

Radio Conference Subcommittee (RCS)

Preparation for ITU Radiocommunication Conferences

UNITED STATES OF AMERICA

DRAFT PRELIMINARY VIEWS ON WRC-11

AGENDA ITEM 1.8: to consider the progress of ITU-R studies concerning the technical and regulatory issues relative to the fixed service in the bands between 71 GHz and 238 GHz, taking into account Resolutions **731 (WRC-2000)** and **732 (WRC-2000)**

ISSUE: The intent of this agenda item is to study compatibility between passive and active services and develop sharing criteria for co-primary active services in bands above 71 GHz. In particular, it is important to study the spectrum requirements for active services for which the technology will be commercially available at a future date. Based on proposals and documentation available at WRC-07 it is likely that some administrations may seek to develop sharing criteria for the radio regulations in the form of pfd limits on space service downlinks.

BACKGROUND: WRC-2000 adopted Resolutions **731** and **732** as part of the conference decisions on the allocation of frequency bands above 71 GHz to the Earth exploration-satellite (passive) and radio astronomy services resulting in an overall rearrangement of the allocation tables in Article 5 of the Radio Regulations. These resolutions became necessary because the ITU-R was not able to fully evaluate for the active services (e.g., fixed, mobile, radiolocation, etc.), the new arrangement of their allocations vis-à-vis the passive allocations or each other. Therefore, the conference decided to adopt these two resolutions providing for further study and possible action in the future when active services technology and emerging requirements become better known. Since that time, millimeter wave spectrum above 71 GHz has become the subject of increasing interest for commercial use due to its unique propagation characteristics and the wide bandwidth available for carrying telecommunications traffic. New technologies are now emerging that offer the possibility of using these higher frequency bands for fixed wireless applications, taking advantage of the wide bandwidths available to support applications such as extremely high speed data transmission (e.g., data rates in the 1 to 10 Gbps range) for short distance (e.g., < 1-2 km). Several administrations have made or are making provisions for such wideband terrestrial fixed wireless applications.

In a somewhat unique set of circumstances, WRC-07 did not adopt a Resolution to define this agenda item. Therefore, the definition and scope of the agenda item is unclear.

U.S. VIEW: The United States supports ITU-R studies concerning the fixed service bands between 71 and 238 GHz. The United States supports protection of the existing services allocated within this frequency range. (August 7, 2008)
