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Thailand

PRELIMINARY VIEWS ON WRC-19 AGENDA ITEMS 1.13 AND 9.1 (ISSUES 9.1.1, 9.1.2, 9.1.8)

Agenda Item 1.13
"to consider identification of frequency bands for the future development of International Mobile Telecommunications (IMT), including possible additional allocations to the mobile service on a primary basis, in accordance with Resolution 238 (WRC-15)"

1. Background

International Mobile Telecommunications (IMT) systems have contributed to global economic and social development of both developed and developing countries. IMT systems are now being evolved to provide diverse usage scenarios and applications such as enhanced mobile broadband (eMBB), massive machine-type (mMTC) and ultra-reliable and low-latency communications (URLLC) requiring larger contiguous blocks of spectrum than currently available bandwidth to realize those applications, as described in Recommendation ITU-R M.2083.

Resolution 238 (WRC-15) specifies the following frequency bands for the appropriate sharing and compatibility studies with respect to services in adjacent bands:

- 24.25-27.5 GHz, 37-40.5 GHz, 42.5-43.5 GHz, 45.5-47 GHz, 47.2-50.2 GHz, 50.4-52.6 GHz, 66-76 GHz and 81-86 GHz, which have allocations to the mobile service on a primary basis; and
- 31.8-33.4 GHz, 40.5-42.5 GHz and 47-47.2 GHz, which may require additional allocations to the mobile service on a primary basis.

It is noted that some of these frequency bands overlapped with those frequency bands subjected to studies under WRC-19 agenda items 1.6, 1.14 and 9.1 (issue 9.1.9).

2. Preliminary View

Thailand supports ITU-R studies on spectrum needs for the terrestrial component of IMT and sharing and compatibility studies in accordance with Resolution 238 (WRC-15) and also supports the consideration of additional frequency bands for IMT, including possible additional mobile allocations on a primary basis.

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Agenda Item 9.1, Issue 9.1.1
"Resolution 212 (Rev. WRC-15) - Implementation of International Mobile Telecommunications (IMT) in the frequency bands 1 885-2 025 MHz and 2 110-2 200 MHz"

1. Background

The frequency bands 1 885 – 2 025 MHz and 2 110 – 2 200 MHz have been identified for IMT in No.5.488 of the Radio Regulations. Within these frequency bands, the frequency bands 1 980 – 2 010 MHz and 2 170 – 2 200 MHz are allocated to the fixed, mobile and mobile satellite services on a co-primary basis.

Resolution 212 (Rev. WRC-15) invites ITU-R to study possible technical and operational measures to ensure coexistence and compatibility between the terrestrial component of IMT (in the mobile service) and the satellite component of IMT (in the mobile satellite service) in the frequency bands 1 980-2 010 MHz and 2 170-2 200 MHz in adjacent geographical areas across different countries to facilitate the development of both the satellite and terrestrial components of IMT.

2. Preliminary View

Thailand supports appropriate studies on the technical and operational measures to ensure coexistence and compatibility between the satellite and terrestrial components of IMT with a view to protecting terrestrial IMT operating in the frequency bands 1 920 – 1 980 MHz and 2 110 – 2 170 MHz.

Agenda Item 9.1, Issue 9.1.2
"Resolution 764 (WRC-15) – Compatibility of International Mobile Telecommunications and broadcasting-satellite service (sound) in the frequency band 1 452 – 1 492 MHz in Region 1 and 3"

1. Background

The frequency band 1 452-1 492 MHz is allocated to the fixed service (FS), mobile service (MS), broadcasting service (BS) and broadcasting-satellite service (BSS). Based on the outcome of WRC-15, this frequency band 1 452-1 492 MHz is identified for use by administrations wishing to implement IMT in accordance with Resolution 223 (Rev.WRC-15) and Resolution 761 (WRC-15). Pursuant to Resolution 528 (Rev.WRC-03), broadcasting-satellite systems, in the interim period, may only be introduced within the upper 25 MHz of this frequency band.

Based on ITU BR database, there are many satellite network filings submitted for coordination request in the frequency band 1 467-1 492 MHz in which the orbital positions of the space stations are distributed globally in the GSO. Some of these satellite networks are operational and their frequency assignments are already recorded in the MIFR. Besides operational satellite systems, some other additional or succeeding BSS (sound) satellite systems are also planned to be deployed in the GSO. Currently, the coordination procedures RR Nos. 9.11 and 9.19 are applied in order to reach the required sharing and compatible conditions between the broadcasting-satellite and terrestrial services.

2. Preliminary View

Thailand supports appropriate studies on the technical and operational measures to ensure the compatibility of International Mobile Telecommunications and broadcasting-satellite service (sound) in the frequency band 1 452-1 492 MHz in Region 1 and 3, with a view to protecting terrestrial IMT operating in the frequency band 1 427-1 518 MHz.

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Agenda Item 9.1, Issue 9.1.8
"Issue 3) in the Annex to Resolution 958 (WRC-15)
Harmonised use of spectrum to support the implementation of narrowband and broadband machine-type communication infrastructures"

1. Background

Currently, Working Party 5D is undertaking studies in response to Resolution 958 (WRC-15), to consider the use of the terrestrial component of International Mobile Telecommunication (IMT) for narrowband and broadband machine-type communication (MTC)/ Internet of Things (IoT).

2. Preliminary View

Thailand supports ITU-R studies currently undertaken by Working Party 5D on technical, operational, and spectrum aspects of the terrestrial component of International Mobile Telecommunication (IMT) for narrowband and broadband machine-type communication.

Thailand notes that MTC/IoT) applications can be used both in IMT and non-IMT bands and it may not be necessary to identify dedicated and/or specific frequency band(s) for MTC/IoT applications.

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