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| **World Radiocommunication Conference (WRC-15)Geneva, 2–27 November 2015** |  |
| **INTERNATIONAL TELECOMMUNICATION UNION** |  |
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| PLENARY MEETING | **Addendum 2 toDocument 6(Add.1)-E** |
|  | **5 October 2015** |
|  | **Original: English** |
|  |
| United States of America |
| Proposals for the work of the conference |
|  |
| Agenda item 1.1 |

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)**;

NOC 4 400‑4 500 MHz and 4 800‑4 990 MHz

Background

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 4 400-4 500 MHz and 4 800-4 990 MHz frequency bands are allocated to the fixed service (FS) and mobile service (MS) on a co-primary basis. 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 10-11 November 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 kilometres) 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 an underlying premise for the MS-IMT studies for the 4 400-4 500 and 4 800-4 990 MHz bands; namely, 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[[1]](#footnote-1).

Proposals

Frequency allocations

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

NOC USA/6A1A2/1

2 700-4 800 MHz

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

**Reasons:** ITU-R studies show co-frequency sharing between IMT and incumbent fixed and mobile service systems is not feasible in the 4 400-4 500 MHz band in the same geographical area without disrupting current and planned incumbent operations in the frequency band.

In addition, CITEL has adopted an Inter-American Proposal for no change to the band 4 500-4 800 MHz. This proposal, by the United States, for no change in the 4 400-4 500 MHz band is meant to complement the CITEL action.

NOC USA/6A1A2/2

4 800-5 570 MHz

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| 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 4 800-4 990 MHz band in the same geographical area without disrupting current and planned incumbent operations in the frequency band.

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1. It may be noted that CITEL has adopted an Inter-American Proposal for no change to the band 4 500-4 800 MHz (see Addendum 9 to Document 7(Add.1)). This proposal by the United States is meant to complement this action. [↑](#footnote-ref-1)