|  |  |  |
| --- | --- | --- |
| A picture containing text, clipart  Description automatically generated | ASIA-PACIFIC TELECOMMUNITY | **Document No:** |
| **The 5th Meeting of the APT Conference Preparatory**  **Group for WRC-23 (APG23-5)** | **APG23-5/OUT-17** |
| 20 – 25 February 2023, Busan, Republic of Korea | 24 February 2023 |

Working Party 2

**PRELIMINARY VIEWs on WRC-23 agenda item 1.11**

**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 three methods as follows:

1. **Method C1** proposes no change to the RR;
2. **Method C2** identifies spectrum for GMDSS if the IMO’s action to recognize the new GSO MSS GMDSS satellite system is completed, and the new GSO MSS GMDSS system is fully coordinated in accordance with Articles **9** and **11** of RR and recorded in the MIFR in accordance with RR No. **11.37**. There are 2 alternatives associated with the method in relation to the applicability of RR No. **4.10** to GMDSS; and
3. **Method C3** proposes an associated new Resolution in order to support the requirement of safety of life aspects by the GMDSS and implement applicable provisions of RR, including applicability of RR No. **4.10** to the specific frequency bands used by the additional MSS system for GMDSS.

All methods propose suppression of *resolves 3* to Resolution **361 (Rev.WRC‑19)**.

**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.2010-1](https://www.itu.int/rec/R-REC-M.2010), ITU-R [M.2058-0](https://www.itu.int/rec/R-REC-M.2058)
* Preliminary 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)
* Working Document towards a preliminary draft new Report ITU-R M.[ADD\_GSO\_GMDSS]

**2. Documents**

* Input Documents: APG23-5/INP-09 (THA), APG23-5/INP-15 (J), APG23-5/INP-27 (IND), APG23-5/INP-33 (BGD), APG23-5/INP-37 (IRN), APG23-5/INP-47 (SNG), APG23-5/INP-53 (VTN), APG23-5/INP-57 (AUS), APG23-5/INP-64 (KOR),   
  APG23-5/ INP-74 (NZL), APG23-5/INP-79 (INS), APG23-5/INP-89 (CHN),   
  APG23-5/INP-93 (CHN), APG23-5/INP-96 (MLA)
* Information Documents: APG23-5/INF-02 (DG Chairs), APG23-5/INF-48 (CEPT), APG23-5/INF-43 (CITEL), APG23-5/INF-45 (RCC)

**3. Summary of discussions**

**3.1 Summary of APT Members’ views**

**3.1.1 Thailand (Kingdom of)** - **Document APG23-5/INP-09**

* Issue A: GMDSS Modernization

Thailand supports Method A in the current draft CPM text 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;
* The implementation of the AIS-SART as locating equipment as alternative to RADAR-SART; and
* The removal of the use of satellite EPIRBs from the frequency band 1645.5-1646.5 MHz.
* Issue B: E-navigation

Thailand supports Method B in the current draft CPM text with the view that it is not necessary to modify the RR in support of e-navigation.

**3.1.2 Japan** - **Document APG23-5/INP-15**

* 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.

* Issue B: e-navigation

Japan supports single method B (NOC).

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

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

**3.1.3 India (Republic of)** - **Document APG23-5/INP-27**

* 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 updates and practical usages.

* Issue B: e-navigation

India supports the only 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**.

**3.1.4 Bangladesh (People’s Republic of)** - **Document APG23-5/INP-33**

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

**3.1.5 Iran (Islamic Republic of)** - **Document APG23-5/INP-37**

* Issue B: e-navigation

This Administration supports Method B, which does not need the necessary additional frequency allocation in RR Article **5** for e-navigation and no change to RR Article **5**.

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

1. 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.

2. This Administration 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.

3. This Administration is therefore of the view that any satellite network/ system (GSO/ Non-GSO) to provide GMDSS function needs to complete relevant coordination.

**3.1.6 Singapore (Republic of)** - **Document APG23-5/INP-47**

* Issue A

Singapore supports the modernisation of GMDSS, and permit the use of the band 1645.5 – 1646.5 MHz for GMDSS and general maritime communications from earth stations operating in the GMDSS.

* Issue B

Singapore supports No Change to RR Article **5**.

* Issue C

Singapore supports the addition of new GMDSS satellite systems under the similar conditions as those applying to incumbent GMDSS satellite systems.

**3.1.7 Viet Nam (Socialist Republic of)** - **Document APG23-5/INP-53**

* ***Resolves 1*: GMDSS Modernization**

Viet Nam support Method A in the current draft CPM text.

* ***Resolves 2*: E-navigation**

Viet Nam support Method B in the current draft CPM text.

