

## UNITED STATES OF AMERICA

### DRAFT PROPOSALS 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 consider spectrum requirements for IMT/mobile broadband and conduct compatibility studies taking into account protection requirements of other services from concerned ITU-R Working Parties.

JTG 4-5-6-7 conducted compatibility studies between IMT and incumbent radar systems operating in the 2 700-2 900 MHz frequency band. All these studies show co-frequency, co-coverage sharing is not feasible between radars and IMT systems. Adjacent-frequency sharing could be possible, but only after applying modifications to both the IMT systems and existing radar systems; imposing geographic separations between IMT and radar systems; and instituting a spectrum guard band between the IMT frequencies and radar frequencies. The guard band size is dependent on the assumed IMT/radar modifications and the imposed geographic separations. These studies are contained in the JTG 4-5-6-7 Chairman's Report (Annex 30). Based on the JTG 4-5-6-7 compatibility studies, global harmonization of the 2 700-2 900 MHz frequency band for IMT use is not feasible, and any possible IMT use in portions of this frequency band would be only at the national or local level, after coordination with neighboring countries (i.e., those within 700 km) to ensure protection of their radar use.

In the United States, the frequency band 2 700-2 900 MHz is extensively used for air traffic control (ATC), weather, and defense radar systems. The ATC and weather applications are safety of flight and deserving of the additional protections offered by Radio Regulations No. **4.10**. Domestic studies determined incumbent radar systems utilize the full 2 700-2 900 MHz frequency band, and re-planning those radar systems into a smaller portion of the band to open spectrum for IMT is not possible. As a result, the United States cannot accommodate the necessary adjacent-frequency sharing conditions, including the required guard band, to support IMT implementation in this frequency band.

Given the JTG and domestic sharing study results between incumbent radar systems and IMT, and the incumbent radar spectrum requirements, the United States proposes no change to the ITU Radio Regulations regarding mobile service allocations and/or IMT identification for the 2 700-2 900 MHz frequency band.

#### **Proposals:**

**NOC**

USA/1.1/1

## ARTICLE 5

### Frequency allocations

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

##### 2 700-2 900 MHz

Allocation to services		
Region 1	Region 2	Region 3
2 700-2 900	AERONAUTICAL RADIONAVIGATION 5.337 Radiolocation 5.423 5.424	

**Reasons:** JTG studies show that sharing on a global scale between IMT and incumbent radar systems is not feasible, and domestic studies show that the United States fully utilizes the frequency band for incumbent radar systems.