**UNITED STATES OF AMERICA**

**DRAFT PRELIMINARY VIEWS FOR WRC-19**

**Agenda Item 1.7**:to study the spectrum needs for telemetry, tracking and command (TT&C) in the space operation service for non-geostationary (NGSO) satellites with short duration missions, to assess the suitability of existing allocations to the space operation service and, if necessary, to consider new allocations, in accordance with Resolution **659 (WRC-15)**

**BACKGROUND**: The demand for suitable spectrum for NGSO satellites with short duration missions is growing due to the increasing number of these types of satellite missions. The mass and dimensions of these satellites contribute to their success and their use will likely grow. These types of missions provide an affordable means for scientific and commercial space purposes and are increasingly used by new entrants in space. Nevertheless, it is important to ensure that these missions do not cause harmful interference to existing systems and incumbent services. WRC-19 Agenda Item 1.7 invites studies to accommodate spectrum requirements for TT&C in the space operation service, below 1 GHz, for NGSO satellites with short duration missions in existing bands or identify new spectrum supported by sharing studies.

The term “short duration mission” used in Resolution **659 (WRC-15)** refers to a mission having a limited period of validity of typically not more than 3 years.

**U.S. VIEW:** The United States supports completing sharing and compatibility studies between NGSO satellites with short duration missions and the incumbent services with respect to invites ITU-R 1, 2, and 3 of Resolution **659 (WRC-15)**, and supports that frequency bands below 1 GHz should be considered for allocation changes only if agreed ITU-R studies demonstrate sharing feasibility.

The frequency ranges described for consideration under invites ITU-R 3 overlap with allocations to critical global maritime distress and safety service (GMDSS) frequencies, identified in **RR** Appendix **15**, and centered at 156.3 MHz, 156.525 MHz, 156.65 MHz, 156.8 MHz, 161.975 MHz, and 162.025 MHz, as well as frequencies used for the safety of life COSPAS/SARSAT system in the band 406-406.1 MHz. Therefore, the U.S. is of the view that CPM text must exclude the GMDSS frequency bands stated above and the COSPAS-SARSAT frequency range 406-406.1 MHz and the 100 kHz adjacent bands above and below the COSPAS-SARSAT frequency range (Res. **205 (WRC-15)**)from consideration for possible new allocations or an upgrade of the existing allocations to the space operation service. Additionally, the frequency ranges for fixed and land mobile (162.0375-173.2 MHz, 173.4-174 MHz, and 406.1-420.0 MHz), meteorological satellite (400.15-403 MHz), earth exploration satellite service (401-403 MHz) and meteorological aids (400.15-406 MHz) services are heavily used, and usage of the existing allocations is expected to increase in the future. The United States is of the view these factors must be considered in any sharing and compatibility studies under this agenda item.

The United States is of the view that a single spacecraft with a lifetime of less than three years, where the operator does not launch replenishment or replacement spacecraft is a short duration mission. The operation of multiple spacecraft simultaneously can qualify as short duration if all spacecraft have lifetimes less than three years and therefore the frequency and orbital characteristics and capabilities exist for less than 3 years – i.e., no replenishment/replacement. The case of a single (or multiple) spacecraft with a lifetime of less than three years, where the operator launches a single (or multiple) replenishment/replacement spacecraft(s) such that the operator has persistent frequency and orbital characteristics and capabilities longer than three years, is not considered a short duration mission.

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