



## Thailand

### PROPOSAL FOR PRELIMINARY APT COMMON PROPOSALS ON WRC-19 AGENDA ITEM 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

#### 1. 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.

#### 2. Views and Proposals

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

- 275-296 GHz
- 306-313 GHz
- 318-333 GHz
- 356-450 GHz

Thailand therefore supports Method E in the CPM report.