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|  | ASIA-PACIFIC TELECOMMUNITY | Document No: |
| **The 6th Meeting of the APT Conference Preparatory****Group for WRC-23 (APG23-6)** | **APG23-6/OUT-20** |
| 14 – 19 August 2023, Brisbane, Australia | 19 August 2023 |

Working Party 2

**APT VIEW and Preliminary APT Common Proposal**

**on WRC-23 agenda item 1.11 [[1]](#footnote-1)**

**Agenda Item 1.11:**

*to consider possible regulatory actions to support the modernization of the Global Maritime Distress and Safety System and the implementation of e‑navigation, in accordance with Resolution* ***361 (Rev.WRC‑19)***

**1. Background**

**1.1 Introduction**

 Resolution **361 (Rev. WRC-19)** through the section *resolves to invite the 2023 World Radiocommunication Conference* identifies three topics which are studied and solved independently as follows:

* Issue A (*resolves* *1*): GMDSS Modernization
* Issue B (*resolves* *2*): E-navigation
* Issue C (*resolves 3*): Introduction of additional satellite systems into the GMDSS

**1.2 ITU-R ongoing activities**

**1.2.1 ITU-R WP 5B**

* ITU-R WP 5B has completed its work on developing the draft CPM Report for *resolves* *1* and *resolves* *2*.
* For *resolves* *1*, **one method** **(Method A) with some alternatives** proposes the followings:
1. The deletion of the NBDP for distress and safety communications from GMDSS in RR Appendices **15** and **17** for MF and HF in all bands;
2. The introduction of a new ACS which will proposed to be implemented on the frequencies which had previously been used by NBDP for GMDSS in all MF and HF bands in RR Article **5** and Appendix **17** by footnote;
3. The introduction of the NAVDAT frequencies in MF and HF in RR Appendix **15** and modification of the relevant provisions in RR Articles **5**, **32**, **33** and **52**;
4. To implement AIS-SART as locating equipment for which frequencies are protected by reference in RR Appendix **15**;
5. There are some alternatives proposed regarding the frequency band 1 645.5-1 646.5 MHz which is no longer used by the satellite EPIRBs:
	1. Two alternatives (**Alternatives A1 and A2**) propose to modify RR No. **5.375** and Table 15-2 of RR Appendix **15** such that the frequency band 1 645.5-1 646.5 MHz is no longer limited to be used exclusively by satellite EPIRBs, and would be available for other use; and
	2. Another alternative (**Alternative** **A3**) proposes no change to RR.

Moreover, one alternative (**Alternative B1**) proposes to modify RR No. **19.11**, and one alternative(**Alternative** **B2**)proposes no change to RR No. **19.11**; and

1. The suppression of *resolves 1* to Resolution **361 (Rev.WRC‑19)**
* For *resolves* *2,* **unique method (Method B)** proposes no change to RR Article **5** and suppression of *resolves 2* to Resolution **361 (Rev.WRC-19)**
	+ 1. **ITU-R WP 4C**
* ITU-R WP 4C has completed its work on developing the draft CPM Report for resolves 3, which has four methods as follows:
1. Method C1: No change to the RR except suppression of *resolves*3, Resolution **361 (Rev.WRC‑19)**;
2. **Method C2**: Identify spectrum for GMDSS if the candidate GSO MSS system/network has been completely coordinated in accordance with Articles **9** and **11** of the Radio Regulations and recorded in the MIFR in accordance with RR No. **11.37**. Coordination is an outstanding implementation issue that needs to be effected before the commencement of GMDSS services. There are two options associated with the method in relation to the applicability of RR No. **4.10** to GMDSS.
3. **Method C3**: Support the requirement of safety of life aspects by the GMDSS and implement applicable provisions of the Radio Regulations, including applicability of RR No. **4.10** to the specific frequency bands used by the additional MSS system for GMDSS. This method proposes an associated new Resolution.
4. **Method C4**: Identify spectrum for GMDSS if the candidate GSO MSS system/network has been completely coordinated in accordance with Articles **9** and **11** of the Radio Regulations and recorded in the MIFR in accordance with RR No. **11.37**. Coordination is an outstanding implementation issue that needs to be effected before the commencement of GMDSS services. Apply RR No. **4.10** to the concrete frequency bands used by the new MSS system for GMDSS.
* the working draft document related to WRC-23 agenda item 1.11 developed by WP 4C could not be finalized and attached to the WP 4C Chairman’s Report (Annex 5 to Document 4C/455), as a supporting document for WRC-23 for AI 1.11.