* ***Resolves 3*: Introduction of additional satellite systems into the GMDSS**

Viet Nam supports the ITU-R studies and associated possible regulatory actions, taking into consideration the activities of IMO, as appropriate to introduce additional GSO satellite systems into the GMDSS, while ensuring no adverse effect on the allocation of the existing services and their future development in the same and adjacent frequency bands.

**3.1.8 Australia** - **Document APG23-5/INP-57**

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

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

* deleting narrow-band direct-printing (NBDP) for distress and safety communications from Appendix **15** and **17**, and implement 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) while 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 until the candidate system can demonstrate:

* coordination in accordance with the relevant and applicable provisions of Articles **9** and **11** of the Radio Regulations and associated Rules of Procedure, and
* its spectrum requirements to provide a GMDSS service.

**3.1.9 Korea (Republic of)** - **Document APG23-5/INP-64**

* ***(Issue A)*** The Republic of Korea supports Method A in the draft 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 based on decisions taken in IMO. The Republic of Korea is 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) in the draft 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 any regulatory action to the RR in order to introduce an additional GSO satellite system to part of the GMDSS is premature at this stage because the justification of the frequency requirement for the GMDSS is not sufficient, and the frequency coordination and notification procedures in accordance with the relevant and applicable provisions of the RR have not been completed. Therefore, the Republic of Korea supports Method C1 in the draft CPM Report at this stage.

**3.1.10 New Zealand** - **Document APG23-5/INP-74**

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

* **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. Noting the current IMO position (as agreed to at MSC106) is to retain L-Band frequencies for future maritime use.

* **Resolves 2:** No Change (NOC) – being the single method for this Resolves.
* **Resolves 3:** New Zealand could support method C2 being the adaption of a new regional GMDSS provider noting the recent IMO approval pending frequency coordination being undertaken and resolved between existing and new GMDSS providers. 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 Indonesia (Republic of)** - **Document APG23-5/INP-79**

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

* With regards to issue A of Agenda Item 1.11 in draft CPM23-2 report, Indonesia supports the revisions to the RR proposed to address:
* the deletion of Narrow Band Direct Printing,
* the implementation of ACS,
* the implementation of NAVDAT in MF and HF frequencies, and
* the implementation of the automatic identification system search and rescue transmitter (AIS-SART) in Appendix **15**.

Regarding the issue of the band 1 645.5-1 646.5 MHz which is no longer used by the satellite emergency position indicating radio beacons (EPIRBs), Indonesia supports the view 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 use exclusively by satellite EPIRBs based on “Alternative A1”.  The band would be available for use for the GMDSS and, on a non-priority basis, for general maritime radiocommunications.

* With regards to issue B of Agenda Item 1.11 in draft CPM23-2 report, 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**.
* With regards to issue C of Agenda Item 1.11 in draft CPM23-2 report, 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.

**3.1.12 China (People’s Republic of)** - **Document APG23-5/INP-89**

* Regarding ***Resolves 1***:

China in general supports the unique Method A proposed in the draft CPM text 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.

China supports the removal of the use of satellite EPIRBs from the frequency band 1645.5-1646.5 MHz. China is also of the view that any modifications to the RR regarding the frequency band 1645.5-1646.5 MHz are premature in lack of sufficient studies hence no change is proposed.

* Regarding ***Resolves 2***:

China supports the Method B in the draft CPM text, 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, while ensuring the existing services in the same and adjacent bands are not adversely affected.

China supports the addition of the band 1 610.18-1 621.35 MHz, 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**, and to apply RR **4.10** to the MMSS for GMDSS in the subject frequency, in order to support the requirement of safety of life aspects by the GMDSS and implement applicable provision of RR.

**3.1.13 Malaysia** - **Document APG23-5/INP-96**

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

Malaysia supports regulatory actions to implement GMDSS modernization, 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 bands
* Inclusion of AIS-SART as homing equipment for survival craft stations
* Removal of the use of satellite EPIRBs in 1.6 GHz band
* **Issue B (*resolves 2*): E-navigation**

Malaysia supports no change to Article **5** of the Radio Regulations**.**

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

Malaysia supports regulatory action to introduce additional satellite system into the GMDSS if:

* ITU-R studies demonstrate protection of services in the same and adjacent frequency band;
* Complete coordination and notification of the satellite in accordance with Article **9** of the Radio Regulations; and
* IMO recognition to be fully obtained prior to WRC-23.

