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Sent: Thursday, January 18, 2024 12:52 PM
To: Bill Cairns <bcairns@rtcm.org>
Subject: Coast Guard notes from the TF

Notes for agenda items from CG-672:

Coast Guard report item I:

International Telecommunication Union (ITU) World Radiocommunication Conference 2023 (WRC–23) and Conference Preparatory Meeting 2027 was held in Dubai, United Arab Emirates from 20 November to 19 December 2023.

1. Agenda Item 1.11 is the regulatory actions to support the modernization of Global Maritime Distress and Safety System (GMDSS) and implementation of e-navigation, in accordance with ITU Resolution 361 (WRC–19) and has three distinct and independent Issues, A, B, and C.

AI 1.11 Issue A is the regulatory actions:

- a. The removal of narrow band direct printing (NBDP), in accordance with the modernization Safety of Life at Sea (SOLAS) treaty.
- b. Implementation of the new Automatic Connection System (ACS), international consensus to use the vacated NBDP frequency bands and allocate to ACS.
- c. Introduction of the Navigational Data frequencies for the Medium Frequency and High Frequency bands (MF/HF), based on the modernization of SOLAS treaty.
- d. The 1645.5 – 1646.5 MHz frequency band is no longer used by the satellite Emergency Positioning Indication Radio Beacons.

Issues A and B were adjudicated together and approved to modify the ITU RR supporting the modernization of GMDSS. The primary sub element of concern is the frequency band 1645.5 – 1646.5 MHz, ITU RR Appendix 15 was modified to protect this frequency band and limited to GMDSS distress, urgency, and safety services.

e. Operational Impact – AI 1.11 Issue A: For the past 10 years the frequency band 1645.5 – 1646.5 MHz lacked attention until WRC–19. Non-GMDSS satellite services providers have operational interests for this frequency band.

(1) Even though this frequency band has ITU RR Appendix 15 protection it is still vulnerable. IMO will need to determine how to employ this frequency band for GMDSS. If IMO has no operational plan for this frequency band, non-GMDSS satellite service providers will request for a spectrum needs study.

(2) CPM–27 approved WRC–27 AI 1.12 authorizing Space Norway to conduct spectrum study of this frequency band.

2. AI 1.11 Issue C is the regulatory provisions, based on the results of ITU-R studies, to support the introduction of an additional satellite system into the GMDSS. This item was contentious and required several weeks of meetings to achieve a workable way forward.

a. In accordance with ITU RR Appendix 15, GMDSS operational frequency band is 1610 – 1626.5 MHz, China has provisional frequency bands 1614.4225 – 1618.725 MHz or 1616.3 – 1620.38 MHz, and 2483.59 – 2499.91 MHz for BeiDou satellite system which overlap into Iridium’s authorized frequency bands 1616 – 1626.5 MHz and Globalstar authorized frequency bands 1610 – 1617.775 MHz. China must comply with the provisional agreement to complete the ITU satellite coordination and interference mitigation requirements with Iridium and Globalstar before WRC – 27.

b. The agreement contains the provisional frequency bands in Appendix 15 for BeiDou to provide GMDSS services until the satellite coordination and interferences mitigations are completed. Further, the agreement contains ITU RR “Article 59 – Entry into force and provisional application of the RR” and “Resolution 99 – Provisional application of certain provisions of the RR as revised by WRC–23 Resolutions and Recommendations.” This will establish the requirements of the Resolution in this provisional option, if requirements are completed within the Resolution, then the provisional recordings will be permanent, if the requirements are not completed before WRC–27, Article 59 and Resolution 99 will be implemented against China.

c. Operational Impact – AI 1.11 Issue C: The provisional agreements have China’s attention and shall complete the ITU satellite coordination and interference mitigation impacts to Globalstar and Iridium.

(1) Globalstar and Iridium will continue to report harmful interference caused by China’s BeiDou satellite system.

3. FAI 2.10, considerations to improve the utilization of the MF/HF and Very High Frequency (VHF) maritime frequencies in ITU RR Appendices 17 and 18.

a. Coast Guard chaired three productive drafting group (DG) meetings on recommendations to the ITU Council on FAI 2.10 to improve the ITU RR on the utilization of Appendix 17 for the MF/HF, and Appendix 18 for VHF maritime mobile frequency bands.

b. The DG Inter-regional nations agreed to implement these two Resolutions for WRC–31 that will support IMO courses of action for implementation by WRC-31.

c. Operational Impacts – AI 2.7 and AI 2.8: Existing ITU RR Appendix 18 is unable to support current or future frequencies for the maritime mobile service (MMS), nor will it support any transition from analogy systems to digital systems for the MMS.

(1) IMO has not developed a course of action or implementation plan/date for this transition.

4. Agenda Item 1.1 on the possible measure for protection of aeronautical mobile service (AMS) and maritime mobile service (MMS) located in international airspace and waters from other stations located within national territories, and to review the power flux-density (pfd) criteria in ITU footnote 5.441B in accordance with Resolution 223 (Rev. WRC–19).

a. WRC decided to keep the regulatory and technical conditions in ITU footnote 5.441B unchanged and it was decided not to continue further studies. Operational Impact – AI 1.1: IMT countries will not be able to implement IMT and must comply with ITU footnote 5.441B.

Coast Guard Report Item a:

5 Developments in GMDSS services, including guidelines on maritime safety information (MSI) (7.2)

6 Response to matters related to the ITU-R Study Groups and ITU World Radiocommunication Conference (2.1)

1. Interference of AIS by VHF Voice Transmissions – shipboard
2. RADAR SART

7 Development of global maritime SAR services, including harmonization of maritime and aeronautical procedures and amendments to the IAMSAR Manual (1.34)

1. IAMSAR Manual amendment
2. SAR Capability Assistance
3. IAMSAR Manual Volume II 2028 addition – guidance to ICAO/IMO JWG
4. Iridium GMDSS SAR implementation
5. AMVER annual report

8 Development of performance standards for a digital navigational data system (NAVDAT) (2.27)

9 Development of amendments to SOLAS chapters IV and V and performance standards and guidelines to introduce VHF Data Exchange System (VDES) (2.28)

10 Review of the appropriateness and effectiveness of SOLAS regulation IV/5 (Provision of radiocommunication services) (1.35)

11 Revision of the Criteria for the provision of mobile satellite communication services in the Global Maritime Distress and Safety System (GMDSS) (resolution A.1001(25))(1.3)

1. Comment paper once the report comes out to capture our and Iridium's issues with the recommended changes.

Bonus statement on the Great Lakes Agreement:

Great Lakes Agreement – The US/Canada is drafting a paper to MSC-108 to remove all references to the Great Lakes Agreement. This will take away any special requirements to operate on the Great Lakes. This should also make all vessels that operate in US waters to have the same rules/requirements.