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|  | ASIA-PACIFIC TELECOMMUNITY | Document No: |
| **The 4th Meeting of the APT Conference Preparatory**  **Group for WRC-19 (APG19-4)** | **APG19-4/OUT-07** |
| 7 – 12 January 2019, Busan, Republic of Korea | 12 January 2019 |

Working Party 5

**PRELIMINARY VIEWs on WRC-19 agenda item 1.8**

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

**1. Background**

The Global Maritime Distress and Safety System (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. The plan for modernization of the GMDSS was adopted by the Maritime Safety Committee of the IMO on June 2017. The GMDSS modernization plan consists of various components which could be part of the GMDSS, among them some items are identified in relation to the studies on Agenda Item 1.8 for the WRC-19, such as additional satellite service in GMDSS, VDES, NAVDAT and HF communications.

The Resolution 359 invites the WRC-19 to take necessary actions to support GMDSS modernization (***Resolves 1***) and to consider regulatory provisions related to the introduction of additional satellite system into the GMDSS while ensuring the protection of all incumbent services from harmful interferences (***Resolve 2***).

In relation to ***Resolves 1***, the NAVDAT on 500 kHz has been covered by WRC-12, however, the NAVDAT using HF which is described in the Recommendation ITU-R M.2058-0 has not yet been addressed.

In relation to ***Resolves 2****,* at the IMO’s Maritime Safety Committee (MSC) meeting in May 2018, it has formally recognised an additional satellite system as the new GMDSS satellite service provider. See also Section 3.2.

**1.1 Progress of ITU-R studies**

The WP 5B is the responsible group for Agenda Item 1.8, and the WP 4C and 7D are concerned group. The ***Resolves 1*** is under review in WP 5B, and the ***Resolves 2*** is under review in WP 4C.

To satisfy Issue A under WRC-19 agenda item 1.8, two methods are described in section 5/1.8/4.1 of Draft CPM Report. The first method is no change; the second method includes frequencies to be used for medium frequency (MF) and high frequency (HF) navigational data (NAVDAT) systems, in support of GMDSS modernization. Possibility of using above medium frequency by national NAVDAT also be mentioned.

To satisfy ***Resolves 2*** under WRC-19 Agenda Item 1.8, six methods are described in section 5/1.8/4.2 of Draft CPM Report.

**1.2 List of relevant ITU-R Recommendations and Reports**

1) ***Resolves 1***:

* Recommendation ITU-R M.2010-0: Characteristics of a digital system, named Navigational Data for broadcasting maritime safety and security related information from shore-to-ship in the 500kHz band; or the revised version;
* Recommendation ITU-R M.2058-0: Characteristics of a digital system, named navigational data for broadcasting maritime safety and security related information from shore-to-ship in the maritime HF frequency band; or the revised version;
* Report ITU-R M.2201: Utilization of the frequency band 495-505 kHz band by the maritime mobile service for the digital broadcasting of safety and security related information from shore-to-ships.

2) ***Resolves 2***:

* Recommendation ITU-R M.1184-3: Technical characteristics of mobile satellite systems in the frequency bands below 3 GHz for use in developing criteria for sharing between the mobile-satellite service (MSS) and other services;
* Recommendation ITU-R M.1188-1: Impact of propagation on the design of non-GSO mobile-satellite systems not employing satellite diversity which provide service to handheld equipment;
* Recommendation ITU-R M.1583-1: Interference calculations between non-geostationary mobile-satellite service or radionavigation-satellite service systems and radio astronomy telescope sites;
* Recommendations ITU-R RA.1631-0: Reference radio astronomy antenna pattern to be used for compatibility analyses between non-GSO systems and radio astronomy service stations based on the epfd concept;
* Report ITU-R M.2369-0: Use of non-geostationary orbit mobile satellite systems to enhance maritime safety;
* Preliminary draft new Report ITU-R M.[GMDSS‑SATREG]-Introduction of additional mobile-satellite service systems into the GMDSS;
* Working document towards a preliminary draft new Report ITU-R M.[RAS‑COMPAT] – Unwanted emissions in the RAS band from space-to-Earth transmissions from MSS Satellites.