**1.3 List of relevant ITU-R Reports/Recommendations**

Issue A and Issue B:

* Recommendations ITU-R [M.476-5](https://www.itu.int/rec/R-REC-M.476), ITU-R [M.492-6](https://www.itu.int/rec/R-REC-M.492), ITU-R [M.493-15](https://www.itu.int/rec/R-REC-M.493), ITU-R [M.541-10](https://www.itu.int/rec/R-REC-M.541), ITU-R [M.625-4](https://www.itu.int/rec/R-REC-M.625), ITU-R [M.1798-2](https://www.itu.int/rec/R-REC-M.1798), ITU-R [M.2010-2](https://www.itu.int/rec/R-REC-M.2010), ITU-R [M.2058-1](https://www.itu.int/rec/R-REC-M.2058)
* Draft new Report ITU-R M.[ACS]

Issue C:

* Recommendations ITU-R [M.1184-3](https://www.itu.int/rec/R-REC-M.1184), ITU-R [M.1188-1](https://www.itu.int/rec/R-REC-M.1188), ITU-R [RA.769-2](https://www.itu.int/rec/R-REC-RA.769), ITU-R [RA.1513-2](https://www.itu.int/rec/R-REC-RA.1513), ITU-R [RA.1031-3](https://www.itu.int/rec/R-REC-RA.1031)
* Reports ITU-R [M.2369-0](https://www.itu.int/pub/R-REP-M.2369), ITU-R [RA.2131-0](https://www.itu.int/pub/R-REP-RA.2131)

**2. Documents**

* Input Documents: APG23-6/INP-18 (IND), INP-24 (BGD), INP-31 (J), INP-48 (INS), INP-55 (SNG), INP-59 (THA), INP-66 Rev.1 (IRN), INP-81 (AUS), INP-88 (KOR), INP-93(PHL), INP-99 (NZL), INP-104 (CHN), INP-110 (MLA)
* Information Documents: APG23-4/INF-21 (ASMG), APG23-6/INF-25 (ICAO), INF-45 (RCC), INF-46 (CEPT), INF-52 (CITEL), INF-55 (ATU)

**3. Summary of discussions**

**3.1 Summary of APT Members’ views**

**3.1.1 Australia** - **Document APG23-6/INP-81**

**Issue A/resolves 1 – GMDSS modernization**

Australia supports regulatory action to progress modernisation of the Global Maritime Distress and Safety System (GMDSS), taking into consideration the decisions of International Maritime Organization (IMO), by:

* deleting narrow-band direct-printing (NBDP) for distress and safety communications from Appendix **15** and **17**, and implementing an automatic channel selection (ACS) using digital-selective calling (DSC) technology for those frequencies via a footnote in Article **5** of the Radio Regulations,
* implementing AIS-SART (automatic identification system search and rescue transmitter) as locating equipment in Appendix **15** of the Radio Regulations,
* removing satellite emergency position-indicating radio beacons (EPIRBs) in the frequency band 1 645.5 – 1 646.5 MHz (E-s) and leaving the band available for GMDSS by modifying Appendix **15** of the Radio Regulations.

**Issue B/resolves 2 – e-navigation**

Australia supports no change (NOC) for Issue B.

**Issue C/resolves 3 – new satellite systems**

Australia supports no change (NOC) for Issue C unless the candidate system can:

* complete coordination and notification procedures in accordance with the relevant and applicable provisions of Articles **9** and **11** of the Radio Regulations and associated Rules of Procedure, by the commencement of WRC-23, and
* demonstrate its spectrum requirements to provide a GMDSS service.

Australia does not propose a Preliminary APT Common Proposal on this agenda item.

**3.1.2 Bangladesh (People’s Republic of)** - **Document APG23-6/INP-24**

Tosatisfy this agenda item, Bangladesh administration prefers method A for issue A, method B for issue B and method C3 for issue C of the CPM report to WRC-2023.

**3.1.3 China (People’s Republic of)** - **Document APG23-6/INP-104**

**Regarding *Resolves 1*:**

China supports the unique Method A finalized in the CPM report as follows:

* the deletion of the NBDP for distress and safety communications from GMDSS;
* the implementation of an ACS for MF and HF;
* the introduction of MF and HF NAVDAT frequencies into Appendix **15** of the Radio Regulations; and
* the implementation of the AIS-SART as locating equipment as alternative to Radar SART.

