

United States of America

PROPOSAL FOR THE WORK OF THE CONFERENCE

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;

Background Information: Resolution **342**, titled “*New Technologies to provide improved efficiency in the use of the band 156-174 MHz in the maritime mobile service*”, considers the need for new maritime technologies which use the bands described by Appendix **18** of the Radio Regulations. *Considering k* of this Resolution in particular addresses the new **Automatic Identification System (AIS)** developed by ITU-R and the need to provide full worldwide interoperability of equipment on ships.

AIS is an international standard for ship-to-ship, ship-to-shore and shore-to-ship communication of information, including vessel position, speed, course, destination and other data defined by ITU-R Rec. M.1371-1. AIS transmits on 161.975 MHz and 162.025 MHz, as specified by Appendix **18** of the Radio Regulations and by Rec. ITU-R M.1371-1. AIS was originally designed to enhance navigation safety, but its potential as a prime contributor to security quickly became apparent. AIS provides an effective means to monitor the total global marine environment that could affect the security, safety, economy, or environment of an Administration.

On December 6, 2000, the International Maritime Organization (IMO) amended Chapter V of the Safety of Life at Sea (SOLAS) Convention to include an implementation schedule for shipboard AIS carriage requirements. In 2002, in response to the needs of Administrations to improve their security, the IMO accelerated the AIS carriage requirements schedule from a phased approach ending in 2008, to require all vessels over 300 gross tons on international voyages to carry AIS equipment by 31 December 2004.

In order to locate and identify vessels for security purposes beyond VHF range of shore, the U.S. plans to install AIS receivers on aircraft and on low earth orbit mobile satellite platforms. Norway is performing similar evaluations using satellite detection of AIS, as demonstrated to the International Maritime Organization’s Communications and Search & Rescue Subcommittee meeting of February 2005. Satellite use is not currently allocated in Article **5**.

Proposal:

ARTICLE 5

Frequency allocations

Section IV – Table of Frequency Allocations

USA/ / 1 MOD

Allocation to services		
Region 1	Region 2	Region 3
156.8375-174 FIXED MOBILE except aeronautical mobile MOD 5.226 ADD 5.226X 5.229	156.8375-174 FIXED MOBILE MOD 5.226 ADD 5.226X 5.230 5.231 5.232	

Reasons: The specific footnote is modified below.

USA/ / 2 MOD

5.226 The frequency 156.8 MHz is the international distress, safety and calling frequency for the maritime mobile VHF radiotelephone service. The conditions for the use of this frequency are contained in Article **31** and Appendix **13**.

In the bands 156-156.7625 MHz, 156.8375-157.45 MHz, 160.6-160.975 MHz and 161.475-162.05 MHz, each administration shall give priority to the maritime mobile service on only such frequencies as are assigned to stations of the maritime mobile service by the administration (see Articles **31** and **52**, and Appendix **13** and **18**).

Any use of frequencies in these bands by stations of other services to which they are allocated should be avoided in areas where such use might cause harmful interference to the maritime mobile services.

However, the frequency 156.8 MHz and the frequency bands in which priority is given to the maritime mobile service may be used for radiocommunications on inland waterways subject to agreement between interested and affected administrations and taking into account current frequency usage and existing agreements.

Reasons: The addition of a reference Appendix **18** to the second paragraph is needed.

USA/ / 3 ADD

5.226X In the maritime mobile service the frequency 162.025 (AIS 2) MHz shall be used exclusively for automatic identification systems (AIS) (see Appendix 18). The band 162.0125-162.0375 MHz is also allocated on a primary basis to the maritime mobile-satellite service (Earth-to-space) for reception by satellites of emissions from the AIS transmitting at 162.025 MHz (AIS 2).

Any use of frequencies in these bands by stations of other services to which they are allocated should be avoided in areas where such use might cause harmful interference to the maritime mobile and maritime mobile-satellite service at 162.025 (AIS 2) MHz.

Reasons: AIS is a navigation safety and security system, with frequencies specified in Appendix 18. Low earth orbit mobile satellites are used to detect AIS transmissions from ships of vessel identification and location, for purposes of security, safety and environmental protection.

USA/ / 4 MOD

APPENDIX 18 (WRC-200007)

Table of transmitting frequencies in the VHF maritime mobile band

Channel designator	Notes	Transmitting frequencies (MHz)		Inter-ship	Port operations and ship movement		Public correspondence
		Ship stations	Coast stations		Single frequency	Two frequency	
AIS 1	MOD 1)	161.975	161.975				
AIS 2	MOD 1), ADD o bis)	162.025	162.025				

Reasons: The specific note “o bis)”, a derivation of note 1), and Mod 1), are described below.

Notes referring to the Table

Specific notes

USA/ / 5 MOD

MOD 1) These channels (AIS 1 and AIS 2) ~~will be~~ used for a terrestrial automatic ship identification and surveillance system in accordance with Recommendation ITU-R M.1371 which is capable of providing worldwide operation on high seas, unless other frequencies are designated on a regional basis for this purpose.

Reasons: ITU-R adopted Rec. M.1371 after this note was adopted at WRC-97.

USA/ / 6 ADD

ADD *o bis*) Additionally, AIS 2 may be used by the maritime mobile-satellite service (Earth to space) for the reception of AIS transmissions from ships.

Reasons: Low earth orbit mobile satellites can be used to detect AIS transmissions from ships of ship identification and location, for purposes of security, safety and environmental protection.