**2. Documents**

**2.1 Input Documents**

APG19-4/INP-19(Rev.1) (Australia), INP-26 (New Zealand), INP-33 (Thailand), INP-40 (Viet Nam), INP-63 (Japan), INP-80 (Korea), INP-87 (Iran), INP-94 (Singapore), INP-99 (China), INP-111 (Bangladesh), INP-113 (India), INP-122 (Indonesia).

**2.2 Information Documents**

APG19-4/INP-09 (Rev.1) (Chairman APG-19), INF-04 (ICAO), INF-22 (CITEL), INF-23 (CEPT), INF-24 (RCC)

**3. Summary of discussions**

**3.1 Summary of APT Members’ views**

**3.1.1 Australia** - **Document APG19-4/INP-19**

Australia supports development of possible regulatory requirements to facilitate ‘modernisation’ of Global Maritime Distress Safety Systems (GMDSS) in accordance with Resolution **359 (Rev.WRC-15)** while ensuring compatibility and sharing with other services in the frequency bands and adjacent frequency bands.

For Issue A Australia supports Method A2 in the Draft CPM Report.

For Issue B Australia supports Method B1 in the Draft CPM Report in conjunction with Method B2 - noting that any modifications to the Radio Regulations to provide for additional satellite systems for GMDSS should not have any impact on the existing services within the frequency band and the adjacent bands under consideration of this agenda item.

Australia supports the APT Preliminary View from the APG19-3 meeting.

**3.1.2 New Zealand** - **Document APG19-4/INP-26**

For Issue A, New Zealand supports Method A2. New Zealand is of the view that it is appropriate to include MF NAVDAT and HF NAVDAT frequencies into Appendix **17**, while the recognition of these MF NAVDAT and HF NAVDAT frequencies as GMDSS for inclusion into RR Appendix **15** would be considered at a future WRC after IMO concludes its work on the modernisation of the GMDSS.

For Issue B, New Zealand supports Method B1 to facilitate regulatory changes for an additional satellite system into the GMDSS, as this satellite system meets all the necessary requirements and has been approved by the IMO, allowing competition and diversity in the GMDSS satellite space.

**3.1.3 Thailand** - **Document APG19-4/INP-33**

For issue A, Thailand supports modification of the Radio Regulations to allow the frequency band 495-505 kHz to be used for the international MF NAVDAT system and to allow the frequency bands described in the most recent version of Recommendation ITU-R M.2058 to be used for the HF NAVDAT system.

For issue B, Thailand supports considering possible modifications to the provisions of the Radio Regulations to provide for additional satellite systems into the GMDSS, taking into consideration the activities of IMO, while ensuring no additional impact on the existing services, particularly RAS, within the frequency band and the adjacent bands under study.

**3.1.4 Viet Nam** - **Document APG19-4/INP-40**

Viet Nam Administration supports the activities of ITU-R WP5B and WP4C to address this Agenda item.

Regarding Issue A, GMDSS modernization:

* Support the introduction of NAVDAT frequencies, both MF and HF as described in M.2010 and M.2058, into appropriate portions of Radio Regulation in supporting of GMDSS modernization;
* Support to consider the frequency(ies) to be used for national MF NAVDAT;
* The existing frequencies used for NAVTEX should be retained and protected.
* Support Method A2 to satisfy resolves to invite ITU-R 1 of **Resolution 359 (Rev.WRC‑15)**.

Regarding Issue B, additional satellite systems into the GMDSS:

* Support the introduction of an additional satellite system into the GMDSS to provide redundancy and global coverage in maritime safety services, while ensuring the protection to existing services within the frequency band and the adjacent bands under study.

