1.8 to consider possible regulatory actions to support Global Maritime Distress Safety Systems (GMDSS) modernization and to support the introduction of additional satellite systems into the GMDSS, in accordance with Resolution 359 (Rev.WRC-15);

**Introduction**

Resolution 359, resolves to conduct studies, taking into consideration the activities of IMO, as well as information and requirements provided by the International Maritime Organization (IMO), in order to determine the regulatory provisions to support GMDSS modernization. The GMDSS modernization being considered under this agenda item focus on MF NAVDAT and HF NAVDAT.

The GMDSS was adopted as part of the 1988 amendments to the International Convention for the Safety of Life at Sea, 1974 (SOLAS). It was fully implemented in 1999. It has served the mariner and the maritime industry well since its inception, but some of the GMDSS technologies used have not reached their full potential, and some GMDSS functions could be performed by more modern technologies.

IMO has adopted a modernization plan for the GMDSS containing a high-level review and a detailed review. The detailed review and the plan show that the use of some existing analog services is declining while other new digital technologies are being introduced such as VHF data exchange system (VDES) and the NAVDAT system. The terrestrial component of VDES was previously addressed by WRC-15 and WRC-19 will consider the satellite component of VDES separately under agenda item 1.9.2.

Navigational text (NAVTEX) was incorporated into the regulations for the GMDSS for disseminating maritime safety information, which was introduced in a transitional phase from 1992 to 1999, after which it became mandatory under Chapter V of the SOLAS regulations.

NAVDAT is regarded as an improvement of the current NAVTEX and could be among the elements included in the next generation GMDSS.

WRC-12 addressed the allocation of the 495-505 kHz frequency band for the maritime mobile service. This band is regarded as the most suitable for MF NAVDAT application. However, regulatory provisions are still needed for both MF and HF NAVDAT applications.
NAVDAT may operate both in MF and HF. Since the 500 kHz frequency band provides good coverage as shown in Recommendation ITU-R P.368-9, the frequency band 415-526.5 kHz of the maritime mobile service would be used for MF NAVDAT as described in Recommendation ITU-R M.2010.

Some administrations are of the view that MF NAVDAT may not be required due to the future implementation of VDES which will provide sufficient means to communicate the required navigational information in place of MF NAVDAT. However, the implementation of HF NAVDAT would complement data information in the Arctic region which would allow the distribution of detailed charts and maps for MSI in these areas.

Taking into account the studies performed during this study period under the resolves 1 of Resolution 359 (Rev.WRC-15) and noting the information and requirements provided by IMO, in order to determine the regulatory provisions to support GMDSS modernization, this proposal contains some regulatory provisions to facilitate the introduction of NAVDAT and progress the modernization of the GMDSS which will be further addressed at WRC-23 under Resolution 361 (Rev.WRC-15).
ARTICLE 5

Frequency allocations

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

MOD IAP/6229A8A1/1

5.79 The use of the In the maritime mobile service, the frequency bands 415-495 kHz and 505-526.5 kHz (505-510 kHz in Region 2) by the maritime mobile service is are limited to be used for radiotelegraphy and NAVDAT system. Such use of NAVDAT system should be in accordance with the most recent version of Recommendation ITU-R M.2010, subject to special arrangements between interested and affected administrations. (WRC-19)

Reasons: These two bands are used currently by the NAVTEX system. They could be used in the future by the NAVDAT system and will need time-slot allocation between interested administrations.

MOD IAP/6229A8A1/2

495-1 800 kHz

<table>
<thead>
<tr>
<th>Allocation to services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Region 1</td>
</tr>
<tr>
<td>495-505</td>
</tr>
</tbody>
</table>

Reasons: This new footnote secure the usage of this frequency bands solely for the NAVDAT system.

ADD IAP/6229A8A1/3

5.A18 The band 495-505 kHz is reserved exclusively for the international NAVDAT system as described in the most recent version of Recommendation ITU-R M.2010. (WRC-19)

Reasons: This new footnote secure the usage of this frequency bands solely for the NAVDAT system.

MOD IAP/6229A8A1/4

APPENDIX 17 (REV.WRC-195)

Frequencies and channelling arrangements in the high-frequency bands for the maritime mobile service

(See Article 52)

This Appendix is separated into two annexes:

Annex 1 contains the existing frequency and channelling arrangements in the high-frequency bands for the maritime mobile service, in force until 31 December 2016.
Annex 2 contains the future frequency and channelling arrangements in the high-frequency bands for the maritime mobile service, as revised by WRC-12, which enter into force on 1 January 2017.  

**Reasons:** These notes have been overcome by events are no longer needed.

**SUP**  IAP/6229A8A1/5

ANNEX 1  (WRC-15)

**Frequencies and channelling arrangements in the high-frequency bands for the maritime mobile service, in force until 31 December 2016**  (WRC-12)

**Reasons:** Annex 1 of Appendix 17 was only in force unit 31 December 2016, therefore it is no longer needed.

**MOD**  IAP/6229A8A1/6

ANNEX 2  (WRC-15)

**Frequency and channelling arrangements in the high-frequency bands for the maritime mobile service, which enter into force on 1 January 2017**  (WRC-192)

**Reasons:** Annex 2 title header is no longer needed since Annex 1 has been suppressed.

**MOD**  IAP/6229A8A1/7

**PART A – Table of subdivided bands**  (WRC-12)

Table of frequencies (kHz) to be used in the band between 4 000 kHz and 27 500 kHz allocated exclusively to the maritime mobile service (end)

<table>
<thead>
<tr>
<th>Band (MHz)</th>
<th>4</th>
<th>6</th>
<th>8</th>
<th>12</th>
<th>16</th>
<th>18/19</th>
<th>22</th>
<th>25/26</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limits (kHz)</td>
<td>4 221</td>
<td>6 332.5</td>
<td>8 438</td>
<td>12 658.5</td>
<td>16 904.5</td>
<td>19 705</td>
<td>22 445.5</td>
<td>26 122.5</td>
</tr>
<tr>
<td>Frequencies assignable for wide-band systems, facsimile, special and data transmission systems and direct-printing telegraphy systems</td>
<td>m) p) s) pji</td>
<td>m) p) s) pji</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limits (kHz)</td>
<td>4 351</td>
<td>6 501</td>
<td>8 707</td>
<td>13 077</td>
<td>17 242</td>
<td>19 755</td>
<td>22 696</td>
<td>26 145</td>
</tr>
<tr>
<td>...</td>
<td>...</td>
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</tr>
</tbody>
</table>

*pp) These sub-bands are also designated for the NAVDAT system as described in the most recent version of Recommendation ITU-R M.2058.*
Reasons:

SUP IAP/6229A8A1/8

RESOLUTION 359 (REV.WRC-15)

Consideration of regulatory provisions for updating and modernization of the Global Maritime Distress and Safety System

The World Radiocommunication Conference (Geneva, 2015),

Reasons: This Resolution is proposed to be suppressed considering the finalization of the studies on WRC-19 Agenda item 1.8 covered by the Resolves 1 (modernization of the GMDSS). Any further action regarding the modernization of the GMDSS will be covered by the Resolution 361 (WRC-15) for WRC-23.