UNITED STATES OF AMERICA

PROPOSAL FOR THE WORK OF THE CONFERENCE

Agenda Item 1.1: *to consider additional spectrum allocations to the mobile service on a primary basis and identification of additional frequency bands for International Mobile Telecommunications (IMT) and related regulatory provisions, to facilitate the development of terrestrial mobile broadband applications, in accordance with Resolution* ***233 (WRC-12)***

Background Information: The 2012 World Radiocommunication Conference (WRC-12) recognized a need for additional radio spectrum to support the increasing mobile data traffic, and placed consideration of additional spectrum allocations for terrestrial mobile broadband applications on the agenda for WRC-15. The ITU established the Joint Task Group (JTG) 4-5-6-7 to develop sharing studies and draft CPM text for WRC-15 Agenda Item 1.1.

The 4400-4500 MHz and 4800-4990 MHz frequency bands are allocated to the fixed service (FS) and mobile service (MS) on a co-primary basis, while the 4500-4800 MHz frequency band is allocated on a co-primary basis to the fixed, fixed-satellite, and mobile services. ITU-R conducted compatibility studies between IMT and FS, as well as between IMT and MS systems operating in the 4 400-4 990 MHz frequency range. The JTG 4-5-6-7 Chairman's Report contains the studies between IMT systems and the FS in Annex 18, and studies between IMT systems and the MS in Annex 33. Study Group 5 (SG 5) approved the IMT-FS sharing studies at its November 10-11, 2014 meeting. The JTG did not agree to the IMT-MS sharing studies; consequently, SG 5 did not consider the IMT-MS sharing studies.

The ITU-R studies generally show significant separation distances (hundreds of kilometers) would be required between IMT stations and both FS and MS stations. These results show that co-frequency, co-coverage sharing is difficult or infeasible between FS or MS systems and IMT in the same geographical area. The IMT-MS sharing studies show extreme separation distance requirements, including distances exceeding 500 km. Moreover, the JTG did not agree on the underlying premise of the MS-IMT studies for the 4 400-4 500 and 4 800-4 990 MHz bands and that incumbent systems would have to vacate portions of the frequency range to allow use by IMT applications. The JTG studies noted this would result in loss of spectrum for the incumbent services. The United States believes this would negatively affect operations and future planning of the incumbent FS and MS uses in the 4 400-4 990 MHz frequency range.

Given the results of the JTG studies, and the adverse effects on the incumbent services' operations by IMT use of the bands, the United States proposes no changes to the ITU Radio Regulations for the contiguous 4 400-4 990 MHz frequency range in all three regions .

Proposal:

NOC USA/1.1/1

ARTICLE 5

Frequency allocations

Section IV – Table of Frequency Allocations
(See No. **2.1**)

2 700-4 800 MHz

Allocation to services		
Region 1	**Region 2**	**Region 3**
4 400-4 500	FIXED MOBILE 5.440A	
4 500-4 800	FIXED FIXED-SATELLITE (space-to-Earth) 5.441 MOBILE 5.440A	

4 800-5 570 MHz

Allocation to services		
Region 1	**Region 2**	**Region 3**
4 800-4 990	FIXED MOBILE 5.440A 5.442 Radio astronomy 5.149 5.339 5.443	

Reasons: ITU-R studies show co-frequency sharing between IMT and incumbent fixed and mobile service systems is not feasible in the 4 400-4 990 MHz frequency range in the same geographical area without disrupting current and planned incumbent operations in the frequency range. Given operations and future planning of the incumbent FS and MS applications in the 4 400-4 990 MHz frequency range, the United States does not support identification to IMT.