**3.1.5 Japan** - **Document APG19-4/INP-63**

Japan supports the introduction of NAVDAT in the MF and HF bands. The frequency bands which are currently identified for NAVTEX for use by GMDSS need to be retained and protected. Therefore, Japan supports Method A2 in draft CPM Report. (Issue A)

Japan supports ITU-R studies for introduction of additional satellite systems. The frequency bands which are currently identified existing services need to be retained and protected. (Issue B)

**3.1.6 Korea** - **Document APG19-4/INP-80**

APT Members support the ITU-R studies on possible regulatory actions for GMDSS modernization to enhance maritime capabilities and the studies on sharing and compatibility with other services in the frequency bands and adjacent frequency bands under study and to ensure possible modification to the Radio Regulations to protect services to which the frequency bands are currently allocated without any constraints by additional GMDSS satellite systems, in accordance with the **Resolution 359 (Rev. WRC-15)**.

Regarding ***Resolves 1***, APT Members support the incorporation of NAVDAT systems and NAVDAT frequencies, both MF and HF as described in Recommendation ITU-R M.2010 and ITU-R M.2058 into consideration for addressing this agenda item.

APT Members are also of the view that:

* the recognition of these MF NAVDAT and HF NAVDAT frequencies as GMDSS for inclusion into RR Appendix 15 would be considered at a future WRC after IMO concludes its work on the modernisation of the GMDSS.
* the existing frequencies used for NAVTEX should be retained and protected.
* the recognition of national NAVDAT frequencies in the bands 415-495 kHz and 505-526 kHz (505-510 kHz in Region 2) should not impose any additional constrains on existing services and the use of national NAVDAT frequencies should be coordinated such as not to bring harmful interference among NAVDAT radio stations.

Regarding ***Resolves 2***,APT Members support possible modifications to the provisions of the Radio Regulations to provide for additional satellite systems into the GMDSS, taking into consideration the activities of IMO, while ensuring no additional impact on the existing services, particularly RAS, within the frequency band and the adjacent bands under study.

**3.1.7 Iran** - **Document APG19-4/INP-87**

In regard to issue B, I.R. of Iran supports the Method B4 (No Change) to the ITU’s RR.

Reasons for No Change:

In order to introduce an additional satellite system into the GMDSS, the frequency band to be used by this system must be entered into RR Appendix **15**. Regarding the frequency band 1 613.8-1 626.5 MHz, the secondary MSS allocation in the space-to-Earth direction cannot be considered for GMDSS.

A satellite system, the downlink of which:

1) has a status of “non-interference, non-protection” vis-à-vis any primary service within the same band and in adjacent bands; and

2) has currently no reliable coordination criteria, apart from frequency overlap which is one among other interference criteria to accomplish coordination, should not be a candidate to provide safety-of-life aspects as required by the GDMSS.

Moreover according to paragraph 2.3 of the Rules of Procedure relating to application of RR No. **9.11A** (*“While recognizing the difficulties of harmonizing the text of the footnotes to Article* ***5*** *introduced by WARC-92, WRC-95 and WRC-97 on the one hand and the text of the provision of No.****9.11A*** *(including Nos.* ***9.12*** *to* ***9.16****) and* ***9.17A****, as appropriate with respect to the services to which this provision is applicable, on the other hand, the Board concluded that the procedure is applicable to all other space and terrestrial services with respect to those satellite services having allocations with equal rights and mentioned in the specific footnotes to which this provision applies. The frequency bands are those to which, in a footnote, reference is made to this provision in the Table of Frequency Allocations (see Tables 9.11A-1 and 9.11A-2 below). In these Tables, there is an indication of those other space services (in addition to the MSS and radiodetermination-satellite service as well as non-GSO MSS feeder links and non-GSO FSS included in the footnotes) to which this coordination procedure shall also apply*”).

The downlink of the HIBLEO-2 using the band 1 613.8-1 626.5 MHz was not required to coordinate with any space or terrestrial service of primary status. Consequently, should a primary status (on a provisional basis) be granted to this allocation, it is fundamental for the downlink assignments of HIBLEO-2 to carry out the required coordination with all space and terrestrial services submitted to the Bureau until a decision can be made to identify it for GDMSS. Finally the consequences of such action must be analysed.

