# ASIA-PACIFIC TELECOMMUNITY The 3rd Meeting of the APT Conference Preparatory Group for WRC-19 (APG19-4)

7-12-16 January 2019, Busan, Republic of Korea

Document: APG19-4/INP-xx

xx December 2018

### Thailand

#### PRELIMINARY VIEW ON WRC-19 AGENDA ITEMS 1.15

# Agenda Item 1.15:

"to consider identification of frequency bands for use by administrations for the land-mobile and fixed services applications operating in the frequency range 275-450 GHz, in accordance with Resolution 767 (WRC-15);"

Resolution 767 (WRC-15) – Studies towards an identification for use by administrations for land-mobile and fixed services applications operating in the frequency range 275-450 GHz

# **Background**

This agenda item seeks to identify spectrum for land mobile service (LMS) and fixed service (FS) applications in the 275-450 GHz frequency range while maintaining protection of the existing Earth exploration-satellite service (EESS) (passive) and radio astronomy service (RAS) applications identified in RR No. **5.565**. A PDN Report ITU-R SM.[275-450GHz SHARING] has been developed. This Report contains the results of compatibility studies between LMS, FS applications and both EESS (passive), RAS in the 275-450 GHz band based on the technical information available on LMS and FS characteristics in Reports ITU-R M.2417-0 and F.2416-0, for the purpose of identifying spectrum that can be used by LMS/FS applications without the need for regulatory restrictions.

Compatibility studies between the RAS and LMS/FS applications concluded that atmospheric attenuation independent of free-space losses at 275-450 GHz is not sufficient to provide compatibility between FS and RAS operations in the absence of other considerations. Separation distances and/or avoidance angles between RAS stations and FS stations should be considered depending on the deployment environment of FS stations.

## **Preliminary Views**

Thailand supports the identification of frequency bands for fixed and mobile service applications in the range 275-450 GHz while maintaining the protection of the passive services identified in **No. 5.565**.

\_\_\_\_

Contact: Dr. Thirapiroon Thongkamwitoon Email: thirapiroon.t@nbtc.go.th

Office of the NBTC, Thailand