For the consideration of the frequency band 1645.5-1646.5 MHz, China supports the removal of the use of satellite EPIRBs from this band. While considering that any modifications to the RR regarding the frequency band 1645.5-1646.5 MHz are premature in lack of sufficient studies, China supports the ***Alternative 3*** in the CPM report, which is no change (NOC).

**Regarding *Resolves* 2:**

China supports the Method B in the CPM report, which is no additional frequency allocation is necessary in RR Article **5** for e-navigation.

**Regarding *Resolves 3*:**

China supports the introduction of additional GSO satellite systems into the GMDSS, provided that effective coordination and notification in accordance with the relevant and applicable provisions of Articles **9** and **11** of the Radio Regulations and associated Rules of Procedure are implemented and the subject assignments are recorded in the MIFR, in order to protect services to which the bands are currently allocated.

China supports,

* The addition of the frequency bands 1 610.18-1 621.35 MHz and 2 483.59-2 499.91 MHz to Table 15-2 of RR Appendix **15**, as well as provisions RR No. **33.50** and RR No. **33.53** of RR Article **33**, in order to support the requirement of safety of life aspects by the GMDSS and implement applicable provisions of RR;
* the modification of RR Nos. **5.364** and **5.368** to apply RR No. **4.10** in the frequency band 1 610.18-1 621.35 MHz to GMDSS stations operating in the MMSS (Earth-to-space) and the modification of RR No. **5.368** to keep the status between GMDSS stations operating in the MMSS and AMS(R)S in the frequency band 1 610.18-1 621.35 MHz.

**3.1.4 India (Republic of)** - **Document APG23-6/INP-18**

**Issue A: Global Maritime Distress and Safety System modernization:**

India supports modernization of GMDSS and supports the unique method which proposes to update the RR Appendices in line with IMO decisions.

For frequency band 1 645.5-1 646.5 MHz (Earth-to-space), India is of the view that change of use from EPIRBs to other applications is out of the scope of this AI and require further studies to ensure proper and efficient use of this frequency band. Hence, India supports Alternative A3 and Alternative B2 proposing NOC for this frequency band.

**Issue B: e-navigation:**

India supports theonly method to satisfy this Agenda Item that no additional allocation is necessary in RR Article **5** for e-navigation. Therefore, it is proposed a No change to RR Article **5**.

**Issue C: Introduction of additional satellite system into the Global Maritime Distress and Safety System**:

Completion of coordination and notification of the new proposed GMDSS system, in accordance with Articles **9** and **11** of the RR, is a prerequisite for making changes to the Radio Regulations to accommodate it. Without this, a GMDSS system cannot claim protection from harmful interference, and may not satisfy the requirements of a safety system. To this effect it is emphasized that assignments recorded under RR No. **11.41** are not suitable for use in a GMDSS system.Therefore, India supports No change to the Radio Regulations.

**3.1.5 Indonesia (Republic of)** - **Document APG23-6/INP-48**

Indonesia is of the view, that modernization of GMDSS such as the introduction of automatic connection system (ACS), the addition of new GMDSS satellite systems, should be affordable and simple to operate, so that non-SOLAS/non-Convention vessels could also benefit from it.

**Issue A (Resolves 1):**

Indonesia supports the revisions to the RR proposed to address:

* + - the deletion of Narrow Band Direct Printing for GMDSS safety and distress communication,
		- the implementation of ACS in MF and HF frequencies using digital selective calling (DSC),
		- the implementation of NAVDAT in MF and HF frequencies to RR Article **5**, and
		- the implementation of the automatic identification system search and rescue transmitter (AIS SART) in Appendix **15**.

Regarding the issue A, the band 1 645.5-1 646.5 MHz which is no longer used exclusively by the satellite emergency position indicating radio beacons (EPIRBs) by modifying RR No **5.375** and table 15-2 RR Appendix **15**.

Considering that currently the EPIRB satellite has been enabled at a frequency of 406 MHz using the Cospas Sarsat satellite, Indonesia supports Alternative A1 to allow the use of this frequency band 1 645.5-1 646.5 MHz for the GMDSS and a non-priority basis for general maritime radiocommunications.

**Issue B (Resolves 2):**

Indonesia supports the view that no additional frequency allocation is necessary in RR Article **5** for the e-navigation. Therefore, it is proposed a no change to RR Article **5**.

**Issue C (Resolves 3):**

Indonesia supports method C2. Indonesia supports the introduction of the additional GSO satellite systems into the GMDSS, provided that the IMO has approved the application for the proposed satellite network, and provided that the results of studies on sharing and compatibility with other radiocommunication services in the same and adjacent frequency bands ensure the protection of the services in the frequency bands under consideration by this agenda item.

