

RESOLUTION 131 (WRC-23)

Consideration of 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

The World Radiocommunication Conference (Dubai, 2023),

considering

- a)* that, in the frequency ranges at 4/6/10/11/12/13/14/17/20/30/40/50 GHz, there are allocations to the fixed-satellite service (FSS) and/or broadcasting-satellite service (BSS) on a primary basis;
- b)* that a portion of radio-frequency spectrum in the frequency ranges at 4/6/10/11/12/13/14/17 GHz has been used to develop planned space services as contained in Appendices **30**, **30A** and **30B**;
- c)* the additional regulatory measures for the enhancement of equitable access are included in Resolution **553 (Rev.WRC-23)** in the BSS in the frequency band 21.4-22 GHz in Regions 1 and 3;
- d)* that all countries have equal rights with respect to the use of both the radio frequencies allocated to various space radiocommunication services and geostationary-satellite orbits (GSO) and non-geostationary-satellite orbits (non-GSO) for these services in accordance with the Radio Regulations;
- e)* that, accordingly, a country or a group of countries having satellite filings in the FSS in the frequency ranges at 30/40/50 GHz can take practical measures to facilitate the use of new space systems by other countries or groups of countries;
- f)* that the Plenipotentiary Conference 2022 adopted Resolution 219 (Bucharest, 2022), on sustainability of the radio-frequency spectrum and associated satellite-orbit resources used by space services;
- g)* that No. **5.550B**, which identifies the 37-43.5 GHz band for IMT, notes that potential deployment of FSS earth stations within the frequency range 37.5-42.5 GHz and high-density applications in the FSS in the frequency bands 39.5-40 GHz in Region 1, 40-40.5 GHz in all Regions and 40.5-42 GHz in Region 2 (see No. **5.516B**); administrations should further take into account potential constraints to IMT in these frequency bands, as appropriate,

considering further

that planning for FSS networks, as was done in the Appendices **30**, **30A** and **30B** in the C- and Ku-bands, resulted in undesired consequences such as a lack of flexibility to adapt to new technologies, and that lessons learned should be taken into account in the consideration of 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,

recognizing

- a) that Articles 12 and 44 of the ITU Constitution lay down the basic principles for the use of the radio-frequency spectrum and the GSO and non-GSO systems, taking into account the needs of developing countries;
- b) that the “first-come, first-served” concept in Articles 9 and 11 can result in difficulties for future access to limited spectrum and orbits resources for later filed systems;
- c) the relative disadvantage for developing countries in coordination negotiations due to reasons such as a lack of resources and expertise;
- d) that Resolution 2 (**Rev.WRC-03**) resolves that “the registration with the Radiocommunication Bureau of frequency assignments for space radiocommunication services and their use do not provide any permanent priority for any individual country or groups of countries and do not create an obstacle to the establishment of space systems by other countries”;
- e) that Resolution ITU-R 74 resolves to continue activities in the scope of the ITU Radiocommunication Sector (ITU-R) with a focus on equitable, efficient and economical use of the radio-frequency spectrum taking into account the special needs of developing countries,

recognizing further

- a) that there is a need to have additional technical and regulatory measures to ensure equitable access to the frequency ranges at 30/40/50 GHz in the FSS;
- b) that there are many GSO FSS submissions in the frequency ranges at 30/40/50 GHz, which can prevent access to these frequency bands by developing countries,

resolves to invite the ITU Radiocommunication Sector to complete in time for the 2027 world radiocommunication conference

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,

invites the 2027 world radiocommunication conference

to review the results of the studies in accordance with *resolves to invite the ITU Radiocommunication Sector to complete in time for the 2027 world radiocommunication conference* above and take appropriate action on the usage of 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 by FSS satellite networks/systems,

invites administrations

to participate actively in the studies by submitting contributions to ITU-R.