UNITED STATES OF AMERICA

PRELIMINARY VIEWS ON WRC-11

AGENDA ITEM 1.10: to examine the frequency allocation requirements with regard to operation of safety systems for ships and ports and the related regulatory provisions, in accordance with Resolution 357 (WRC-07)

BACKGROUND:

Satellite Detection of AIS

International Maritime Organization (IMO) Resolution MSC 74(69) required that AIS “improve the safety of navigation by assisting in the efficient navigation of ships, protection of the environment, and operation of Vessel Traffic Services (VTS), by satisfying the following functional requirements: 1) in a ship-to-ship mode for collision avoidance; 2) as a means for littoral States to obtain information about a ship and its cargo; and 3) as a VTS tool, i.e. ship-to-shore (traffic management).” In the frequencies covered by Appendix 18, some administrations have made assignments to other stations in the mobile service. The ITU-R Radio Regulations only recognize the AIS-SART operation as having a safety function on the two AIS frequencies. Topics that may be appropriate for study include:

a) the need for exclusive maritime mobile-satellite service allocations to support additional channels for satellite detection of AIS and the impact of these potential new allocations to existing systems and services; and

b) the appropriate RR designation of the terrestrial AIS 1 and AIS 2 channels, taking into account the AIS ship-to-ship collision avoidance function, AIS use in Vessel Traffic Services (VTS), AIS general use for navigational safety, and the impact on existing systems and services.

ITU-R Working Party 5B is studying Appendix 18 channels 75 and 76 for improved satellite detection of AIS.

Communications for Ship and Cargo Identification

The global maritime community has agreed on special measures to enhance ship and cargo identification and tracking, as well as ship and port security and safety. Some administrations, as well as the International Standards Organization (ISO), are studying the spectrum and standardization requirements for electronic seals and automatic identification tags used on freight containers and supply chain tags located on the freight container contents. These tags will provide a more secure international transportation system.

Provisions for Security Communications in Article 33

Article 33 of the Radio Regulations describes the operational procedures for maritime urgency and safety communications, including the transmission of maritime safety information. The ITU-R is studying the need to modify Article 33 to include security communications and the transmissions of maritime security information.

Safety and Security Communications, including E-navigation
Modernization of shipboard and port safety and security communication systems, including e-navigation, is another important issue to the global maritime community. The IMO COMSAR and NAV subcommittees are reviewing technologies that may require amendments to the Radio Regulations and possibly new spectrum allocations. The ITU-R is studying the development of VHF radio systems and technologies, the need to retain FM voice communications, and the use of 12.5 kHz channel spacing. Other studies include narrow band digital voice and data communication using 6.25 kHz channel spacing, and broadband data communications using two or more 25 kHz adjacent channels.

There is a need to study the data requirements of the 518 kHz NAVTEX and the Inmarsat C SafetyNET to support the need for graphical navigation and meteorological, search and rescue, and security information. There is also a need to study integrated shipboard navigational display systems to support e-navigation.

**ISSUES:**

Resolution 357 (WRC-07) was adopted at WRC-07 for the consideration of additional regulatory provisions and spectrum allocations for use by enhanced maritime safety systems for ships and ports. The ITU-R is studying satellite detection of Automatic Identification System (AIS) and communications to support the identification and security of cargo containers entering and leaving international ports and ships (noting WRC-11 AI 1.22). ITU-R studies also include provisions for security communications in Article 33, and safety and security communications, including e-navigation. The ITU-R will conduct studies, as a matter of urgency, to determine the spectrum requirements and potential frequency bands suitable for these systems. These studies should include the applicability of spectrum efficient technologies, as well as sharing and compatibility studies with services already having allocations in potential spectrum for ship safety and port security systems.

**PRELIMINARY VIEWS:**

**U.S. VIEW:** If studies identified in Resolution 357 (WRC-07) determine the need for additional allocations to the maritime service and existing services can be protected and not unduly constrained, the United States supports the allocation of spectrum required to support the operation of safety systems for ships and ports.