



UNITED STATES DEPARTMENT OF COMMERCE
National Telecommunications and
Information Administration
Washington, D.C. 20230

MAR 24 2017

Robert Nelson
Chief Engineer, International Bureau
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Dear Mr. Nelson

The National Telecommunications and Information Administration (NTIA), on behalf of the Executive Branch, approved the release of four Executive Branch draft preliminary views for the 2019 World Radiocommunication Conference (WRC-19).

- 1) Agenda Item 1.11 – Railway Radiocommunication Systems between train and trackside
- 2) Agenda Item 1.12 – Intelligent Transport Systems (ITS)
- 3) Agenda Item 1.15 – Land Mobile and Fixed services footnote between 275-450 GHz
- 4) Agenda Item 9.1, Issue 9.1.4 – Stations on board sub-orbital vehicles

NTIA considered the federal agencies' inputs toward the development of these documents. NTIA forwards this package for your consideration and review by the FCC WRC-19 Advisory Committee. Mr. Charles Glass is the primary contact from my staff.

Sincerely

A handwritten signature in blue ink, appearing to read "Paige R. Atkins".

Paige R. Atkins
Associate Administrator
Office of Spectrum Management

Enclosures:

UNITED STATES OF AMERICA
DRAFT PRELIMINARY VIEWS FOR WRC-19

Agenda Item 1.11: to take necessary actions, as appropriate, to facilitate global or regional harmonized frequency bands to support railway radiocommunication systems between train and trackside within existing mobile service allocations, in accordance with Resolution 236 (WRC-15)

BACKGROUND: Railway radiocommunication systems between train and trackside (Rail RSTT) carry train control, command, and operational information as well as monitoring data between on-board radio equipment and related radio infrastructure located along trackside. WRC-19 agenda item 1.11 and associated ITU-R Resolution 236 (WRC-15) were developed by some administrations to harmonize spectrum for railway radiocommunication systems between train and trackside for command and control.

U.S. VIEW: The United States is of the view that the development of applicable ITU-R Reports and Recommendations can satisfy this agenda item and no change is required for the Radio Regulations. The United States supports studies under Resolution 236 (WRC-15) regarding the possible regional or global harmonization of frequency bands within existing mobile service allocations to facilitate train and trackside radiocommunication for command and control.

UNITED STATES OF AMERICA
DRAFT PRELIMINARY VIEWS FOR WRC-19

Agenda Item 1.12: to consider possible global or regional harmonized frequency bands, to the maximum extent possible, for the implementation of evolving Intelligent Transport Systems (ITS) under existing mobile-service allocations, in accordance with Resolution 237 (WRC-15).

BACKGROUND: An Intelligent Transport System uses communications and computing technologies to improve transportation applications such as safe driving and to enhance productivity through the integration of advanced communications technologies into the transportation infrastructure and into vehicles and other end users. ITS encompasses a broad range of wireless and wireline communications-based information and electronics technologies.

The World Radiocommunication Conference 2015 (WRC-15) developed agenda item 1.12 and associated Resolution 237 (WRC-15) out of an effort by some Administrations to harmonize spectrum for ITS. Since the ITU initiated studies on ITS in the 1990s, there have been many changes in the ITS environment, including the introduction/planned introduction of new technologies and use of various frequency ranges.

U.S. VIEW: The United States is of the view that this agenda item could be satisfied by developing ITU-R Reports and Recommendations rather than changing the Radio Regulations. We do support studies under Resolution 237 (WRC-15) regarding the possible harmonization of frequency bands for ITS applications under existing mobile service allocations.

UNITED STATES OF AMERICA
DRAFT PRELIMINARY VIEWS FOR WRC-19

Agenda Item 1.15: to consider identification of frequency bands for use by administrations for the land-mobile and fixed services applications operating in the frequency range 275-450 GHz, in accordance with Resolution 767 (WRC-15).

BACKGROUND: At present, there are no international allocations for radiocommunication services above 275 GHz in the Radio Regulations (RR's). However, footnote No. 5.565 does make identifications for radio astronomy, earth exploration-satellite (passive) and space research (passive) services. Recent advances in microwave technology make possible the use of this spectrum by active services for communications and related uses. Consistent with No. 5.565, frequencies for fixed and land mobile use could be utilized above 275 GHz, provided "all practicable steps" are taken to protect passive services.

Report ITU-R RA.2189 "Sharing between the radio astronomy service and active services in the frequency range 275-3 000 GHz" indicates that the radio astronomy service can share with terrestrial systems due to propagation conditions and power limitations of current active services technologies. The space research service (passive) and the Earth exploration-satellite service (passive) may also be able to share frequencies with the active services; however, studies are needed to demonstrate this.

U.S. VIEW: The United States is of the view that it may be possible to develop a similar footnote to that in No. 5.565 for land-mobile and fixed services, identifying bands for terrestrial active service use. To this end, the United States supports studies in the ITU-R on sharing and compatibility between passive and active services as well as spectrum needs for the land-mobile and fixed services for WRC-19 agenda item 1.15 under the terms of Resolution 767 (WRC-15).

UNITED STATES OF AMERICA
DRAFT PRELIMINARY VIEWS FOR WRC-19

Agenda Item 9: to consider and approve the Report of the Director of the Radiocommunication Bureau, in accordance with Article 7 of the Convention:

Agenda Item 9.1: on the activities of the Radiocommunication Sector since WRC-15.

Note: The subdivision of Agenda Item 9.1 into issues, such as 9.1.1, 9.1.2, etc., was made at the first session of the Conference Preparatory Meeting for WRC-19 (CPM19-1) and is summarized in the BR Administrative Circular CA/226, 23rd December 2015.

Issue 9.1.4 - Resolution 763 (WRC-15) – Stations on board sub-orbital vehicles

BACKGROUND: Sub-orbital vehicles, including manned reusable launch vehicles and high-altitude balloons, are being licensed by the Federal Aviation Administration to operate within the United States of America. It is predicted that the commercial space transportation industry will grow substantially in the coming years. Resolution 763 (WRC-15) identifies a number of challenges that have to be addressed regarding the spectrum supportability of stations on board sub-orbital vehicles.

The ITU Radiocommunication Sector is presently engaged in studying the current and future radio equipage on board sub-orbital vehicles. Studies will be required to identify any required technical and operational measures that could assist in avoiding harmful interference between radiocommunication systems and determine spectrum requirements to consider a possible future agenda item for WRC-23. These studies have been directed to be completed during the WRC-19 study cycle.

U.S. VIEW: The United States supports:

1. The studies called for by Resolution 763 (WRC-15) noting that those studies need to be completed during this study cycle.
2. If the results of studies indicate that additional spectrum and/or other regulatory measures are required, consider seeking an agenda item at a future WRC.