



Submission in response to
ACMA Discussion Paper

**Technical design
features and allocation
considerations for the
2 GHz MSS band
(1980–2005 and 2170–
2195 MHz)**

Public Version

February 2024

OPTUS RESPONSE TO ACMA PROPOSALS

1. Optus welcomes the opportunity to provide feedback on the Australian Communications and Media Authority's (ACMA) discussion paper: *Technical design features and allocation considerations for the 2 GHz MSS band (1980–2005 and 2170–2195 MHz)* (the Discussion Paper).
2. The decision to replan the 2 GHz band for mobile satellite services (MSS) would enable:
 - (a) 2 x 25 MHz (1980–2005 MHz and 2170–2195 MHz) for Australia-wide mobile-satellite services (MSS), with support for deployment of a complementary ground component (CGC) including direct air-to-ground communications services (DA2GC), where a licensee wishes to supplement its MSS.
 - (b) 2 x 5 MHz (2005–2010 MHz and 2195–2200 MHz) for shared narrowband MSS including telemetry, short messaging, and low-data-rate services such as satellite IoT (internet of things) application. Arrangements supporting narrowband MSS systems were introduced in July 2022.
3. Optus broadly supports the ACMA's approach outlined in the Discussion Paper, including the proposed key 2 GHz MSS technical parameters and coordination requirements and we note that the ACMA's approach is consistent with that previously outlined in its Outcomes Paper.
4. Optus strongly support the principle that the technical design of the 2 GHz MSS band should align with both the 2 GHz spectrum licensing framework and the equipment requirements for 3GPP band n256 and band 65/n65. This should allow the band to be configured for 5, 10 or 15 MHz bandwidths in line with 3GPP specifications.
5. Regarding potential demand for this spectrum, we note that the 'MSS Direct to mobile 'DTM' uses MSS bands, and the communications within these bands will utilise satellites providing MSS services. The standards and technology surrounding MSS DTM are recent, with user equipment manufacturers only recently incorporating this technology into their device ecosystems. We expect as these services develop further and low earth orbit NTN's are deployed, there will be increased demand for DTM services more generally around the world, including Australia.
6. We note that the ACMA has not formed a final view on the approach to allocation and has indicated that this decision will be informed by the level of expected demand for the spectrum. In line with the ACMA's statement that a transparent mechanism should be used to resolve competing demand, Optus support the use of a price-based allocation (auction) process for the purpose of allocating this spectrum.
7. The ACMA has indicated that it has not considered requirements for space stations in the design of the technical framework for 2 GHz MSS as requirements for space stations are addressed by the ITU satellite coordination process. The ACMA has also stated its preliminary view that consistency with the ITU requirements should be assessed as part of any eligibility requirements to participate in the allocation of licensees for 2 GHz MSS. We note this though consider the ACMA should ensure consistency with its approach to maintaining a procedural distinction between filing and licensing.
8. We note that the ACMA intends to conduct formal consultation on the draft legislative instruments and administrative documents supporting the technical framework, along with the allocation design matters, in late 2024. We look forward to further engagement as more details are developed.