**3.1.6 Iran (Islamic Republic of)** - **Document APG23-6/INP-66 Rev.1**

**Issue C: Introduction of additional satellite systems into the global maritime distress and safety system**

The Administration of Iran (Islamic Republic of) supports the introduction of additional satellite systems for the GMDSS operations subject to completion of coordination pursuant to the applicable provision of Articles **9** and **11** of the Radio Regulation together with associated Rules of Procedure, where applicable. Completion of the above-mentioned coordination is essential in order to ensure the protection of the assignments already coordinated and recorded in the MIFR with favorable finding RR **11.31**, RR **11.32**, and, where applicable, RR **11.32A**, taking into account the conditions under which the above-mentioned existing assignments were coordinated and are currently operating and implemented. Also, This Administration is therefore of the view that any satellite network/ system (GSO/ Non- GSO) to provide GMDSS function needs to complete relevant coordination.

Finally, should be considered that, Recognition of the satellite system to function as a GMDSS is a matter to be decided by IMO irrespective and independent of WRC-23. This type of recognition has been done by IMO in the past without any action by WRC. In other words, recognition of a satellite network/system by IMO to provide GMDSS function(s) does not need specific action/ decision by WRC.

**3.1.7 Japan** - **Document APG23-6/INP-31**

**Issue A: GMDSS Modernization**

Japan supports the introduction of automatic connection system (ACS) for MF and HF bands and international NAVDAT system for the modernization of GMDSS. Therefore, Japan supports single method A in the CPM report. Regarding the frequency band 1 645.5-1 646.5 MHz, Japan supports NOC (Alternative A3).

**Issue B: e-navigation**

Japan supports single method B (NOC) in the CPM report.

**Issue C: Introduction of additional satellite systems into the GMDSS**

Japan is of the view that the introduction of additional GSO satellite system into the GMDSS is considered to ensure protection of services to which the same and adjacent bands are allocated.

**3.1.8 Korea (Republic of)** - **Document APG23-6/INP-88**

**(Issue A)** The Republic of Korea supports Method A described in the CPM Report which allows the removal of narrow band direct printing (NBDP) from the GMDSS and the introduction of automatic connection system (ACS) and NAVDAT system into the GMDSS. The Republic of Korea is also of the view that introduction of new technologies should not adversely affect the GMDSS functions.

**(Issue B)** The Republic of Korea supports Method B (NOC) described in the CPM Report considering that there is no requirement for spectrum allocation or amendments to the Radio Regulations for implementation of e-navigation.

**(Issue C)** The Republic of Korea is of the view that the possible introduction of additional GSO satellite systems into GMDSS could be considered provided that the coordination and notification in accordance with the Radio Regulation would be completed and the incumbent services in the same and adjacent frequency bands are not adversely affected.

It is proposed that the following text be included in the APT View;

It is encouraged all parties concerned to work cooperatively to ensure that the requirements of the ITU Radio Regulations, including Articles **9** & **15**, are met in order to permit the introduction of a new GMDSS operator in our region.

**3.1.9 Malaysia** - **Document APG23-6/INP-110**

**Issue A: Global maritime distress and safety system modernization**

Malaysia supports regulatory actions to implement GMDSS modernisation, taking into consideration the consequential amendments by the decision of IMO, as follows:

* Removal of narrow band direct printing (NBDP) from the GMDSS;
* Introduction of the NAVDAT frequencies in the Appendix **15** of the Radio Regulations;
* Implementation of an automatic connection system (ACS) for DSC in MF and HF frequency bands;
* Inclusion of AIS SART as homing equipment for survival craft stations; and
* Removal of the use of satellite EPIRBs in 1.6 GHz frequency band.

As such, Malaysia supports Method A and further considering Alternative A1.

**Issue B: E-navigation**

Malaysia supports no change to Article **5** of the Radio Regulations. As such, Malaysia supports Method B.

**Issue C: Introduction of additional satellite systems into global maritime distress and safety system**

Malaysia supports the introduction of additional GSO satellite systems into the GMDSS, provided that coordination and notification in accordance with the relevant and applicable provisions of Articles **9** and **11** of the Radio Regulations and associated Rules of Procedure need to be completed in order to protect services to which the bands are currently allocated.

