ASIA-PACIFIC TELECOMMUNITY
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India (Republic of)

PROPOSAL FOR PRELIMINARY VIEWS ON WRC-27 AGENDA ITEM 1.6

Background:

The Agenda Item 1.6, focuses on the technical and regulatory measures for fixed satellite service satellite network/systems in various frequency bands, as detailed below .
Agenda Item 1.6: to consider 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-to-space), 47.2-50.2 GHz (Earth-to-space) and 50.4-51.4 GHz (Earth-to-space) for equitable access to these frequency bands, in accordance with Resolution **131 (WRC-23)**;
Agenda Item 1.6 is based on the Resolution -131 adopted by the WRC-23, as detailed below.
Resolution 131 (WRC-23): - resolves to invite ITU-R

to study the technical and regulatory measures for FSS satellite networks/systems in the frequency bands 37.5-42.5 GHz (space-to-Earth), 42.5-43.5 GHz (Earth-to-space), 47.2-50.2 GHz (Earth-to space) and 50.4-51.4 GHz (Earth-to-space), or portions thereof, for equitable access, while ensuring the protection of existing primary services to which the band is allocated in the same and adjacent bands, taking into account the specific needs of developing countries:

- without adversely affecting those services, specifically the operation of the satellite networks and systems in the bands;
- without changing measures to protect terrestrial services from unacceptable interference,

Resolution 131 recognizes the increasing demand for satellite services and the need to ensure **equitable access** to these valuable frequency bands for all ITU Member States, taking into account the specific needs of developing countries.

Frequency Bands under consideration:

The specific frequency bands under consideration are:

- **37.5-42.5 GHz (space-to-Earth):** Primarily used for downlink transmissions from satellites to earth stations in the Fixed-Satellite Service.
- **42.5-43.5 GHz (Earth-to-space):** Primarily used for uplink transmissions from earth stations to satellites in the Fixed-Satellite Service.
- **47.2-50.2 GHz (Earth-to-space):** Primarily used for uplink transmissions in the Fixed-Satellite Service.
- **50.4-51.4 GHz (Earth-to-space):** Also used for uplink transmissions in the Fixed-Satellite Service.

Contact: **Email:**

These bands are in the **Ka-band** and **V-band** portions of the radio spectrum, which are increasingly being utilized for high-capacity satellite communication systems due to the availability of large contiguous bandwidths.

Following to be considered:

a. Equitable Access:

Equitable access is a fundamental principle in the ITU framework, aiming to ensure that all countries have a fair opportunity to utilize spectrum and orbital resources, regardless of their current level of technological development. For these specific bands, achieving equitable access might involve considering measures beyond the traditional "first-come, first-served" approach, especially given the growing interest in these frequencies.

b. Specific Needs of Developing Countries:

Resolution 131 (WRC-23) specifically calls for taking into account the "specific needs of developing countries". This is a recurring theme in ITU discussions, aiming to bridge the digital divide and ensure that developing nations can also benefit from advancements in satellite communications.

c. Protection of Incumbent Primary Services:

A crucial aspect of any new regulatory measures is the protection of incumbent primary services. These are the services that already have a primary allocation in these frequency bands or in adjacent bands. The WRC agenda explicitly states that any new measures for FSS must be developed "while ensuring the protection of existing primary services to which the band is allocated in the same and adjacent bands" and "without adversely affecting those services, specifically the operation of the satellite networks and systems in the bands." This highlights the need for careful technical studies to ensure compatibility and avoid harmful interference.

d. Protection to the Terrestrial Service:

The agenda item also explicitly states the need to develop measures "without changing measures to protect terrestrial services from unacceptable interference". This underscores the importance of maintaining the existing regulatory safeguards for terrestrial services that may operate in or adjacent to these FSS bands.

India's Preliminary Views:

India actively supports the development of a balanced technical and regulatory framework to ensure equitable access to the specified frequency bands, while safeguarding existing services and considering the specific needs of developing countries.