

Australian Communications & Media Authority

Changes to Frequency Band Plans

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Date: 11th of June 2025

Introduction

Sateliot, founded in 2018, is the pioneering satellite operator delivering Internet of Things (IoT) connectivity via the 3GPP-compliant 5G NB-IoT Non-Terrestrial Network (NTN) standard. As the first company to extend terrestrial mobile network operators' (MNOs) coverage through satellite, we focus exclusively on the wholesale provision of satellite capacity to MNOs. Through GSMA-standard roaming agreements, our model ensures seamless, cost-effective IoT connectivity in areas where terrestrial infrastructure is limited or unavailable.

We appreciate the opportunity to provide input to the Australian Communications and Media Authority (ACMA) as part of the Changes to Frequency Band Plans consultation. Sateliot commends ACMA for its consistent leadership in advancing spectrum frameworks that anticipate emerging technologies. In particular, we recognize ACMA as one of the few regulators globally that has allocated spectrum exclusively for NB-IoT services, specifically 5 MHz in the S-band (1980–2010 MHz uplink and 2170–2200 MHz downlink).

Building on this allocation, Sateliot was granted an apparatus licence in 2023 to operate in the frequencies 2005.8–2006.8 MHz (uplink) and 2195.8–2196.8 MHz (downlink), and recently got the carrier licence to support the planned commercial operations in Australia. With the guidance of ACMA, we are preparing to commence service this year, 2025, bringing our satellite NB-IoT offering to support Australian industry, especially in rural and remote areas.

As mentioned above, Sateliot operates within some of the bands specified in the MSS Band Plan (198-2010 MHz and 2170-2200 MHz) and as such, contribute with our considerations below.

1. Considerations for the MSS Band Plan

As noted within the MSS Band Plan, the 1980-2010 MHz band may be used for the following purposes:

- a) A mobile-satellite service (Earth to space)
- b) A television outside broadcasting service (subject to section 7)
- c) The operation of a point to point station for fixed service (subject to section 8)
- d) The operation of a radiocommunications device in accordance with:
 - i) The Radiocommunications (science and research) class licence; or
 - ii) If another instrument replaces that class licence - the other instrument.

The 2170-2200 MHz band may be used for:

- a) A mobile-satellite service (space to Earth)
- b) A television outside broadcasting service (subject to section 7)
- c) The operation of a point to point station for fixed service (subject to section 8)
- d) The operation of a radiocommunications device in accordance with:
 - i) The Radiocommunications (science and research) class licence; or
 - ii) If another instrument replaces that class licence - the other instrument.

We acknowledge that ACMA intends to amend the band plan to include a provision for the new Low Interference Potential Devices (LIPD) class licence. We wish to stress that such class licence must

acknowledge best practices of protecting incumbent operators. While LIPD's are intended by design to not cause harmful interference into other systems, IoT devices can be fixed or mobile and may be located in a variety of buildings, machinery, and infrastructure, some of which may be critical infrastructure. These IoT devices' operational mobility must be considered when authorizing new services within the designated bands, and appropriate interference mitigation measures should be adopted to avoid detrimental service performance when LIPDs and standard IoT transmission are colocated.

Conclusion

Sateliot appreciates the opportunity to contribute to this consultation and commends ACMA for its continued leadership in forward-looking spectrum management. We look forward to continued engagement with ACMA and stand ready to support further technical discussions on how regulatory frameworks can enable safe, efficient, and future-ready integration of satellite-based NB-IoT services into Australia's connectivity landscape.

Sincerely,

A handwritten signature in black ink, consisting of a large, stylized 'E' followed by a series of loops and a final flourish.

Elisabet Fonalleras

Head of Regulatory Affairs and Global Licensing
Satelio IoT Services, S.L.