

**IWG3-021 Rev 5
August 21, 2013**

United States of America

DRAFT PROPOSALS FOR THE WORK OF THE CONFERENCE

Agenda Item 1.10: to consider spectrum requirements and possible additional spectrum allocations for the mobile-satellite service in the Earth-to-space and space-to-Earth directions, including the satellite component for broadband applications, including International Mobile Telecommunications (IMT), within the frequency range from 22 GHz to 26 GHz, in accordance with Resolution **234 [COM6/16] (WRC-12)**;

Background information

WRC-12 adopted agenda item 1.10 in order to consider additional allocations to the mobile-satellite service (MSS) taking into account ITU-R studies in accordance with Resolution **234 (WRC-12)**. Resolution **234 (WRC-12)** invites the ITU-R to complete, for WRC-15, sharing and compatibility studies towards additional allocations to the mobile-satellite service in the Earth-to-space and space-to-Earth directions, within portions of the bands between 22 GHz and 26 GHz, while ensuring protection of existing services within these bands as well as taking into account No. **5.340** and No. **5.149**.

WARC-92 adopted numerous MSS allocations. However, WRC-97 and WRC-2000 made modifications to and suppressed some of these MSS allocations because sharing with other services was difficult or the conditions of use by MSS in some bands were impractical. WRC-12 considered possible new MSS allocations in the 4-16 GHz range under agenda item 1.25. ITU-R studies and WRC-12 determined that sharing with existing services by small mobile terminals in this range would require complex regulatory provisions and therefore, no MSS allocations resulted. As a consequence, WRC-12 agreed to include agenda item 1.10 on the agenda for WRC-15, to consider possible MSS allocations in the 22-26 GHz range.

For the Draft CPM text for this agenda item studies conducted concerning the many services presently allocated to the spectrum range 22-26 GHz for most if not all indicate that it would be very difficult to share with a new Mobile Satellite Service (MMS) having the assumed characteristics for a network need to operate in the part of the spectrum with the indicated indigenous propagation conditions.

Considering the use of existing MSS allocations, and considering the ongoing development of other systems employing mobile terminals, it appears that sufficient spectrum is allocated to accommodate the needs of the MSS. In addition, sharing with existing allocated services would be difficult.

Proposal:
NOC

USA/1.10/1

ARTICLE 5

Frequency allocations

Reasons: Considering current MSS use and new planned systems, the existing MSS allocations are sufficient. Sharing with incumbent services will require technical and operational constraints that will result in spectrum being impractical for use by the MSS. Additionally specific atmospheric propagation conditions around 24 GHz are such that the indicated telecommunication links cannot be achieved.
