

**UNITED STATES OF AMERICA**  
**DRAFT PROPOSALS FOR THE WORK OF THE CONFERENCE**

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

**Background Information:** The broadcast of safety and security information, to and from ships is vital for maritime safety. Article **33** of the Radio Regulations describes the operational procedures for maritime urgency and safety communications, including the transmission of maritime safety information (MSI).

Radio Regulation No. **5.82A** limits the use of maritime mobile service (MMS) systems in the band 495 - 505 kHz to radio telegraphy. No. **5.82B** requires administrations making frequency assignments to services other than the maritime mobile service in the 495-505 kHz band shall not cause harmful interference to the MMS in this band and to other services in adjacent bands. These provisions already give priority to the MMS over other mobile service applications in the band 495 – 505 kHz. Due to further requirements for spectrum to accommodate existing and new maritime systems, it is appropriate to make an exclusive primary allocation to the maritime mobile service in 495 – 505 kHz.

Maritime communication systems in the bands 415 – 526.5 kHz include transmissions in accordance with Recommendations ITU-R M.540 (Operational and technical characteristics for an automated direct-printing telegraph system for promulgation of navigational and meteorological warnings and urgent information to ships), ITU-R M.1677 (International Morse code), and ITU-R M.1798 (Characteristics of HF radio equipment for the exchange of digital data and electronic mail in the maritime mobile service). These systems currently operate in support of maritime applications other than those used for radiotelegraphy. Based on current worldwide operational experience, other maritime applications are compatible with radiotelegraphy.

It is also vital for the maritime community to have a globally harmonized primary allocation to the maritime mobile service in 415 – 526.5 kHz for MMSI, security related broadcasts, and data communication systems.

**Proposal:**

ARTICLE 5

**Section IV – Table of Frequency Allocations**  
(See No. **2.1**)

**MOD** USA/AI 1.10/1

**495-1 800 kHz**

<b>Allocation to services</b>		
<b>Region 1</b>	<b>Region 2</b>	<b>Region 3</b>
<b>495-505</b>	<b>MARITIME</b> MOBILE <b>SUP</b> 5.82A <b>SUP</b> 5.82B	
<b>505-526.5</b> MARITIME MOBILE 5.79 5.79A 5.84 AERONAUTICAL RADIONAVIGATION	<b>505-510</b> MARITIME MOBILE 5.79	<b>505-526.5</b> MARITIME MOBILE 5.79 5.79A 5.84 AERONAUTICAL RADIONAVIGATION Aeronautical mobile Land mobile
	<b>510-525</b> <b>MARITIME</b> MOBILE 5.79A 5.84 AERONAUTICAL RADIONAVIGATION	

**Reason:** Maritime mobile service allocations and global harmonization of transmissions for MSI, security related broadcasts, and data communication systems.

**SUP** USA/AI 1.10/2

5.82A

**Reason:** This is a consequential change to allocating the entire 495-505 MHz band to the maritime mobile service on a primary basis.

**SUP** USA/AI 1.10/3

5.82B

**Reason:** This is a consequential change to allocating the entire 495-505 MHz band to the maritime mobile service on a primary basis.

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**Background Information:** International Maritime Organization (IMO) Resolution MSC 74(69) required that Automatic Identification System (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)". IMO NAV 55 meeting in July 2009 decided to add a distress indicator in the navigation status field of AIS Class A position report messages. Although these IMO functional requirements clearly specify safety and surveillance functions, the Radio Regulations only recognize the Automatic Identification System-Search and Rescue Team (AIS-SART) operation as having a safety function on the two AIS frequencies (161.975 MHz and 162.025 MHz). Operation of AIS on search and rescue aircraft is consistent with ITU-R Recommendation M.1371-3 and Appendix **18** of the Radio Regulations.

Modifying the Radio Regulations to reflect the AIS frequencies is critical to search and rescue, safety of navigation, and the safe movement and tracking of vessels, which are vital to the future of maritime safety. This proposal specifically addresses the need to recognize the safety aspect of AIS use by search and rescue aircraft authorized by Appendix **18** of the Radio Regulations and ITU-R Recommendation M.1371-3, and recognizes the decision by the International Maritime Organization to include a distress indicator in the navigation status field of AIS Class A position report messages. The ITU-R may need to conduct a review of No. **5.229**, as it applies to the sub-band 162 - 162.05 MHz.

**Proposal:**

ARTICLE 5  
**Section IV – Table of Frequency Allocations**  
(See No. **2.1**)

**MOD** USA/AI 1.10/1

148-223 MHz

Allocation to services		
Region 1	Region 2	Region 3
<b>156.8375-<del>161.9625-174</del></b> FIXED MOBILE except aeronautical mobile <u>MOD 5.226</u> <del>5.227A-5.229</del>	<b>156.8375-<del>161.9625-174</del></b> FIXED MOBILE <u>MOD 5.226</u> <del>5.227A</del> <del>5.230</del> <del>5.231</del> <del>5.232</del>	

**Reason:** Proposed changes reflect the allocation and use of AIS frequencies to the required services in Article 5 to support maritime safety requirements. Footnotes that do not apply to the revised frequency band are also removed, but are not proposed for suppression (No. **5.227A**).

