

United States of America

DRAFT PROPOSAL FOR THE WORK OF THE CONFERENCE

WRC-12 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);*
Resolution 731 (WRC-2000): *Consideration by a future competent world radiocommunication conference of issues dealing with sharing and adjacent-band compatibility between passive and active services above 71 GHz*
Resolution 732 (WRC-2000): *Consideration by a future competent world radiocommunication conference of issues dealing with sharing between active services above 71 GHz*

Background information:

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 particular, in the United States, the Fixed Service has operational links in the frequency bands 71-76 GHz, 81-86 GHz, 92-94 GHz and 94.1-95 GHz.

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. Studies of out-of-band aggregate interference from FS into EESS systems in the band 86-92 GHz have been carried out in ETSI and the results of these studies have been reported to the ITU-R. The results of these studies are critically dependent on the assumed characteristics of the FS systems and their

deployment. The assumed characteristics may not be representative of the current or the future deployment in many administrations.

Proposals:

/USA/1.8/1 NOC

ARTICLE 5

Reason: Administrations have not submitted enough information to substantiate the need for a change. The low level of contributions results from the fact that the technologies employed by the active services in these bands are in the early stages of development and some administrations have not even opened the bands for licensing.

/USA/1.8/2 SUP

Resolution 731 (WRC-2000)

Resolution 732 (WRC-2000)

Reason: These Resolutions are premature and unfocused. Resolutions that are specific to the frequency band(s) and to the services that share them will need to be developed as the technologies in those bands become more mature. Any such resolutions need to be included under an agenda item that requests consideration of the allocation choices made at WRC-2000 in light of the emerging needs of the active services.
