EMBARGO 80

FREQUENCY RANGE(S):	37.5-43.5 GHz 47.2-48.2 GHz 48.2-50.2 GHz 50.4-52.4 GHz
SUBJECT:	Embargo on all new assignments except for fixed point-to-point links and earth stations in earth station protection zones to support future replanning activities
DATE OF EFFECT:	16 October 2023
COVERAGE:	Australia-wide
TIME FRAME:	Until further notice

INSTRUCTIONS

No new frequency assignments are to be made Australia-wide in the 37.5-43.5 GHz, 47.2-48.2 GHz, 48.2-50.2 GHz, 50.4-52.4 GHz frequency bands except for:

- > fixed point-to-point links operating in accordance with RALI FX 3;
- > earth stations in the Mingenew Earth Station Protection Zone (ESPZ) as defined in Embargo 49; and
- earth stations in ESPZs for Quirindi, Moore and Roma as defined in Appendix C of RALI MS44.

The restrictions of Embargo 80 do not apply to new or existing earth stations located inside the Mingenew ESPZ as defined in Embargo 49 or ESPZs for Quirindi, Moore and Roma as defined in Appendix C of RALI MS44. The definitions of EPSZs are at Attachment 1.

Any applications for case-by-case exemptions are to be referred to the Manager, Space Systems Section for consideration using the <u>satellite.coordination@acma.gov.au</u> email address.

Details for seeking exemptions for earth stations are included in Attachment 2.

REASONS

The ACMA is currently monitoring developments in the 40 GHz (37.5–43.5 GHz), 46 GHz (45.5–47 GHz) and 47 GHz (47.2–48.2 GHz) frequency bands, and the adjacent 48.2–50.2 GHz and 50.4–52.4 GHz bands, which are collectively known as Q/V bands.

The satellite industry has expressed interest in the 37–43.5 GHz, 47.2–50.2 GHz and 50.4–52.4 GHz bands. There is interest in the 37.5–43.5 GHz band (identified globally for IMT at WRC-19) and 47.2–48.2 GHz band (identified for IMT in Region 2, and 68 of the countries in Region 1 and Region 3 including Australia).

While not intending to undertake a full review of the bands, the ACMA acknowledges that the satellite industry is seeking greater certainty in access to the spectrum to assist long-term planning (particularly for gateway earth stations), with a number of operators looking to deploy new satellite systems in the coming years. The ACMA's understanding is that several satellite operators are looking to make decision about gateway earth stations in Australia.

In the interim, the ACMA has considered guidelines regarding its assessment on licence applications for gateway earth stations in the Q/V bands. The ACMA's intent is to provide a consistent framework for considering early requests for gateway earth stations while not

compromising its ability to conduct a thorough review of the bands to determine what arrangements best serve the long-term interests of end users of the spectrum.

Embargo 80 is created to reflect the above consideration by the ACMA.

EMBARGO AUTHORISATION:

[signed] 16/10/2023

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

ATTACHMENT 1:

Earth Station Protection Zone area definitions

Area name	HCIS
Moree	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
Quirindi	MV3G, MV3H, MV3K, MV3L, MV3C8, MV3C9, MV3D7, MV3F3, MV3F5, MV3F6, MV3F8, MV3F9, MV3J2, MV3J3, MV3J5, MV3J6, MV3J9, MV3O1, MV3O2, MV3O3, MV3P1
Roma	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
Mingenew	BU4B, BU1N, BU1M6, BU1M8, BU1M9, BU1O4, BU1O7, BU1O8, BU4A2, BU4A3, BU4A6, BU4C1, BU4C2, BU4C4

These areas have been taken from RALI MS44 (Frequency coordination procedures for the earth station protection zones).

ATTACHMENT 2:

The process for considering earth station licence applications in the interim is outlined in Table 1.

Area	Bands identified for IMT (37.5–43.5 GHz, 47.2–48.2 GHz)	Bands not identified for IMT (48.2–50.2 GHz, 50.4–52.4 GHz)		
Embargo 49 (Mingenew) and east coast ESPZs as specified in RALI MS 44 (Moree, Quirindi and Roma)	Normal application process and no specific conditions related to potential replanning of the band.	Normal application process with no specific conditions related to potential replanning of the band.		
	Considered an incumbent ¹ for replanning purposes.	Considered an incumbent for replanning purposes.		
Outside of areas specified in <u>Radiocommunications</u> (<u>Spectrum Re-allocation</u> <u>26 GHz band</u>) <u>Declaration</u> <u>2019</u> (except Mingenew and east coast ESPZ)	Written acknowledgement from applicant (satellite operator) that bands are under review and planning arrangements may change requiring operations to cease or to be modified (explicitly acknowledge all requirements).	Written acknowledgement from applicant (satellite operator) that bands are under review and planning arrangements may change requiring operations to cease or to be modified (explicitly acknowledge all requirements).		
	Application of advisory note BL on any licence issued.	Considered an incumbent for replanning purposes		
	Not considered an incumbent for replanning purposes.			
Inside areas specified in <u>Radiocommunications</u> (Spectrum Re-allocation— <u>26 GHz band) Declaration</u> <u>2019</u>	Written acknowledgement from applicant (satellite operator) that bands are under review and planning arrangements may change requiring operations to cease or to be modified (explicitly acknowledge all requirements).	Written acknowledgement from applicant (satellite operator) that bands are under review and planning arrangements may change requiring operations to cease or to be modified (explicitly acknowledge all requirements).		
	Application of advisory note BL on any licence issued.	Considered an incumbent for replanning purposes		
	2-year, non-renewable licence.			
	Not considered an incumbent for replanning purposes.			
	Technical restrictions apply (see below).			

Table 1: Interim Q/V band earth station licensing process

¹ Being considered an incumbent licence for the purposes of a band replanning exercise does not mean that a licence cannot be varied, cancelled or not renewed, but rather that the impacts of replanning on the licensed use of the spectrum will be considered in a replanning process (and, for example, regulatory mitigations such as time periods for transitions may be considered).

Licensing considerations, conditions and advisory notes

In additional to the above, licence applications for Q/V earth stations will be considered in accordance with the procedures in our document <u>Submission and processing of applications</u> for earth, earth receive apparatus licences and device registrations under area-wide apparatus licences for fixed earth stations with the following modifications:

- Where an acknowledgement from the applicant is required that the band is under review, that acknowledge is to be provided as a signed letter from the relevant responsible entity (normally the head of regulatory affairs in the satellite operator or equivalent) acknowledging that the bands are under review, that arrangements may change in the future, and that they accept any licence conditions that might be imposed.
- > The applicant will be responsible for undertaking an assessment of existing terrestrial services (a standard requirement).

Technical restrictions

- > Minimum antenna diameter: 2.4 metres.
- > Minimum antenna elevation: 20 degrees.