

UNITED STATES OF AMERICA

DRAFT PRELIMINARY VIEWS FOR WRC-15

Agenda Item 1.6.1 to consider possible additional primary allocations to the fixed-satellite service (Earth-to-space and space-to-Earth) of 250 MHz in the range between 10 GHz and 17 GHz in Region 1 and review the regulatory provisions on the current allocations to the fixed-satellite service within this range, taking into account the results of ITU-R studies, in accordance with Resolution **151 (WRC-12)**.

ISSUE: To address a shortage and imbalance in ITU Region 1 and to harmonize with spectrum allocations to the fixed-satellite service in Regions 2 and 3 in the indicated spectrum range.

BACKGROUND: The existing unplanned FSS bands are extensively used for a myriad of applications. The very small aperture terminal (VSAT) services, video distribution, broadband networks, internet services, satellite news gathering, and backhaul links have triggered the rapid rise in the demand. Satellite traffic is typically symmetrical in a large variety of applications, i.e. similar amounts of Earth-to-space (uplink) and space-to-Earth (downlink) traffic are transmitted.

WRC-12 adopted two new resolutions (Resolutions **151 (WRC-12)** and **152 (WRC-12)**) to study, as a matter of urgency, possible primary allocations for unplanned FSS to address this asymmetry in Regions 2 and 3 as well as look for additional Earth-to-space and space-to-Earth allocations for the unplanned FSS in Region 1. These are reflected in Agenda items 1.6.1, and 1.6.2, respectively. This Preliminary View concerns agenda item 1.6.1.

It should be noted that a world-wide allocation for the FSS has a significant advantage over a regional one. For example, the same and/or equal FSS allocations for Regions 1, 2 and 3 is typical and important in terms of planning, construction, and orbit management of satellite networks, as well as achieving effective coverage area.

Also, in terms of improving spectral efficiency and convenience of communications set up (system architecture), it is desirable that any additional spectrum for FSS be allocated in a part of the spectrum that is contiguous to the existing fixed-satellite service allocations.

In Region 1, while there are equal allocations between uplink and downlink spectrum, there is a difference of 250 and 300 MHz of unplanned FSS spectrum when compared with Regions 2 and 3.

In order to facilitate efficient use of spectrum for satellite services and address this shortage in the uplink and downlink of FSS spectrum in Region 1 when compared with the FSS allocations in other Regions, **Agenda Item 1.6.1** is to consider additional primary allocations to the fixed-satellite service (FSS) in the range 10-17 GHz in Region 1 (Earth-to-space and space-to-Earth) and a review of regulatory provisions for existing FSS allocations, taking into account ITU-R studies in accordance with Resolution **151 (WRC-12)**.

Resolution **151 (WRC-12)** invites the ITU-R to complete, for WRC-15, sharing and compatibility studies towards additional primary allocations to the fixed-satellite service of 250 MHz in both directions in Region 1 within the bands 10-17 GHz, focusing on the frequency range that is contiguous (or near contiguous) to the existing fixed-satellite service allocations, while protecting existing primary services within these bands. This Resolution also calls for studies considering utilization of existing allocations to the FSS in both directions through a review of regulatory provisions, except for Nos. **5.502** and **5.503** and Resolution **144 (Rev. WRC-07)**.

Working Party 4A has under development a Preliminary Draft New Report **ITU-R S.[R1.FSS]** on an Assessment on use of spectrum in the 10-17 GHz band for the fixed-satellite service in Region 1 (GSO) which establishes and documents the issues and difficulties associated with this shortfall and provides a framework for further work on the associated analyses in support of this agenda item.

U.S. VIEW: The United States supports sharing studies in support of actions by WRC-15 to add new primary fixed-satellite service allocations of up to 250 MHz in both directions in Region 1 within the bands 10-17 GHz, focusing on spectrum that is contiguous (or near contiguous) to the existing non-planned fixed-satellite service allocations, taking into account the sharing and compatibility studies with existing services in accordance with Resolution **151 (WRC-12)**. The United States also supports consideration by WRC-15 a revision of regulatory provisions that would allow for greater flexibility in utilizing existing allocations to the fixed-satellite service in both directions, taking into account the sharing and compatibility studies with existing services in the 10-17 GHz band in accordance with Resolution **151 (WRC-12)**.