**3.1.10 New Zealand** - **Document APG23-6/INP-99**

New Zealand supports modernisation of the Global Maritime Distress and Safety System (GMDSS) and appropriate regulatory actions. New Zealand supports the following positions:

* For Resolves 1, there are unique options for narrow band direct printing for GMDSS, ACS for MF & HF operation, and the implementation of NAVDAT. For 1.6 GHz Satellite EPIRBs, New Zealand is of the view that while recognizing that EPIRBs no longer operate in this band, any modifications to the Radio Regulations at this stage are premature and therefore No Change (NOC) should take place.
* For Resolves 2, No Change (NOC) – being the single method for this Resolves, except suppression of Resolution **361**.
* For Resolves 3, At this stage, New Zealand could support method C2 being the adoption of a new regional GMDSS provider noting the IMO approval is subject to frequency coordination being undertaken and resolved between existing and new satellite networks for the frequencies used for GMDSS. There should be a clear way forward on resolving coordination issues for the frequency ranges that are proposed to be added for GMDSS. This would ensure that New Zealand flagged vessels operating in the proposed new GMDSS RMSS provider operational area should not be impacted by possible interference to onboard GMDSS ship terminals.

**3.1.11 Philippines (Republic of the)** - **Document APG23-6/INP-93**

**Issue A: GMDSS Modernization**

Philippines supports the modernization of GMDSS, and thus, supports Method A for the following:

* the deletion of narrow-band direct printing (NBDP) for distress and safety communications from GMDSS;
* the implementation of an automatic connection system (ACS) for MF and HF bands;
* the introduction of the NAVDAT frequencies in MF and HF in RR Appendix **15**;
* the implementation of automatic identification system search and rescue transponder (AIS-SART) as locating equipment as an alternative to the Radar-SART.

**Issue B: E-navigation**

Philippines supports the view that no additional frequency allocation is necessary in RR Article **5** for e-navigation. Hence, our administration supports Method B which proposes no change to RR Article **5**.

**Issue C: Introduction of Additional Satellite Systems into the GMDSS**

Philippines supports Method C3 towards the introduction of additional GSO satellite systems into the GMDSS.

**3.1.12 Singapore (Republic of)** - **Document APG23-6/INP-55**

**Issue A**

The frequency band 1645.5 – 1646.5 MHz is allocated to the MSS (Earth-to-space) and is limited to use of satellite EPIRBs operating with MSS networks. This band has remained unused for many years and the 1.6 GHz band EPIRB service has now been officially withdrawn from the GMDSS by the IMO.

Therefore, Singapore supports Alternative A1 for the modification of RR No. **5.375** and Radio Regulations (RR) Appendix **15** Table 15-2 and Alternative B1 for the modification of RR No. **19.11**. Singapore proposes a preliminary PACP on WRC-23 Agenda Item 1.11 Issue A, to allow the use of this frequency band 1645.5 – 1646.5 MHz for GMDSS and general maritime communications from earth stations operating in the GMDSS, and no EPIRB operation in L-band VHF DSC. The proposed changes to the ITU RR are shown in the attachment.

**Issue B**

The IMO’s study has not introduced e-navigation in the GMDSS. NAVDAT may become part of the GMDSS as a result of the modernisation and thereby potentially become one of the systems that support e-navigation, however, it will not change the regulatory status of e-navigation. Therefore, Singapore proposes No Change to ITU RR Article **5**.

**Issue C**

The Beidou GSO MSS systems have been accepted by IMO to provide satellite communication within GMDSS, subject to certain remaining conditions. Therefore, Singapore proposes to support the addition of new GMDSS satellite systems under the similar conditions as those applying to incumbent GMDSS satellite systems.

**3.1.13 Thailand (Kingdom of)** - **Document APG23-6/INP-59**

**Issue A: GMDSS Modernization**

Thailand supports Method A as follows:

* The deletion of the NBDP for distress and safety communications from GMDSS;
* The implementation of an ACS for MF and HF bands;
* The introduction of MF and HF NAVDAT frequencies into Appendix **15** of RR; and
* The implementation of the AIS-SART as locating equipment as alternative to RADAR-SART.

In particular, Thailand supports Alternative A1 for the modification of RR No. **5.375** and RR Appendix **15** Table 15-2 and Alternative B1 for the modification of RR No. **19.11**.

**Issue B: E-navigation**

Thailand supports Method B and proposes no change to the Radio Regulations.

**Issue C: Introduction of additional satellite systems into the GMDSS**

Thailand is considering Method C2 Alternative approach A1 if the following elements are addressed:

* The frequency coordination and notification procedures in accordance with the relevant and applicable provisions of the Radio Regulations need to be completed; and
* The study on spectrum requirement for provision of the GMDSS should be completed.

