

WAC/008(01.10.12)

IWG-1/010 (20.09.12)

Ms. Mindel De La Torre  
Chief of the International Bureau  
Federal Communications Commission  
445 12<sup>th</sup> Street SW  
Washington, DC 20554

Dear Ms. De La Torre:

The National Telecommunications and Information Administration (NTIA) on behalf of the Executive Branch agencies, approves the release of the attached Executive Branch preliminary views for WRC-15. The enclosed draft preliminary views address agenda items 1.3 (public protection and disaster relief), 1.5 (unmanned aircraft systems in the fixed-satellite service), 1.6.1 (fixed-satellite service allocations for region 1 uplink/downlink at 10-17 GHz), 1.6.2 (fixed-satellite service allocations for region 2 and 3 uplink/downlink at 13-17 GHz), 1.9.1 (fixed-satellite service allocations uplink/downlink in the 7-8 GHz range), 1.9.2 (maritime-mobile satellite service allocation in the 7-8 GHz range), 1.14 (coordinated universal time), 1.17 (wireless avionics intra-communications), and 1.18 (automotive radiolocation applications in the 77.5-78.0 GHz band).

These draft preliminary views consider the federal agency inputs toward the development of U.S. proposals for WRC-15. NTIA forwards this package for your consideration and review by your WRC-15 Advisory Committee. Dr. Darlene Drazenovich is the primary contact from my staff.

Sincerely,

*(Original Signed September 14, 2012)*

Karl B. Nebbia  
Associate Administrator  
Office of Spectrum Management

Enclosures

**UNITED STATES OF AMERICA**

**DRAFT PRELIMINARY VIEWS FOR WRC-15**

**Agenda Item 1.17:** to consider possible spectrum requirements and regulatory actions, including appropriate aeronautical allocations, to support wireless avionics intra-communications (WAIC), in accordance with Resolution **423 (WRC-12)**

**BACKGROUND:** The aerospace industry is developing the future generation of commercial aircraft to provide airlines and the flying public more cost-efficient, safe, and reliable aircraft. Wireless capabilities will reduce aircraft weight, provide multiple and redundant methods to transmit safety-related information, and provide environmental benefits and cost savings to manufacturers and operators.

WAIC systems consist of multiple radiocommunication devices between two or more transmitters and receivers on a single aircraft and provide safety-related aircraft applications. WAIC system transmissions are not limited to the interior of the aircraft structure. For example, wireless sensors mounted on the wings or engines can communicate with systems located within the aircraft. WAIC communication traffic will be between transmitters and receivers on the same aircraft as part of a closed, exclusive network required for aircraft operation. WAIC systems will not provide air-to-ground, air-to-air or air-to-satellite communications.

Report ITU-R M. 2197 provides findings on the technical characteristics and operational requirements of WAIC systems.

Although Resolution **423 (WRC-12)** does not provide a specific frequency range in the “*Resolves*” section, the “*Invites ITU-R*” section, point (3), indicates studies should consider:

- i. frequency bands within existing worldwide aeronautical mobile service, aeronautical mobile (R) service and aeronautical radionavigation service allocations; and
- ii. additional frequency bands above 15.7 GHz for aeronautical services if spectrum requirements cannot be met in frequency bands studied under *invites ITU-R 3 i)*

**U.S. VIEW:** The United States supports regulatory actions, including appropriate allocations to the AM(R)S limited to WAIC systems, if the results of ITU-R studies show compatibility with existing services in accordance with Resolution **423 (WRC-12)**. Those studies should consider frequency bands above 15.7 GHz only if spectrum requirements cannot be met in existing worldwide AMS, AM(R)S and/or ARNS allocations below 15.7 GHz.