicant consults with CSIRO about those services before applying for the licence. However, the ACMA may decide that an applicant need not consult with CSIRO.

The intent of the requirement to consult with CSIRO is that the licence applicant and CSIRO would come to an agreement about appropriate technical solutions to ensure that radioastronomy services are protected from harmful interference while maximising the opportunities for other spectrum users to use the spectrum in the RQZ. The ACMA will consider all relevant circumstances, including any consultation that has been undertaken, when considering whether to issue an apparatus licence.

In conducting such consultations, reference may be made to the 2011 Memorandum of Understanding on Radio Quiet Matters between the Australian and Western Australian Governments, which sets out their agreed position on the purpose of the RQZ, the roles and obligations of parties in the RQZ, coexistence principles, and dispute resolution mechanisms for concerned parties. In the alternative, the parties may develop other standing or ad hoc consultation arrangements.

The ACMA may also issue class licences that support the use of certain radiocommunications devices. Some class licences include clauses that require that a radiocommunications transmitter operating under the class licence must not cause harmful interference to radio astronomy receivers operating at the centre of the ARQZWA.

Schedule 1 Description of radio quiet zone

As referenced in section 7, Schedule 1 provides a description of two parts of the RQZ.

Both zones incorporate the frequency range 70 MHz to 25.25 GHz. The inner zone incorporates the area within a 70 kilometre radius of the MRO, which is located at latitude 26.704167 South, longitude

Explanatory Statement to the Radiocommunications (Australian Radio Quiet Zone Western Australia)
Frequency Band Plan 2023

116.658889 East (GDA94 datum). The outer zone incorporates the area within a 70 kilometre radius to 150 kilometre radius of the MRO.
Explanatory Statement to the Radiocommunications (Australian Radio Quiet Zone Western Australia)