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UNITED STATES

PRELIMINARY VIEWS ON WRC-07

WRC-07 Agenda Item 1.6 (Res. 415 (WRC-03) only): to consider additional allocations for the aeronautical mobile (R) service in parts of the bands between 108 MHz and 6 GHz, in accordance with Resolution **414 (WRC-03)** and, to study current satellite frequency allocations, that will support the modernization of civil aviation telecommunication systems, taking into account Resolution **415 (WRC-03)**;

ISSUE: How broadening the services and applications of current satellite frequency allocations that could support civil aviation telecommunications systems can be made compatible with existing uses and at the same time encourage the deployment of a satellite infrastructure that can be used for other non-aeronautical telecommunications services.

BACKGROUND:

The objective behind Resolution 415 is to identify satellite spectrum that could, compatibly with current allocations and uses, support additional applications that could be used for aviation-related services that modernize and are supportive of International Civil Aviation Organization (ICAO) Communication, Navigation & Surveillance/ Air Traffic Management (CNS/ATM) systems. Special emphasis is placed on the extension of these modernized systems to developing countries and remote areas that do not have terrestrial infrastructure.

With ever increasing speed, existing and new communications systems are being based on Internet related protocols and services. Access to these services with sufficient bandwidth is becoming essential for both terrestrial and aeronautical communications. Without this access aeronautical operations will be hindered from gaining the efficiencies and benefits that this type of service offers. The development of satellite facilities to support aeronautical operations can also support the extension or enhancement of non-aeronautical telecommunications services to developing countries and remote areas.

Some African countries have indicated that the problems of providing CNS/ATM services to remote airports in some developing countries, and some developed countries with underdeveloped infrastructure, can be eased through the application of satellite-based solutions. Further, they say that in order to promote improved communication capabilities in general, these improved, satellite-based, facilities should be shared with non-aviation users to increase affordability.

The ITU-R recognized that the use of the 14.0-14.5 GHz band for Aeronautical Mobile Satellite Service (AMSS) on a Secondary basis, an allocation added at WRC-03, was compatible with current Fixed Satellite Service (FSS) systems and was supported by studies leading up to WRC-03. Studies within the ITU-R assessed compatibility of the usage of the 11/12 GHz downlink

band, associated with the 14 GHz uplink band, and found that these downlink signals could co-exist with FSS systems.

U.S. VIEWS:

1. That existing Fixed Satellite Service (FSS) spacecraft and appropriate earth stations can be used to create, augment or enhance infrastructure to support civil aviation telecommunications services, including non-safety related ICAO CNS/ATM applications.

2. The use of satellite-based facilities in connection with civil aviation applications mentioned above will contribute to the overall improvement of the communications infrastructure in developing countries and remote areas and allow ready access to Internet based services. However, since these latter applications are already consistent with existing satellite frequency allocations and can be supported by existing or planned satellite networks, no action from WRC-07 is required in this respect.

3. That the extension of broadband digital access to aeronautical platforms is a necessary step in the modernization of civil aviation telecommunications systems and that this extension can be facilitated through the Aeronautical Mobile Satellite Service (AMSS) operating in the 14/11/12 GHz bands. There is currently no AMSS downlink allocation and downlink signals operate under RR 4.4 in the 11/12 GHz band. The matching of the secondary AMSS uplink in the 14 GHz band with a secondary downlink allocation in the 11/12 GHz band would aid in the acceptance and standardization of these non-safety applications for aviation use.