RCS - 1769

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

MAY 28 2004

Mr. Donald Abelson
Chief, International Bureau
Federal Communications Commission
445 12th Street S.W.
Washington, D.C. 20554

Dear Mr. Abelson:

The National Telecommunications and Information Administration, on behalf of the Executive Branch agencies, wishes to bring to your attention four additional approved Executive Branch preliminary views considering federal agency inputs toward the development of U.S. Preliminary Views for WRC-2007. These preliminary views address WRC-2007 agenda items 1.6, 1.14, 1.15, 1.16.

The enclosure is forwarded for review by the Commission. Jim Vorhies of my staff is the primary contact for NTIA.

Sincerely

Fredrick R. Wentland
Associate Administrator
Office of Spectrum Management

Enclosure

Radio Conference Subcommittee (RCS)

Preparation for ITU Radiocommunication Conferences

UNITED STATES

DRAFT PRELIMINARY VIEWS ON WRC-07

Agenda Item 1.6: 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)**;

ISSUES: This agenda item encompasses three distinct efforts:

1) to determine whether additional allocations for aeronautical mobile (route) service (AM(R)S) are necessary: a) First consider adding AM(R)S allocations to existing aeronautical bands; and b) If step a is not sufficient, consider adding AM(R)S allocations to bands that are not currently used by aviation,

2) specifically consider how to accommodate the requirements for aeronautical systems in the band 5 091-5 150 MHz,

3) to examine the possibility of broadening the services and applications of the use of current satellite frequency allocations in order to allow the expansion of ICAO CNS/ATM systems that can also support other non-aeronautical telecommunication services.

BACKGROUND: The first of the three efforts contained in this agenda item addresses the current situation of existing AM(R)S bands nearing saturation in core Europe and the United States. In addition, many of the evolving navigation and surveillance applications may not meet the ITU-defined use of propagation property of waves required in order to operate in a radionavigation band. WRC-03 provided a good example of the latter issue, with the agenda including addition of a limited AM(R)S allocation to the 108-117.975 MHz band to accommodate International Civil Aviation Organization (ICAO) standard navigation and surveillance systems.

The second effort involves studies to consider how to accommodate the requirements for aeronautical systems in the band 5 091-5 150 MHz. Though this might be considered a subset of effort 1 as most proposed applications would fit under AM(R)S, the item is slightly broader in that aeronautical fixed links are also being considered to allow transmission of aeronautical sensor data on the airport property without requiring costly underground cable installation.

The third effort was proposed by a number of administrations with the goal of allowing them to modernize their air traffic control systems without requiring the need for extensive ground facilities. Studies are expected to focus on utilization of the ICAO Global Navigation Satellite System (GNSS) to improve navigation and timing services, and the exploration of using available satellite communications where safety objectives can be assured.

U.S. VIEW: Though studies have not been completed that quantify aviation need for additional AM(R)S spectrum, current aviation communication bands are severely congested. In addition, recent experience has shown that evolving technology for navigation and surveillance may necessitate allocations that are more encompassing than simply aeronautical radionavigation service (ARNS). As a result, the United States anticipates supporting the addition of AM(R)S allocations in some frequency bands depending on the results of ITU-R studies.

Regarding the second effort, AM(R)S applications in the 5 091-5 150 MHz band will be included in the effort 1 response. Based on these studies, the United States expects that a portion of the band will be reserved for the fixed service limited to aeronautical applications at airports.

Regarding the third effort, the United States expects to support the use of the Global Positioning System (GPS) as a constituent element of the GNSS. (May 27, 2004).

Radio Conference Subcommittee (RCS)

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UNITED STATES

DRAFT PRELIMINARY VIEWS ON WRC-07

Agenda Item 1.14: to review the operational procedures and requirements of the Global Maritime Distress and Safety System (GMDSS) and other related provisions of the Radio Regulations, taking into account **Resolutions 331 (Rev.WRC-03) and 342 (Rev.WRC-2000)** and the continued transition to the GMDSS, the experience since its introduction, and the needs of all classes of ships;

ISSUE: Per Resolution **331,** the transition to the GMDSS has not been completed by a large number of administrations. This transition requires the eventual modification of Appendix **13**, to include its possible deletion, and replacement by a suitable recommendation covering vessels subject to the radio regulations that are not required to be GMDSS equipped. However, until the transition is complete, provisions of Appendix **13** are still applicable and need to be retained, and possibly rewritten for non-SOLAS vessels that will not be under the purview the regulations of GMDSS. Also, as GMDSS is becoming the new worldwide distress alerting system there are applicable lessons learned and changes to incorporate in Chapter VII, IX, and other portions of the Radio Regulations. Resolution **342** calls for the review of Appendix **18**, with the goal of accommodating new VHF technology in the 156-174 MHz band. WRC-2003 modified Appendix **18**, including the addition of note *o)*, to permit the possible use, on a voluntary basis, of various channels or bands created by the conversion of some duplex channels to simplex channels, for the initial testing and the possible future introduction of new technologies. The challenge before WP 8B is to identify world wide interoperable digital technology that is adaptable to the maritime mobile service. ITU-R WP 8B plans to evaluate the future uses of the currently designated Public Correspondence VHF Channels for other maritime related use, in view of the worldwide decline of VHF public correspondence services.