**ADD** USA/AI 1.10/2

Region 1	Region 2	Region 3
<u>161.9625-161.9875</u>  <u>MARITIME MOBILE</u> <u>AERONAUTICAL MOBILE (OR)</u> <u>ADD 5.A01</u> <u>MOBILE-SATELLITE (Earth-to-space)</u> <u>ADD 5.A02</u>	<u>161.9625-161.9875</u>  <u>MARITIME MOBILE</u> <u>AERONAUTICAL MOBILE (OR) ADD 5.A01</u> <u>MOBILE-SATELLITE (Earth-to-space)</u>  <u>ADD 5.A02</u>	

**Reason:** Proposed changes reflect the allocation and use of AIS frequencies to the required services in Article 5 to support maritime safety requirements. The proposal that AM(OR)S has primary status and the upgrade to primary status of MSS (Earth-to-space) is necessary due to a pending IMO decision to include a distress alert notification within the AIS position message report. Footnotes that do not apply to the revised frequency band are also removed, but are not proposed for suppression (No. **5.227A**).

**ADD** USA/AI 1.10/3

Region 1	Region 2	Region 3
<u>161.9875-162.0125</u> <u>FIXED</u> <u>MOBILE except aeronautical mobile</u> <u>ADD 5.226</u>	<u>161.9875-162.0125</u> <u>FIXED</u> <u>MOBILE except aeronautical mobile—</u>  <u>ADD 5.226</u>	

**Reason:** Proposed changes reflect the allocation and use of AIS frequencies to the required services in Article 5 to support maritime safety requirements. Footnotes that do not apply to the revised frequency band are also removed, but are not proposed for suppression (No. **5.227A**).

**ADD** USA/AI 1.10/4

Region 1	Region 2	Region 3
<a href="#">162.0125-162.0375</a>  <a href="#">MARITIME MOBILE</a> <a href="#">AERONAUTICAL MOBILE (OR)</a> <a href="#">ADD 5.A01</a> <a href="#">MOBILE-SATELLITE (Earth-to-space)</a> <a href="#">ADD 5.A02</a>	<a href="#">162.0125-162.0375</a>  <a href="#">MARITIME MOBILE</a> <a href="#">AERONAUTICAL MOBILE (OR) ADD 5.A01</a> <a href="#">MOBILE-SATELLITE (Earth-to-space)</a>  <a href="#">ADD 5.A02</a>	

**Reason:** Proposed changes reflect the allocation and use of AIS frequencies to the required services in Article 5 to support maritime safety requirements. The proposal that AM(OR)S be primary status and the upgrade to primary status of MSS (Earth-to-space) is necessary due to a pending IMO decision to include a distress alert notification within the AIS position message report.

**MOD** USA/AI 1.10/5

<a href="#">162.0375-174</a> FIXED MOBILE except aeronautical mobile <a href="#">MOD 5.226</a> <del><a href="#">5.227A</a></del> <del>5.229</del>	<a href="#">162.0375-174</a> FIXED MOBILE  <a href="#">MOD 5.226</a> <del><a href="#">5.227A</a></del> <del>5.230</del> 5.231 5.232
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**Reason:** Proposed changes reflect the allocation and use of AIS frequencies to the required services in Article 5 to support maritime safety requirements.

**ADD** USA/AI 1.10/6

**5.A01** The use of the band 161.9625-161.9875 MHz and 162.0125-162.0375 MHz by the aeronautical mobile (OR) service is restricted to automatic identification system (AIS) emissions from Search and Rescue aircraft operating in accordance with Appendix 18.

**Reason:** The proposed footnote is necessary to restrict the use of the aeronautical mobile (OR) service to AIS emissions in support of search and rescue missions by aircraft in accordance with Appendix 18.

**ADD** USA/AI 1.10/7

**5.A02** The use of the bands 161.9625-161.9875 MHz and 162.0125-162.0375 MHz by the maritime mobile service and mobile-satellite (Earth-to-space) service is restricted to automatic identification system (AIS) emissions operating in accordance with Appendix 18.

**Reason:** The proposed footnote is necessary to restrict the use of the mobile-satellite (Earth-to-space) service to AIS emissions operating in accordance with Appendix 18.

**SUP** USA/AI 1.10/8

**5.227A**

**Reason:** This footnote is no longer necessary after allocation of the AIS channels to the necessary services in Article **5**.

**MOD** USA/AI 1.10/9

**5.226** The frequency 156.525 MHz is the international distress, safety and calling frequency for the maritime mobile VHF radiotelephone service using digital selective calling (DSC). The conditions for the use of this frequency and the band 156.4875-156.5625 MHz are contained in Articles **31** and **52**, and in Appendix **18**.

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 and the band 156.7625-156.8375 MHz are contained in Article **31** and Appendix **18**.

In the bands 156-156.4875 MHz, 156.5625-156.7625 MHz, 156.8375-157.45 MHz, 160.6-160.975 MHz, ~~and 161.475-162.05~~161.9625 MHz, 161.9875-162.0125 MHz, and 162.0375-162.05 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 **18**).