**3.2 Summary of issues raised during the meeting**

**Issue A (*resolves 1*)*:* GMDSS Modernization**

* APT Members have reached consensus on Method A for Issue A in general excluding Alternatives. Different views were expressed on the Alternatives A1, A2 and A3 in the CPM Report. Some APT members support Alternative A1 and some other APT members prefer Alternative A3. For Alternatives B, some APT members support Alternative B1 and some other APT members support Alternative B2. Therefore, no consensus could be achieved on the Alternatives.
* APT Members noted the International Maritime Organization (IMO) position on WRC-23 agenda item 1.11 (Doc. WRC23/45), that supports “*regulatory actions that assist in the modernization of GMDSS (e.g., continued use of the L-Band frequencies for maritime operations and GMDSS following removal of L-band EPIRBs)”*.
* APT Members acknowledged that the band 1 645.5-1 646.5 MHz (Earth-to-space) is no longer used by L-band EPIRBs. Views are expressed that maintaining the current allocation arrangements for the band would continue to maintain the status quo, although with the GMDSS modernization output amending SOLAS Chapter IV coming into effect 1 January 2024, there would be a disconnect between the ITU and IMO regulation. Views are also expressed that no change to RR due to lack of sufficient studies at this stage could be beneficial as the possibility for this frequency band to satisfy future maritime needs is retained.
* There remains a question whether it is appropriate to remove satellite emergency position-indicating radio beacons (EPIRBs) in the frequency band 1 645.5-1 646.5 MHz (Earth-to-space) without a use of the band being identified, whether it be GMDSS, general radiocommunication or otherwise.

**Issue C (resolves 3): Introduction of additional satellite systems into the GMDSS**

* APT members noted the efforts already made on the frequency issues, and the GSO MSS system will continue to make utmost effort to resolve all the pending frequency issues before the commencement of GMDSS services.
* APT members encourage all parties concerned to work cooperatively to ensure that the requirements of the ITU Radio Regulations, including Articles 9 and 15, are met in order to permit the introduction of a new GMDSS operator in our region.
* Some APT Members support the introduction of additional satellite systems into the GMDSS, provided that coordination and notification in accordance with the relevant and applicable provisions of Articles 9 and 11 together of the Radio Regulations and associated Rules of Procedure need to be completed in order to protect services to which the bands are currently allocated. Also any satellite network/ system (GSO/ Non- GSO) to provide GMDSS function needs to complete relevant coordination.

**4. APT View(s)**

**Issue A (*resolves 1*)*:* GMDSS Modernization**

APT Members support Method A of the CPM Report to address this agenda item and drafted a Preliminary APT Common Proposal on the matter. APT Members could not reach consensus on Alternatives A1, A2 or A3 of the CPM Report with respect to the band 1 645.5-1 646.5 MHz (Earth-to-space).

**Issue B (*resolves 2*)*:* E-navigation**

APT Members support Method B to address this agenda item, and drafted a Preliminary APT Common Proposal on the matter.

**Issue C (*resolves 3*)*:* Introduction of additional satellite systems into the GMDSS**

The APT has considered AI 1.11 Issue C but has not developed a Preliminary APT Common Proposal on the matter. The APT has however formed the following view(s) on the AI 1.11 Issue C.

At this stage, APT Members support the introduction of the existing geostationary satellite system/networks described in the CPM Report into the GMDSS, provided that coordination and notification in accordance with the relevant and applicable provisions of Articles **9** and **11** of the Radio Regulations and associated Rules of Procedure to be completed in order to protect services to which the bands are currently allocated.

**5. Preliminary APT Common Proposal**

**Issue A (*resolves 1*)*:* GMDSS Modernization**



**Issue B (*resolves 2*)*:* E-navigation**



**6. Issues for Consideration at APG Coordination Meeting at WRC-23 (if any)**

**Issue A (*resolves 1*)*:* GMDSS Modernization**

APT Members could not support a single Alternative for Method A, with some APT Members supporting Alternatives A1 and A3 in the CPM Report, and some APT Members supporting other alternatives.

**Issue C (*resolves 3*): Introduction of additional satellite systems into the GMDSS**

The appropriate regulation provisions on the Agenda Item 1.11 Issue C may need further consideration at APT Coordination Meeting at WRC-23, taking into account the progress of the ongoing frequency coordination efforts made by the GSO MSS system.

