WRC-27 Preparations
WRC-23 Decisions Follow Up

By

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National Spectrum Management

- National regulatory framework for spectrum management is based on
  - Policy goals of the Government
  - International regulations, treaty documents (RR)
  - Requirements of the wireless users (commercial, strategic, government, safety, R&D etc)

- Contribution for Spectrum Management at the International Level:
  - Through National Study Groups (NSG) and their Working Parties (NWP)
  - Through National Preparatory Committee (NPC) for WRC

Key Outcomes of WRC 23

- Identified additional spectrum for IMT in mid-band
- Identification of spectrum for HAPS as IMT base station (HIBS) in 700 MHz, 900 MHz, 2 GHz and 2.6 GHz band
  - Enable to provide mobile broadband with minimal infrastructure using the same frequencies and devices as IMT mobile networks. HIBS can contribute to bridging the digital divide in remote and rural areas and maintain connectivity during disasters.
- Permitted In-Flight and Maritime Connectivity (IFMC) in additional satellite frequency bands – Ku Plan band (GSO satellites) and Ka band (Non-GSO satellites)
- Modernization of the GMDSS to enhance distress and safety communications at sea including Automatic Connection Systems (ACS) in MF/ HF bands, e-navigation etc.
- Identified spectrum for aeronautical mobile satellite services (117.975-137 MHz) to support communication via non-GSO satellite systems for pilots and air traffic controllers everywhere, especially over oceanic and remote areas.
- Adopted regulatory measures for the efficient use of the Non-GSO orbits and spectrum resources.

Our Achievements

- India advocated for equitable and efficient spectrum allocations while protecting the existing radiocommunication services and systems
- Emphasized on the need to protect operational satellite communication services to enable continued operation of its satellite systems until an amicable solution is worked out
- Indian proposals for future agenda are included in the agenda of the WRC-27:
  - Identification of additional spectrum for IMT to support IMT-2030/6G applications
  - Review/revision of sharing conditions in frequency band 13.75 – 14 GHz – to promote efficient utilization of spectrum by satellite services
  - Study use of frequency band 51.4 – 52.4 GHz by NGSO gateway stations – to provide additional spectrum for NGSO communication and promote efficient utilization of spectrum

WRC 27 Preparations

- WRC 27 Agenda Items: 1.1 to 1.19
  - Except three agenda items all are related to space based services

- **Main Focus is on**:

- **PP 22 Resolutions 218 & 219**

  - 218: **ITU's role in the implementation of the "Space2030" Agenda: space as a driver of sustainable development, and its follow-up and review process**

  - **219: Sustainability of the radio-frequency spectrum and associated satellite-orbit resources used by space services**

- **RA 23: RESOLUTION ITU-R 74** Activities related to the sustainable use of radio-frequency spectrum and associated satellite-orbit resources used by space services

- **WRC 27 AIs:**

- ✓ **1.5:** Regulatory measures, and implementability thereof, to **limit the unauthorized operations of non-geostationary-satellite orbit earth stations** in the fixed-satellite and mobile-satellite services

- ✓ **1.6:** technical and regulatory measures for fixed-satellite service satellite networks/systems in the frequency bands 37.5-42.5 GHz (space-to-Earth), 42.5-43.5 GHz (Earth-tospace), 47.2-50.2 GHz (Earth-to-space) and 50.4-51.4 GHz (Earth-to-space) for **equitable access** to these frequency bands

- ✓ **1.7:** studies on sharing and compatibility and develop technical conditions for the use of **IMT** in the frequency bands **4 400-4 800 MHz and 7 125-8 400 MHz** (or parts thereof), and **14.8-15.35 GHz**

- ✓ **1.13:** studies on possible new allocations to the MSS for **direct connectivity between space stations and IMT user equipment** to complement terrestrial IMT network coverage

- ❖ **Other Study Items**: ITU-R Recommendation S.1503 etc.

THANKS