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**SPECTRUM ASPECTS &**  
**WRC 23 PREPARATIONS**

## **ITU-APT Foundation of India (IAFI)**

### **ADJACENT BAND COMPATIBILITY STUDIES OF IMT SYSTEMS IN THE MOBILE SERVICE IN THE BAND 1492-1 518 MHZ WITH RESPECT TO SYSTEMS IN THE MOBILE SATELLITE SERVICE IN THE BAND 1 518-1 525 MHZ**

#### **1 Introduction**

Working Party 4C has been progressing the work related to IMT/MSS compatibility at 1518 MHz together with WP 5D. WP 4C has also updated its progress on annexes to the Working document I Document [5D/895](#). It continues its work on the Recommendations through the Correspondence group and plans to send further updates on the Report and Recommendation from its meeting in May 2022.

#### **2 Discussion**

Following IAFI participation in the various meetings, including CGs, good progress is being made to provide administrations guidance regarding the possible measures to put in place to ensure co-existence between IMT and MSS while assigning the band 1427-1518 MHz for IMT.

As per the LS from WP 4C to WP 5D in the Document 5D/895, WP 5D is invited to review the Annexes, in particular, the content of Annexes 2bis, 3, and 4 and provide any comments to the next meeting on WP 4C while WP 4C continues the work of its Correspondence Group in accordance with Annex 15 to Document [4C/283](#).

The 4C CG is progressing the work on the main body of the Recommendation (title, scope, *considering*, *notings*, and *recommends*) and is also tasked to explore ways and means on whether or not and how to address the suggested approach for MSS operations in the L band

In India, L-Band MSS operations are being used by the shipping industry where the shipping fleets use L-band Satcom terminals that operate within the band 1518 to 1559 MHz to comply with GMDSS requirements and maritime safety information services. It is important that the proposed new ITU-R Recommendations should provide technical measures to ensure coexistence between IMT and MSS terminals in L Band, in accordance with Resolution **223 (Rev.WRC-19)** *invites 1*.

Noting that Resolution **223 (Rev.WRC-19)** calls for compatibility studies to provide technical measures to ensure coexistence between MSS in the frequency band 1 518-1 525 MHz and IMT in the frequency band 1 492-1 518 MHz, it is essential that the proposed new Recommendation should include, as per both IMO and ICAO suggestions, the following for guidance of the administrations as a minimum:

- protection measures for out-of-band emissions from IMT systems using the frequency band 1 492-1 518 MHz;
- protection measures for land MSS terminals, maritime MSS terminals at ports, and aeronautical MSS terminals at airports operating in the L band in range 1 518 -1 525 MHz, including ensuring the protection necessary for terminals used for the GMDSS;
- information regarding the process underway in IMO to ensure that next-generation GMDSS terminals have increased resilience to interference, which, if required, will assist administrations in determining the timing of applying further corrective adjustments on protection limits on IMT systems;
- options to enable MSS land terminals to operate in L band in 1 518-1 525 MHz without any interference from IMT systems;
- information regarding possible guard bands to ensure coexistence between MSS and IMT.

### **3 Proposal**

It is proposed that WP 5D kindly take into account the suggestions in Section 2 above.

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