**7. Views from Other Organisations** (as provided in the information documents to

APG23-6)

**7.1 Regional Groups**

**7.1.1 ASMG** - **Document APG23-4/INF-21**

* Issue A: Support regulatory measures for GMDSS modernization with a sufficient time limit for administrations to start implementation and operation.
* Issue B: Electronic Navigation: No change.
* Issue C: Follow studies on the introduction of a new GMDSS satellite system while ensuring the protection of other existing services and systems operating in GMDSS.

**7.1.2 ATU** - **Document APG23-6/INF-55**

**Issue A: GMDSS Modernization**

**Support Method A, Alternative A1 for RR No. 5.375,** on the Regulatory and procedural considerations for:

**MOD:**

5.375 The use of the frequency band 1 645.5-1 646.5 MHz is used by the mobile-satellite service (Earth-to-space) and for by inter-satellite links is limited to for distress, urgency and safety communications (see Article 31). Additionally, for the mobile-satellite service, use of this band from earth stations operating in the GMDSS for other than distress purposes is also permitted. (WRC-23)

**Issue B: Electronic Navigation**

**Support Method “B”** mentioned in the draft CPM (that is no need for changes to the RR);

**Issue C: Introduction of additional satellite systems into the GMDSS**

**.1 Support Method C3 -** The introduction of additional satellite systems for the GMDSS operations is subject to the completion of relevant and applicable provisions of the Radio Regulations in force including RR Articles 9 and 11 together with the objectives of their associated Rules of Procedure (RoP), before such addition is made with a view to comply with the protection of existing services to which the frequency band is allocated, taking into account the conditions under which these existing services are currently operating and implemented.

This method also includes:

1. the addition of the frequency bands 1 610.18-1 621.35 MHz and 2 483.59-2 499.91 MHz to Table 15-2 of RR Appendix **15**, as well as provisions RR No. **33.50** and RR No. **33.53** of RR Article **33**, in order to support the requirement of safety of life aspects by the GMDSS and implement applicable provisions of RR;

2. to modify RR Nos. **5.364** and **5.368** to apply RR No. **4.10** in the frequency band 1 610.18-1 621.35 MHz to GMDSS stations operating in the MMSS (Earth-to-space) and to modify RR No. **5.368** to keep the status between GMDSS stations operating in the MMSS and AMS(R)S in the frequency band 1 610.18-1 621.35 MHz.

3. an associated Resolution with a view to addressing the coordination needs and the mitigation and elimination of possible harmful interference.

**.2** Some administrations are of the view that completion of coordination and notification of the new proposed GMDSS system, in accordance with Articles 9 and 11 of the RR, is a prerequisite for making changes to the Radio Regulations to accommodate it. Without this, a GMDSS system cannot claim protection from harmful interference, and may not satisfy the requirements of a safety system. To this effect it is emphasized that assignments recorded under RR No. 11.41 are not suitable for use in a GMDSS system. Recognition and approval of the GSO satellite network/system by IMO to provide GMDSS function prior to WRC-23 is also a determining factor for adopting any changes to the Radio Regulations.

**.3** Some other administrations are of the strong view that the above statement is not factual and misleading for the following reasons:

1. There is no relation between the process of coordination of the assignments and decision of any WRC including WRC-23 since the course of actions to be taken for coordination are currently clearly described and outlined in the Radio Regulations and thus does not need and additional decision by WRC-23.

2. Reference to inclusion of a given frequency assignments pertaining to a given GSO satellite network or non-GSO satellite system in the Radio Regulations is an integral part of the notification and recording procedure of these assignment as outlined in Article **11** of the Radio Regulations and thus is entirely independent of the decision of any WRC including WRC-23.

3. The issue of recognition IMO of a GSO satellite network or non-GSO satellite system to be qualified as a candidate to provide GMDSS has no relation with the decision of any WRC, such WRC-23 due to the fact that such recognition is entirely a separate issue within the mandate and remit of IMO which could be done before any WRC or after any WRC or not be recognized at all.

**7.1.3 CEPT** - **Document APG23-6/INF-46**

**Issue A: Modernization of GMDSS**

CEPT supports regulatory actions needed to implement the GMDSS modernization in the Radio Regulation based on decisions taken in IMO. CEPT supports in particular: • the removal of narrow band direct printing from the GMDSS and introduction of an automatic connection system for MF and selected HF bands; • the introduction of NAVDAT as a component of the GMDSS; • to accommodate Automatic Identification System search and rescue transmitters (AIS-SARTs) as homing equipment for survival craft stations, as an alternative to Radar-SARTs; • the removal of satellite EPIRBs operating in the frequency band 1645.5–1646.5 MHz (Earth-to-space) from the GMDSS in the Radio Regulations

**Issue B: e-navigation**

CEPT is of the view that no change to the Radio Regulations is required as a consequence of no decision taken by IMO regarding spectrum requirements to implement e-navigation.

