

OPTUS

Submission in response
to ACMA consultation

**Proposed updates to
RALIs LM08, FX16
and FX22**

December 2023

OPTUS RESPONSE TO ACMA CONSULTATION

1. Optus welcomes the opportunity to provide feedback to the Australian Communication and Media Authority's (ACMA) consultation paper *Proposed updates to RALIs LM08, FX16 and FX22 – Consultation paper – October 2023* (the Consultation Paper).
2. Optus understands that the ACMA is seeking feedback on proposed changes to planning arrangements to support the final stage of the ACMA's long-term strategy for the 803-960 MHz band. These include removal of arrangements in RALI LM08 which apply to the legacy TLMS frequency segments (820-825/865-870 MHz) and to suppress the document SP 4/93 that contains coordination procedures for services in the 857-861 MHz band, which has now become redundant. Optus supports these proposals.
3. The ACMA is also seeking feedback on proposed revised protection criteria and additional guidance in RALIs LM08, FX16 and FX22 relating to coordination between 800 MHz band apparatus licensed services and spectrum-licensed services operating below 803 MHz. Optus understands that the ACMA is seeking to design co-existence arrangements that will mitigate some of the adverse effects of having to manage interference with apparatus licensees in the 804-809 MHz band.
4. The ACMA is proposing revised protection criteria in LM08, FX16 and FX 22 through both voluntary and mandatory requirements to aid co-existence between TLMS/PMP/PTP receivers and spectrum-licensed transmitters. The revised criteria will only apply to new PMP and PTP apparatus licences issued after the release of the updated RALIs or after 1 July 2024 for TLMS licences.
5. Optus has noted its concerns relating to the ACMA's approach to amending the 700 MHz spectrum licence technical framework on a number of occasions, including most recently in response to the ACMA's August 2023 consultation. Optus' key concern expressed in response to those consultations was that the ACMA's approach will undermine the long-term utility of the 700 MHz band, which is key low band spectrum used by mobile operators for national mobile network deployment.
6. Optus continues to have concerns about the ACMA's overall approach to replanning of this spectrum and reiterates the view that it sets a concerning precedent in the context of the ACMA's preferred approach to expiring spectrum licences. Optus refers the ACMA to the submission from the Australian Mobile Telecommunications Association (AMTA) in relation to this matter. Optus supports the AMTA submission.

The co-existence arrangements do not provide sufficient certainty of access to 700 MHz

7. Adjusting the permitted interference levels occasioned to new TLMS, PMP and PTP apparatus licensed receivers means that the overall effect of the new protection criteria will be to reduce the separation distances between apparatus licensed receivers and 700 MHz spectrum licensed transmitters.
8. Optus understands that the intention of these arrangements is to maximise spectrum utility supported by coordination and co-existence arrangements. However, Optus considers that the best solution would have been to avoid the interference potential created by migrating the new services to the adjacent channel.
9. Optus acknowledges that the proposed changes have been designed to allow for improved coexistence. Optus continues to support measures to promote effective coordination, cooperation and co-existence between spectrum users. However, this

support does not extend to cases where a 700MHz band spectrum licensee is unable to deploy and operate equipment in this band.

10. The propagation characteristics of the 700MHz band mean that it is its critical to MNOs in delivering mobile telecommunication services. Site configurations are designed to maximise customer experience by extending the geographic extent of the network and/or to increase signal levels to support indoor use cases. When site designs cannot incorporate 700MHz band technologies or require significant configuration changes to meet ACMA licencing requirements then the impacts can include:
 - (a) A reduction in customer network experience
 - (b) A denial of service
 - (c) Additional resourcing and costs to perform detailed assessments and to liaise with the other licence holder.
11. Optus is concerned that the proposed arrangements are also designed with a view to increase the number of new apparatus licensed services. This would increase the costs and demands on resources for spectrum licensees, potentially chilling incentives to invest and ultimately maximise the utility of their 700 MHz spectrum over the longer term.

Increasing levels of engagement to resolve interference has resource implications

12. In regard to the ACMA's proposed additional guidance, Optus notes that the ACMA's statement that there still may be situations where a proposed spectrum licensed transmitter or apparatus licensed receiver cannot be successfully coordinated implicitly recognises that there are shortcomings with the proposed coexistence arrangements under the SLTF. That said, Optus welcomes the ACMA's proposed additional guidance in LM08, FX16 and FX 22 detailing the additional measures that can be considered by an Accredited Person and/or licensee.
13. Optus notes that this additional guidance generally reflects practical tried and tested means for resolving interference between spectrum users. Optus welcomes the ACMA's efforts to provide clarity and transparency in this regard. Optus also supports the proposed advisory note as useful to providing a transparent baseline for future coordination following acceptance of higher interference levels by an apparatus licensee.
14. That said, we note that from a practical perspective, interference management discussions between spectrum users can be complex and time consuming to resolve. There is a large mismatch between the scale of network, resourcing and technical competence available between an MNO and a licensee with only a single or small number of registrations. In this way, the knowledge and information asymmetries between the parties can compounded the resource implications of increased interference management for MNOs.