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## **TELSTRA GROUP LIMITED**

# **Submission to ACMA Consultation: Extended mobile satellite service (MSS) L-band options paper**

### **Public Submission**

20 September 2023



## 1 Introduction

We welcome the opportunity to provide our views to the ACMA's options paper on the **Extended mobile satellite service (MSS) L-band**. We support the ACMA's preferred planning option (Option 2) for the Extended MSS L-Band (1518-1525/1668-1675 MHz) to be allocated for MSS on a "no interference / no protection" basis.

We support the ACMA's continued protection for High Capacity Radio Concentrator (HCRC) systems used to deliver USO services in regional and remote locations until such time as a proven alternate technology solution is developed for USO services.

We also support the ACMA adopting our recommendation to pause further consideration of 1427-1518 MHz until after WRC-23.

Our submission is structured as follows:

- Section 2 contains our responses to key themes raised in the options paper; and
- Appendix 1 contains our responses to the four questions raised in the options paper.

## 2 Response to Options Paper

In this section, we respond to key themes contained in the options paper.

### 2.1. Protection for HCRC systems used for USO is still required

In our submission to the 2021 Regional Telecommunications Review, we reported that we have over 10,000 HCRC supplied voice services in the 'last 8 per cent' (that is, areas outside of nbn's fixed footprint).<sup>1</sup> Today, this figure is still accurate, with over 10,000 HCRC supplied USO voice services still in operation. While alternate technologies are closer to being realised than they were two years ago, we are yet to see the deployment of suitable replacement technology for USO voice services in locations that are dependent on HCRC systems (i.e., where there is no mobile or nbn coverage to facilitate fixed wireless access solutions). In our June 2022 submission to the ACMA's discussion paper,<sup>2</sup> we noted there were approximately 870 PTP links in the frequency range 1427-1518 MHz and 867 of these links are still in operation today.

So, we strongly support the ACMA providing continued protection of these HCRC systems in all three options proposed in the Options Paper.

### 2.2. We support the ACMA's preference for Option 2

We support the ACMA's preference to allow MSS to use 1518-1525/1668-1675 MHz on a "no interference / no protection" basis. We agree this is best done through the Communication with Space Objects (CSO)

<sup>1</sup> Telstra submission to the Regional Telecommunications Review 2021 Issues Paper, 30 Sept, 2021, p.23.  
<https://www.infrastructure.gov.au/sites/default/files/documents/rtr2021-submission-no-613-telstra-public.pdf>

<sup>2</sup> ACMA. Review of the 1.5 GHz band - consultation 16/2022.  
<https://www.acma.gov.au/consultations/2022-05/review-15-ghz-band-consultation-162022>



Class Licence. We consider allowing MSS to use 1518-1525/1668-1675 MHz will maximise utility of the band, because it will allow MSS terminals to enter the band, on the condition they don't cause interference to radio astronomy / meteorological services in the 1668-1675 MHz range.

We strongly support the ACMA introducing additional regulatory measures to any MSS use in the L-band, to enable coexistence with future adjacent-band services, including possible WBB services.<sup>3</sup> As a minimum, the ACMA should include a requirement (or assumption for interference management purposes) that from a specified date onwards, MSS stations will implement higher performance receivers, including the use of improved filters to mitigate against receiver blocking. As the Options Paper notes, this is so the introduction of MSS does not unduly limit or constrain future replanning across the broader 1.5 GHz band.

We note that MSS user terminals will not be afforded protection from PTP and PMP links, including all links used to supply USO services. Today, we have 119 such links (84 PTP and 35 PMP) operating in the 7 MHz of spectrum between 1518 MHz and 1525 MHz.<sup>4</sup>

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<sup>3</sup> Options paper, second paragraph, p.22: *"To better enable coexistence with other adjacent-band services, including possible WBB services, it is likely additional regulatory measures will also need to be applied to any MSS use in the L-band. At a minimum, the ACMA will seek to include a requirement (or assumption for interference management purposes) that from a specified date onwards, MSS stations implement better performing receivers, including more stringent blocking levels. This is so the introduction of MSS, before options for other services are considered, does not unduly limit or constrain future replanning in the broader 1.5 GHz band."*

<sup>4</sup> For clarity, the 119 PTP and PMP links mentioned here are not counted in the 867 PTP links mentioned in the previous section. The 867 PTP all operate below 1518 MHz, whereas these 119 are all above 1518 MHz. As a sidenote, the ACMA slightly misquoted us in the Options paper. At the bottom of p.21 of the Options paper, the ACMA says the *"roughly 870 PTP licences in the 1427-1535 MHz frequency range"*, whereas the roughly 870 PTP licences are all below 1518 MHz.



## Appendix 1: Response to consultation questions

This appendix contains our responses to the questions contained in the Options Paper.

1. Comment is sought on the proposed desirable planning outcomes for the review of the extended MSS L-band.

We support the introduction of MSS services into the extended MSS L-Band, on the basis they do not cause interference to existing services, nor claim protection from interference from existing services (i.e., on a “no interference / no protection” basis). We consider introducing MSS services into the extended MSS L-Band will increase the overall utility of the band, in line with the ACMA’s spectrum management objectives.

We strongly support Planning Outcome #3, which is to consider necessary regulatory measures for new MSS use in the extended MSS L-band to enable coexistence with incumbent and possible future in-band and adjacent band services (such as WBB).

2. Comment is sought on the options identified. Do you have any alternative options to propose?

We support the ACMA’s preferred option, which is Option 2. We consider this option to be the best alternative, as it requires MSS terminals to introduce appropriate receiver blocking capabilities to ensure optionality for new uses for 1427-1518 MHz is preserved. Further details are in section 2.2 of our submission.

3. Comment is sought on the ACMA’s assessment of options.

We agree with the ACMA’s assessment of the options.

4. Comment is sought on the ACMA’s preliminary preferred approach, including the proposed draft amendments to the [Radiocommunications \(Communication with Space Object\) Class Licence 2015](#) and associated licence application and allocation process.

We support the ACMA’s preferred approach. Specifically, on p.28 of the Options Paper, the ACMA proposes three items as part of its preferred approach, namely:

- 1) attaching an advisory note to any space-receive licences issued flagging ongoing review of the 1.5 GHz band;
- 2) include a note in the business operating procedures for the submission and processing of applications for space and space receive apparatus licences, flagging the future review of arrangement and possible application of regulatory measures on MSS operating in L-band; and
- 3) retention of Embargo 70 Until the next stage of the 1.5 GHz band review is completed.

We strongly support each of these elements of the ACMA’s preferred approach.



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In addition, we have reviewed the draft amendments to the CSO Class Licence Variation Instrument and the draft Notification Instrument. We make the following observation, just on the CSO Class Licence Variation Instrument:

- Item 5 in the list of variations proposes an amendment to subsection 8(3) as follows: After “1660 to 1660.5 MHz”, insert “and 1688 to 1670 MHz”. We think the number “1688” should be “1668”.

Beyond this observation, we have no further comments on either draft instrument.