**Issue C: Regulatory actions due to the introduction of additional satellite systems into the GMDSS by IMO**

CEPT does not support at this stage the introduction of the satellite system BEIDOU in the Radio Regulations in order to be part of the GMDSS, even if the IMO has recognized BEIDOU as a GMDSS service provider. The reasons are the lack of justification of the frequency requirement, the incompatibility with the current usage of the 1610-1626.5 MHz and 2483.5-2500 MHz bands in which BEIDOU would like to operate and the non-achievement of the frequency coordination with the other MSS systems present in these frequency bands

**7.1.4 CITEL** - **Document APG23-6/INF-52**

• Some Administrations provided Preliminary Proposals at recent CITEL meeting addressing Resolves 1, 2 and 3 of Resolution **361 (Rev.WRC-19)**.

• Resolves 1: Supported by a number of Administrations. Proposal on Modernization of GMDSS is in accordance with the draft CPM text and consists of a number of regulatory solutions, including the deletion of Narrow-Band Direct Printing (NBDP) for distress and safety communication from GMDSS in RR Appendices **15** and **17**, introduction of automatic connection system in RR Article **5** and Appendix **17**, introduction of the NAVDAT frequencies in Appendix **15** and modification of the relevant provisions in Articles **5**, **32**, **33** and **52**, as well as No. **31.7**.

 • NOC in relation to frequency band 1 645.5-1 646.5 MHz as any modification to this frequency band is in need of further studies

• Resolves 2: Supported by a number of Administrations. Proposal on E-Navigation is consistent with the NOC which is the only identified Method in the draft CPM text.

• Resolves 3: proposals on consideration of additional GSO MSS system to provide sub-regional GMDSS is in accordance with the draft CPM text Methods C1 and C2

• NOC - supported by a number of Administrations and is in accordance with Method C1:

• the additional GSO MSS system has not coordinated its spectrum intended to be used for provision of GMDSS safety services with other satellite systems already providing safety services.

• IMO approval of the GSO MSS system is conditional on a number of elements, including completion of coordination requirements before commencement of GMDSS service.

• Spectrum requirements for provision of the GMDSS is not studied.

• Method C2 supported by one Administration – includes Modification of 5.364, 5.368, Article **33**, and Appendix **15**; if conditions of Method C1 above are satisfied.

• SUP RESOLUTION **361(Rev.WRC-19)** – Consequential to the results of studies.

**7.1.5 RCC** - **Document APG23-6/INF-45**

**Topic A - Modernization of GMDSS**

The RCC Administrations support a single Method A of the CPM Report as well as changes of No. 5.375 and Table 15-2 of RR Appendix **15** to remove restriction to use the band 1645.5-1646.5 MHz only by satellite EPIRBs

**Topic B - Implementation of e-navigation**

The RCC Administrations support the only Method B of the CPM Report which provides no change to RR Article **5**.

**Topic C - Introduction of additional satellite systems into the GMDSS by IMO**

IMO decisions on GMDSS, as well as the realistic needs of frequency bands for satellite systems in GMDSS, should be taken into account. GMDSS can be implemented based on the global and regional satellite systems that meet the requirements for GMDSS and use standardized and affordable shipboard equipment. The RCC administrations are of the view that, according to the ITU-R studies, the use of specific frequencies for new GMDSS satellite networks/systems is acceptable in accordance with the Method C4 of the CPM Report.

**7.2 International Organisations**

**7.2.1 IARU** - **Document APG23-5/INF-21**

* No position for this agenda item.

**7.2.2 ICAO** - **Document APG23-6/INF-25**

To ensure that any change to the regulatory provisions and spectrum allocations resulting from this agenda item do not adversely impact on the capability of search and rescue aircraft, including helicopters, to effectively communicate with vessels during disaster relief operations.

With respect to Resolution **361 (Rev.WRC-19)**, resolves 3, to ensure that any regulatory provisions in response to this agenda item do not adversely affect the compliance of aeronautical mobile-satellite (route) service systems in the frequency band 1 610–1 626.5 MHz with international Standards and Recommended Practices and procedures established in accordance with the Convention on International Civil Aviation.

**7.2.3 WMO** - **Document APG23-6/INF-02**

* No position for this agenda item.

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1. [↑](#footnote-ref-1)