



Thailand

PRELIMINARY VIEW ON WRC-15 AGENDA ITEM 1.13

Agenda Item 1.13: “to review No. 5.268 with a view to examining the possibility for increasing the 5 km distance limitation and allowing space research service (space-to-space) use for proximity operations by space vehicles communicating with an orbiting manned space vehicle, in accordance with Resolution 652 (WRC-12)”;

Background

The band 410-420 MHz is used today for communications by astronauts conducting extra-vehicular activities (EVA) operations in the immediate vicinity of the International Space Station (ISS). Use of the band for proximity operations by vehicles approaching the ISS or other manned space vehicles would be advantageous as the propagation and physical properties of this frequency range enable favourable coverage performance in the highly multipath environment of the ISS. The 5 km limit was agreed during WARC-92 when the envisioned use of the band was limited to free floating astronauts working in the rear vicinity of a manned space vehicle. The addition of power flux-density (pfd) limits by WRC-97 provided primary allocation for SRS s-s uses as specified in RR No. 5.268 while ensuring the protection of systems operating in the fixed and mobile services. Vehicles approaching the ISS, whether manned or robotic, need to communicate over a longer distance to provide safe operations during docking manoeuvres. It is therefore necessary to modify RR No. 5.268 to remove the 5 km limitation and extra vehicular activity (EVA) use limitation while maintaining the current pfd limits.

Preliminary View

Thailand supports studies done by ITU-R Working Party 7B proposing one method in CPM report to satisfy this agenda item by modifying to RR No. 5.268 to remove the 5 km distance limitation and not solely limit the use of the frequency band for extra-vehicular activities. Taking into account that studies required by Resolution 652 (WRC-12) have been completed this resolution should be suppressed.