

**Viasat Response to
ACMA Consultation “Review of the 1.5 GHz band, Extended MSS L-band options paper”
“Reply to Comment”
25 October 2023**

Viasat thanks the Australian Communications and Media Authority’s (“ACMA”) for the opportunity to provide our reply comments in response to the submissions for *Review of the 1.5 GHz band, extended mobile satellite service (“MSS”) L-band options paper* published August 2023 (the “**Options Paper**”).

It is notable that there is widespread support from all sectors for the introduction of MSS in the extended MSS L-band in Australia. None of the public comments have opposed the introduction of MSS in these bands and there is broad support expressed for Option 2, which was also the option preferred by the ACMA. Therefore, we encourage the ACMA to proceed rapidly with Option 2.

Viasat is however concerned with some of the comments provided on three aspects raised in submissions, further elaborated below:

1. Regulatory conditions on MSS operations with respect to incumbent and new terrestrial services;
2. Mobile Earth Station (“MES”) receiver blocking requirements; and
3. Use of the 1518 – 1520 MHz band.

1. Regulatory conditions on MSS operations with respect to incumbent and new terrestrial services

Viasat would concur that those MSS operations in the 1518 – 1525 MHz band should in general be on the basis of not claiming protection from **incumbent** licences operating in the same band or adjacent bands. This would follow the common practice of “first come-first served”. However, this should not be taken as a condition for MSS operations to operate on a secondary basis with respect to potential **new** systems in the same and adjacent bands. Further, MSS operations in the 1518 – 1525 MHz band should be taken into account in developing future co-existence conditions. For example, any condition applied to the MSS should not lead to a situation where proposed new wireless broadband (“**WBB**”) systems in the adjacent frequency band can cause interference to the MSS.

Telstra has highlighted in its response that it has 119 links operating in the 7 MHz of spectrum between 1518 MHz and 1525 MHz bands. While operation of MSS on a secondary basis with respect to those links is acceptable, there will be some negative impacts on MSS services due to interference when operating in the vicinity of fixed service (“**FS**”) transmitters, and any increase in use of the band for fixed links would likely harm those MSS services. Such matters can be considered in more detail in the planned review for the broader 1427 – 1535 MHz band, but it should be established at this stage that any use by **new** terrestrial stations does not have priority over MSS operations. Regarding potential new fixed links, we take this opportunity to remind the ACMA that Viasat has proposed to extend the frequency range for Embargo 70 to include the 1518

– 1535 MHz band, which, if adopted, would in any case avoid risk of interference from new fixed links. We encourage the ACMA to implement this change to Embargo 70 as soon as possible.

Optus, in its comments, sought to ensure that *“MSS stations in the 1518 – 1525 MHz band will not be afforded protection from **incumbent** in-band and adjacent band services”* (our emphasis). As noted above, while this condition is acceptable with regard to incumbent systems in the same and in adjacent bands, it appears that Optus seeks that proposed new WBB systems operate without constraints with respect to MSS operations, when it states: *“we reiterate that technical arrangements should support 3GPP-compliant equipment and leverage international device ecosystems. Longer term, measures to limit interference at the upper edge of 1427-1518 MHz should be designed to maximise the efficient use of the spectrum for WBB (i.e support 5 MHz channels).”*

A blanket condition that MSS would not be offered protection from adjacent band services would imply that MSS would have to accept any interference produced by WBB systems in the future. As noted by the ACMA, a number of technical solutions for coexistence with MSS operations above 1518 MHz are available, which can be addressed as part of the next phase. The ACMA should not prejudice that next phase now, by imposing regulatory conditions on MSS operations such as a need to accept all interference. Therefore, Viasat is of the view that **new** terrestrial stations should not:

1. have a higher priority over MSS;
2. have the right to cause interference to the MSS; and
3. be able to require protection from the MSS.

Viasat supports the ACMA’s plan for a broader review of the 1427 – 1535 MHz band in Q3 2024, which should take into account the potential for interference to MSS receivers in the extended MSS L-band and adjacent bands, to reduce interference to MSS and to avoid unnecessary constraints on MSS. This approach will provide equal spectrum access rights to MSS with other services.

2. MES receiver blocking requirements

Viasat does not agree with the comments from Telstra and AMTA regarding the implementation of MES receiver blocking requirements to the extended L-band MSS receiver. This issue was highlighted by the ACMA as something for consideration in the next stage of the 1.5 GHz review, for the 1427 – 1535 MHz band. In its comments, the AMSA has clearly highlighted some of the issues around the implementation of improved receivers for maritime terminals. As Viasat has highlighted in our previous response, it is premature and unbalanced to impose requirements for a better performing MSS receiver at this time. Viasat recommends that the ACMA follows its proposal to consider the issues around better performing receivers in the next stage, and takes no further action at this time.

3. Use of the 1518 – 1520 MHz band

Viasat does not agree with the AMTA's comment to exclude applications for space licences in the 1518 – 1520 MHz band (i.e., that an additional 2 MHz guard band should be applied above 1518 MHz). Such a measure is unnecessary given that MSS operations in this band would in any case have to accept any interference from incumbent services, and the coexistence measures for new services including WBB will be subject to a separate future review. Viasat encourages the ACMA not to take up that proposal.
