



## Thailand

### PRELIMINARY VIEW ON WRC-15 AGENDA ITEM 1.11

**Agenda Item 1.11: “to consider a primary allocation for the Earth exploration-satellite service (Earth-to-space) in the 7-8 GHz range, in accordance with Resolution 650 (WRC-12)”;**

#### Background

A sizable number of future EESS missions will require to uplink to the spacecraft a large amount of data for operations plans and dynamic spacecraft software modifications.

The bandwidth that globally would be required on the Earth-to-space link for these telecommanding functions cannot be accommodated in the only EESS (Earth-to-space) allocation that is currently available in RR Article 5 for telecommanding, i.e. the 2 025-2 110 MHz band. This 2 025-2 110 MHz band is of fundamental importance, since there are already more than 1 100 satellite networks filed with the ITU and many new satellite networks are expected to enter into this band, also including many microsattelites, nanosatellites and picosatellites. It would be extremely difficult, if not impossible, to coordinate satellites with such large bandwidth requirements within this band.

An EESS (Earth-to-space) allocation in the 7-8 GHz range would allow alleviating the problems posed by this new type of EESS mission. The TT&C (Telemetry, Telecommand and Control) function could be implemented by pairing this new allocation with the already existing EESS (space-to-Earth) allocation in the band 8 025-8 400 MHz. This may also eventually lead to a simplified on-board architecture and operational concept for some future EESS missions.

#### Preliminary View

Thailand supports studies done by ITU-R Working Party 7B in order to propose a new primary allocation to the EESS in the frequency band 7 190-7 250 MHz . However, Thailand does not have a strong view to select any method at this moment.