

WRC-23 Agenda Item 1.18

Overview

“ To consider studies relating to spectrum needs and potential new allocations to the mobile-satellite service for future development of narrowband mobile satellite systems, in accordance with Resolution 248 (WRC-19). ”

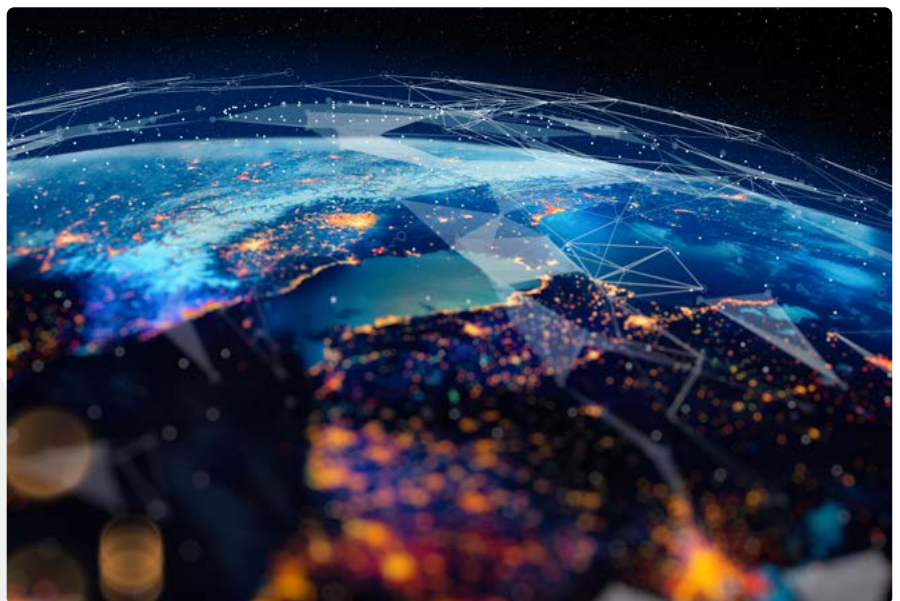
Considerations

- › While there is a demand for new spectrum for narrowband emissions such as M2M and IoT, there is also an exponential increase for non-terrestrial network (NTN) Mobile Satellite Service (MSS) voice and data communications requiring wider band emissions.
- › Agenda Item 1.18 limits spectrum access only to low power, low duty cycle MSS devices which precludes more robust existing MSS and future 5G NTN global capabilities and use cases.

Background

Resolution 248 (WRC-19) invited WRC-23 to determine appropriate regulatory actions based on the result of sharing and compatibility studies, while ensuring protection of existing primary services in frequency bands and adjacent bands, without causing undue constraints on their further development, based on the following studies:

- studies relating to spectrum needs and operational requirements as well as characteristics of low-data rate systems for the collection of data from and management of terrestrial MSS devices.
- sharing and compatibility studies with existing primary services to determine suitability of new allocations to MSS in 1695-1710 MHz in Region 2 (R2), 2010-2025 MHz in Region 1 (R1), and 3300-3315 MHz, 3385-3400 MHz in R2.



Studies and draft CPM methods

The tasks required to conduct the studies were neither agreed nor completed, so it was not possible to ensure protection of existing services (in-band and adjacent band) with potential new allocations to MSS in 1695-1710 MHz in R2, 2010-2025 MHz in R1, and 3300-3315 MHz, 3385-3400 MHz in R2.

In the ITU-R WP4C correspondence group on AI 1.18, there was no agreement on the interpretation of Resolution 248 and the parameters to perform sharing and compatibility studies which left the studies unconcluded. Despite the utmost efforts in WP4C and numerous meetings it was not possible to advance this Agenda Item.

WP4C simply finalized WRC-23 CPM text at its September 2022 meeting with two No Change methods:

Method A

No change to the Radio Regulations and suppression of **Resolution 248 (WRC-19)**

Method B

No change to any Articles of the Radio Regulations and its Appendices thereof, except revision of **Resolution 248 (WRC-19)**

GSOA Recommendation

> Supports Method A:

- No change to the Radio Regulations and **Suppression of Resolution 248 (WRC-19)**

> Rationale

- Sharing and compatibility studies with existing primary services and studies on the spectrum needs could not be concluded on new allocations to MSS for low data rate/narrowband applications.
- Resolution 248 (WRC-19) is ambiguous and unclear on the appropriate technical and operational characteristics to be used in the sharing and compatibility studies and studies on spectrum needs.
- The lack of agreed technical and operational characteristics of narrowband MSS made it impossible to conduct sharing and compatibility studies.

