World Radiocommunication Conference 2027





WRC-27 Agenda Item 1.7

Potential New IMT identification in C, X and Ku bands

Overview

This Agenda Item invites Administrations to consider studies on sharing and compatibility and develop technical conditions for the use of International Mobile Telecommunications (IMT) in the frequency bands 4 400-4 800 MHz, 7 125-8 400 MHz (or parts thereof), and 14.8-15.35 GHz taking into account existing primary services operating in these, and adjacent, frequency bands, in accordance with Resolution **256 (WRC-23)**.

Background

Resolution 256 (WRC-23) invites the WRC-27 to consider the identification of frequency band(s) for the terrestrial component of IMT as follows:

- > 4 400-4 800 MHz, or parts thereof, in Region 1 and Region 3;
- > 7125-8400 MHz, or parts thereof, in Region 2 and Region 3;
- > 7125-7250 MHz and 7750-8400 MHz, or parts thereof, in Region 1;
- > 14.8-15.35 GHz,
- The frequency band 4 500 4 800 MHz is a planned band allocated to FSS (space-to-Earth) service under Appendix 30B
- The frequency bands 7 250 7750 MHz and 7 900- 8400 MHz are allocated to the FSS and partly MSS services. These bands are mainly used for governmental and military applications
- The frequency ranges 7 125-8 400 MHz and 14.8-15.35 GHz are also used by scientific satellite services

Key Points

- > Many countries rely heavily on C-band FSS and X-band FSS / MSS satellite services for critical applications, which in many cases cannot be reliably provided or provided at all by other means. Past studies between satellite services and IMT have demonstrated that sharing between FSS / MSS and IMT is not feasible.
- > The entry of IMT into such FSS bands will necessitate substantial additional regulatory or technical constraints being imposed on those satellite services, which detrimentally will harm the future viability and sustainability of use by FSS services in these bands and jeopardizes major commercial and government investments made being made in such satellite system.

GSOA Position

GSOA supports No Change in the bands 4500-4800 MHz, and 7125-8400 MHz. Furthermore, there should be no impact from any IMT identification in the bands adjacent to FSS.

