



Received: 22 February 2021

**Document 5D/471-E**  
**22 February 2021**  
**English only**

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

## **ITU-APT Foundation of India (IAFI)<sup>1</sup>**

### **ADJACENT BAND COMPATIBILITY STUDIES OF IMT SYSTEMS IN THE MOBILE SERVICE IN THE BAND 1 492-1 518 MHZ WITH RESPECT TO SYSTEMS IN THE MOBILE SATELLITE SERVICE IN THE BAND 1 518-1 525 MHZ**

#### **Introduction**

Working Party (WP) 5D has been progressing the work related to IMT/MSS compatibility at 1 518 MHz together with WP 4C. WP 4C has sent an update on its progress in document 5D/[378](#) and noted that it plans to send further updates on the Report and Recommendation from its meeting in February 2021. Since WP 4C will next meet from 15 to 19 February, just before WP 5D, WP 5D may receive an updated version of the draft new Report and Recommendation shortly before the start of the meeting.

#### **Discussion**

Following the identification of IMT in the band 1 427-1 518 MHz, administrations are looking for guidance regarding the possible frequency arrangements and/or the size of the guard band between IMT and MSS while assigning this band for IMT.

L Band MSS operations in the band 1 525-1 559 MHz are being used by the shipping industry where several ships use L-band Satcom to comply with GMDSS requirements, and fishing vessels that use L-band Satcom to support off-shore operations. Further, L-band Satcom is also extensively used for aeronautical operations, by airlines and government agencies, as well as by land MSS terminals

#### **Proposal**

Noting that the Resolution **223 (Rev.WRC-19)** calls for compatibility studies in order 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 important that the new Report/ Recommendation should, provide the following for guidance of the administrations:

---

<sup>1</sup> ITU-APT Foundation of India (IAFI) is a new sector member of ITU-R. Details of IAFI can be seen at [itu-apt.org](http://itu-apt.org)

- a) technical measures to ensure coexistence between MSS and IMT stations including
    - (i) PFD protection measures for Land MSS terminals, maritime MSS terminals at ports and aeronautical MSS terminals at airports in the bands above 1518 MHz,
    - (ii) options regarding the OOB emission limits in the bands 1 518-1 525 MHz and 1 525-1 559 MHz; and
    - (iv) information regarding receiver blocking requirements for new MSS terminals.
  - b) information regarding possible guard band to ensure coexistence between MSS and IMT.
-