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| **The 3rd Meeting of the APT Conference Preparatory Group for WRC-23 (APG23-3)** | **APG23-3/INP-xx** |
| 8 – 13 November 2021, Virtual/Online Meeting | xx October 2021 |

Thailand

**preliminary views on WRC-23 agenda items 1.15, 1.17**

**Agenda Item 1.15:**

*to harmonize the use of the frequency band 12.75-13.25 GHz (Earth-to-space) by earth stations on aircraft and vessels communicating with geostationary space stations in the fixed-satellite service globally, in accordance with Resolution* ***172 (WRC-​19)***

**1. Background**

The ITU has addressed aeronautical and maritime earth stations operating with GSO FSS satellites in Study Group 4 and at several WRCs that adopted technical and regulatory regimes to allow such operations. In the Radio Regulations Resolution **902 (WRC-03)** and Resolution **169 (WRC-19)** define technical and regulatory rules to allow GSO FSS networks to communicate with earth stations on aircraft or vessels to provide broadband communications.

In according with Resolution **172 (WRC-19)**, calls for studies to ensure that AP30B allotments and assignments as well as other allocated services are protected.

**2. Preliminary Views**

Thailand supports ITU-R studies currently carried out in accordance with Resolution **172 (WRC-19)**. The operation of earth stations on aircraft and vessels communicating with geostationary space stations in the fixed-satellite service in the frequency band 12.75-13.25 GHz (Earth-to-space) should[shall] take into account the protection of existing services as well as their future developments.

**Agenda Item 1.17:**

*to determine and carry out, on the basis of the ITU R studies in accordance with Resolution* ***773 (WRC-19)****, the appropriate regulatory actions for the provision of inter-satellite links in specific frequency bands, or portions thereof, by adding an inter-satellite service allocation where appropriate*

**1. Background**

Under this agenda item, Resolution **773 (WRC-19)** invites the ITU-R:

* to develop the technical and operational characteristics of different types of space stations that plan satellite-to-satellite transmissions in the frequency bands 11.7-12.7 GHz, 18.1-18.6 GHz, 18.8-20.2 GHz and 27.5-30 GHz;
* to study the technical and operational characteristics, including spectrum requirements, off-axis equivalent isotropically radiated power (e.i.r.p.) values and out-of-band emission limits, for transmissions between space stations in the frequency bands 11.7-12.7 GHz, 18.1-18.6 GHz, 18.8-20.2 GHz and 27.5-30 GHz;
* to study sharing and compatibility between satellite-to-satellite links intending to operate between space stations in the frequency bands 11.7-12.7 GHz, 18.1-18.6 GHz, 18.8-20.2 GHz and 27.5-30 GHz and current and planned stations in the FSS and other existing services allocated in the same frequency bands and adjacent frequency bands, including passive services, with a view to ensuring protection of the primary services referred to above;
* to develop, for different types of space stations, the technical conditions and regulatory provisions for satellite-to-satellite operations in the frequency bands 11.7-12.7 GHz, 18.1-18.6 GHz, 18.8-20.2 GHz and 27.5-30 GHz, or portions thereof, including new ISS allocations, as appropriate, taking into account the results of the studies above,

**2. Preliminary Views**

Thailand supports ITU-R studies currently carried out in accordance with Resolution **773 (WRC-19)**. The development of technical conditions and regulatory provisions for the use of satellite-to-satellite operations in the frequency bands 11.7-12.7 GHz, 18.1-18.6 GHz, 18.8-20.2 GHz and 27.5-30 GHz shall ensure the protection of existing services as well as their future developments in the same frequency bands and in adjacent frequency bands.

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