Background: The reasons for this agenda item are to ensure that GMDSS requirements and procedures are current, administrations continue the transition from legacy non-GMDSS distress and safety systems, and ensure that the International Radio Regulations continue to accommodate the needs of those that have not made the transition to the GMDSS. This agenda item will continue to provide worldwide maritime safety system coordination to promote Safety-of-Life at sea in conjunction with International Maritime Organization (IMO) circulars and directives. This agenda item also promotes the efficient use of the VHF maritime band and accommodates new VHF technology in this band. Many administrations and regional groups will support changes to Appendix **18**.

U.S. VIEW: The United States believes that the distress and safety communications, non-GMDSS, should be revised to accommodate interoperability with GMDSS. In particular, Chapter VII of the Radio Regulations should be revised. This interoperability is required to maintain Safety-of-Life at sea until the maritime community has fully transitioned to the GMDSS standard. In accordance with IMO recommendations, GMDSS ships continue to keep continuous guard on VHF channel 16 (156.8 MHz) with a view to maintaining communications between SOLAS and Non-SOLAS ships. The United States maintains that all vessels are encouraged to make use of the GMDSS as soon as possible. The IMO has authorized the discontinuance of a 2182 KHz guard for SOLAS vessels. The United States,

in recognition of its continuing domestic requirements regarding non SOLAS vessels outside of VHF range, will maintain a 2182 kHz guard for the foreseeable future.

With regard to the use of new technologies for the maritime mobile service in the band 156-174 MHz and the consequential revision of Appendix **18** to reflect new technologies, the United States supports and is implementing port and coastal systems in accordance with Recommendation ITU-R M.1371-1 for Automatic Identification System (AIS). The further introduction of digital systems into this band should be based on adopting suitably modified land mobile technology into a worldwide interoperable standard. Appendix **18** should also be modified to reflect the current diminished demand for public correspondence coast stations. (May 27, 2004)

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DRAFT PRELIMINARY VIEWS ON WRC-07

Agenda Item 1.15: to consider a secondary allocation to the amateur service in the frequency band 135.7-137.8 kHz;

ISSUE: Determine the impact of this proposed secondary allocation on the fixed and mobile primary services. Low Frequency (LF) propagation must be considered carefully due to potential worldwide propagation characteristics. Amateur emissions from this possible secondary allocation must be assessed for compatibility of services to the fixed and maritime mobile services.

BACKGROUND: Amateurs want to continue to perform experimental communications in the 135.7-137.8 kHz band segment. This spectrum is currently allocated to the fixed and maritime mobile services internationally and domestically. One Region 1 administration currently allows amateurs to operate in this frequency range limiting EIRP to 1 watt. Also, many other administrations have permitted experimental operation on a case-by-case basis.

U.S. VIEW: The United States could support a secondary allocation to the amateur service in the band 135.7-137.8 MHz depending on the results of ITU-R studies. ITU-R studies should include an assessment of the impact of an amateur secondary allocation to currently allocated services and a determination of appropriate protection criteria for the fixed and mobile maritime services. (May 27, 2004)

Radio Conference Subcommittee (RCS)

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DRAFT PRELIMINARY VIEWS ON WRC-07

Agenda Item 1.16: to consider the regulatory and operational provisions for Maritime Mobile Service Identities (MMSIs) for equipment other than shipborne mobile equipment, taking into account **Resolutions 344 (Rev.WRC-03)** and **353 (WRC-03)**;

ISSUE: The expansion of MMSIs is proposed for effective maritime Search and Rescue (SAR) operations and enhancements of the maritime navigation systems. SAR aircraft using Digital Selective Calling (DSC) require assignment of MMSIs to enable effective communications with ships during emergency communications. Also, the assignment of MMSIs to aids-to-navigation will increase maritime navigational safety. The MMSIs for equipment other than shipborne mobile equipment must be unique to prevent confusion between vessels and distinguish aircraft engaged in search and rescue operations. ITU-R M.585 governs the MMSI format.

BACKGROUND: During WRC-03, MMSIs for other than shipborne equipment received considerable objections from some administrations. The United States first presented the issue of MMSIs for aeronautical equipment at the ITU during the Conference Preparatory Meeting (CPM-2), which were subsequently discussed and endorsed during a meeting of the International Maritime Organization (IMO). The main concern expressed by some administrations was the belief that changing the Radio Regulations during WRC-03 was premature. Administrations believed that ITU-R studies are required to ensure that there are no incompatibility issues regarding the use of MMSIs with the existing GMDSS. Administrations were also concerned that allowing DSC equipment on aircraft might degrade the effectiveness of the GMDSS. During WRC-03 several administrations expressed a need to assign MMSIs to Aids to Navigation as outlined in Resolution 353 (WRC-03).

U.S. VIEW: Recommendation ITU-R M.585 should be reviewed and modified prior to WRC-07 to take into account the potential exhaustion of maritime identification digits (MIDs) and MMSIs, and compatibility with current uses of MMSIs. This review may lead to recommendations for changes to the Radio Regulations. RR Article **19** should be modified to allow for assignment of MMSIs to aeronautical stations involved in maritime SAR. The United States and other administrations are currently studying, and in some cases implementing, replacement of existing RACON Transponders with AIS Transponders that require the use of MMSI's as an enhancement to maritime safety. The use of AIS Transponders will permit detection and identification of aids-to-navigation at greater ranges. (May 27, 2004)