**3.1.14 Samoa (Independent State of)** - **Document APG23-4/INP-60**

* **Issue A (*resolves 1*)*:* GMDSS Modernization**
* Samoa supports ITU-R studies to progress the modernization of GMDSS, taking into consideration the activities of IMO, for GMDSS modernization, including the introduction of the NAVDAT system and revised IMO performance standards of GMDSS equipment and discontinuation of satellite EPIRBs as per IMO recommendation.
* Samoa also supports the introduction of the automatic connection system (ACS) for MF and selected HF bands and international NAVDAT service for the modernization of GMDSS while ensuring no adverse effect on the allocation of the existing services and their future development in the same and adjacent frequency bands. The introduction of the ACS should be affordable and simple to operate so that non-SOLAS/non-Convention vessels could also benefit from it.
* Furthermore, Samoa supports IMO’s decision to discontinue Satellite EPIRBs as per RR No. 5.375 and Table 15-2 of RR Appendix **15** such that the frequency band   
  1 645.5-1 646.5 MHz can now be no longer limited to use exclusively by satellite EPIRBs.  The band should be available for the GMDSS and, on a non-priority basis, for general maritime radiocommunications.
* **Issue B (resolves *2*)*:* E-navigation**
* Samoa supports ITU-R studies, taking into consideration the activities of IMO for the implementation of e-navigation while ensuring no adverse effect on the operation of the existing services and their future development in the same and adjacent frequency bands.
* The implementation of e-navigation should be affordable and simple to operate so that non-SOLAS/non-Convention vessels could also benefit from it.
* **Issue C (resolves *3*)*:* Introduction of additional satellite systems into the GMDSS**
* Samoa supports the introduction of proposed GMDSS operations provided that it demonstrates compatibility with other radiocommunication services to which the band 1610-1626.5 MHz is currently allocated.
  1. **Summary of issues raised during the meeting**

Some APT Members indicated that IMO may wish to submit its position to APG23-6 for information.

**4. APT Preliminary Views**

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

* APT Members support Method A to address this agenda item.
  + APT Members support the removal of the use of satellite EPIRBs in the frequency band 1 645.5-1 646.5 MHz and are considering either Alternatives A1, A2 or A3.

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

* APT Members support Method B to address this agenda item.

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

* APT Members support 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.

**5. Other View(s) from APT Members**

None.

**6. Issues for Consideration at Next APG Meeting**

APT Members are encouraged to contribute their views, taking into account ITU-R studies, outcome of the CPM23-2 and the APT preliminary views, and submit contributions to the next APG meeting (APG23-6) to develop the draft PACP on WRC-23 agenda item 1.11.

**7. Views from Other Organisations** (as provided in the information documents to APG23-5)

**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 APG23-4/INF-02**

* Support the development of possible regulatory procedures for GMDSS modernization, E-navigation implementation and introducing a new GMDSS satellite system while ensuring the protection of radio astronomy and other incumbent services as well as current GMDSS systems.

**7.1.3 CEPT** - **Document APG23-5/INF-39**

* **Issue A: Modernisation of GMDSS**

CEPT supports regulatory actions needed to implement the GMDSS modernisation in the Radio Regulations 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 were to recognize BEIDOU as a GMDSS service provider. The reasons are the lack of justification on 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 APG23-5/INF-43**

* 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 one Administration. Proposal on Modernization of GMDSS is in accordance with the draft CPM text and consists of a number of regulatory solutions, including deletion of Narrow-Band Direct Printing (NBDP) for distress and safety communication from GMDSS in RR Appendices **15** and **17**, introduction to 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**, **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 one Administration. 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 more than one Administration 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 pending.
      * Spectrum requirement 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.**
* **SUP RESOLUTION 361 (Rev.WRC-19)** – Consequential to the results of studies.

**7.1.5 RCC** - **Document APG23-5/INF-45**

* **Topic A - Modernization of GMDSS**

The RCC Administrations support a single Method A.

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

The RCC Administrations support the only Method B 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.

RCC is considering the use of specific frequencies for the new GMDSS satellite networks/systems in the 1610-1621.35 MHz band, which should be restricted by the MMSS (Earth-space) based on the results of the ITU-R studies. However, such use shall not impose any additional restrictions on the ARNSS and AM(R)S operating in accordance with 5.368 of RR. No specific Method.

**7.2 International Organisations**

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

* No position for this agenda item.

**7.2.2 ICAO** - **Document APG23-3/INF-15**

* 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.
* To ensure that any regulatory provisions in response to this agenda item do not adversely affect compliance of aeronautical mobile-satellite (route) service systems with international standards and recommended practices and procedures established in accordance with the Convention on International Civil Aviation.

**7.2.3 WMO** - **Document APG23-5/INF-01**

* No position for this agenda item.

\_\_\_\_\_\_\_\_\_\_\_\_