

**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 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.

The 2700-2900 MHz frequency band is allocated on a primary basis to the aeronautical Radionavigation service in all three Regions. ITU-R 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 sharing is not feasible between radars and IMT systems in the same geographical location. 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 level, after coordination with neighboring countries, where the coordination distances potentially could be large (i.e., hundreds of kilometers), 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 applications are a safety service, subject to the additional protections offered by Radio Regulation No. **4.10**. The radar systems utilize the full 2 700-2 900 MHz frequency band in the United States. 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 ITU-R sharing study results between incumbent radar systems and IMT, the United States proposes no change to the ITU Radio Regulations and cannot support mobile service allocations and/or IMT identification for the 2 700-2 900 MHz frequency band.

**Proposal:**

**NOC**

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ARTICLE 5

**Frequency allocations**

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

**2 700-2 900 MHz**

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

**Reasons:** ITU-R studies show that compatibility between IMT and incumbent radar systems is not feasible in the same geographical area. The United States fully utilizes the frequency band for incumbent radar systems.