In addition to the lack of reliable criteria for application of RR No. **9.11A**, pursuant to RR No. **9.52C** (“For coordination requests under Nos. **9.11**to **9.14** and **9.21**, an administration not responding under No. **9.52** within the same four-month period shall be regarded as unaffected and, in the cases of Nos. **9.11**to **9.14**, the provisions of Nos. **9.48** and **9.49** shall apply.”) unlike RR No. **9.7** the coordination procedure is of an implicit type, i.e., those administrations which failed to reply to request for coordination were considered as not affected even though in reality they were affected.

On account of any attempt to upgrade the status of this allocation from secondary to primary to fulfil this agenda item, the following studies are needed to be carried out:

a) the amount of bandwidth required for GMDSS while the allocated MSS band is also used for routine non-safety purposes;

b) the sharing and compatibility of the MSS system in the considered frequency band with incumbent services in the same and in adjacent bands;

c) the potential impact of possible modifications to the provisions of the Radio Regulations on sharing and compatibility with other services and systems in the frequency band and adjacent frequency bands.

The issues listed above have not been studied or resolved. The inconsistency and potential constraint of RR Nos.**5.364** and **5.368** have not been studied. The harmful interference from the MSS space-to-Earth operations continues to exist in the radio astronomy frequency band 1 610.6‑1 613.8 MHz and several administrations are having ongoing communications with the ITU‑R RRB on this interference issue. The frequency band 1 613.8-1 626.5 MHz, or any part thereof, is therefore to be considered not suitable for use in GMDSS as long as these studies have not been carried out.

It should be noted that this administration, based on Document 4C/390-E proposes some comments(highlighted in yellow) for modification of the draft CPM text, based on Annex13 to Document 4C/343 of WP 4C meeting in February 2018, for considerations and appropriate actions in WP4C meeting in June 2018. However, since the final text of the CPM to be sent to the CPM Chapter Rapporteur by WP5B which has finished its last meeting before WP4C, there would therefore be no possibility/opportunity for WP4C to further improve the draft CPM text. This is resulted from the sequence of meetings of WP 5B and WP4C which has scheduled the last meeting of WP 5B before the last meeting of WP4C. Consequently, WP4C missing the last opportunity to further improve the draft CPM text, in spite of the fact that contributions are being sent to WP4C in this regard. So this administration will prepare and send new contribution to CPM19-2 for proposing some comments for modification of draft CPM report.

However, This Administration may consider other Method including clear cut upgrading of the secondary down link to primary if the objectives of Rules of procedure relating to Provision RR 9.51 is transferred to the conditions associated with upgrading link/assignments and the upgraded link/assignments effects coordination with all those space and terrestrial services with which coordination was not required due to the secondary status of allocation.

**3.1.8 Singapore** - **Document APG19-4/INP-94**

In consideration of Resolution 359 (Rev.WRC-15), Singapore is supportive of **Methods B1** **and** **B2** and provides the following views:

* There is a need to ensure availability and robustness of maritime safety communications;
* Singapore is supportive of the new GMDSS service provider which introduces competition, diversity and improved search-and-rescue capabilities into maritime safety communications;
* Possible modifications to the RR to reflect the additional frequencies for distress and safety communications for the GMDSS; and
* There should be no impact to the existing GMDSS services operating in adjacent frequency bands.

**3.1.9 China** - **Document APG19-4/INP-99**

Regarding ***Resolves 1***:

China supports the ITU-R studies on possible regulatory actions for GMDSS modernization to enhance maritime capabilities.

China supports the method A2 proposed in the draft CPM text to satisfy the frequency needs of NAVDAT.

China is also of the view that:

* the incorporation of NAVDAT systems should be supported and both MF and HF NAVDAT frequencies as described in Recommendation ITU-R M.2010 and ITU-R M.2058 should be taken into consideration for addressing this agenda item.
* The recognition of these MF NAVDAT and HF NAVDAT frequencies as GMDSS for inclusion into RR Appendix 15 would be considered at a future WRC after IMO concludes its work on the modernisation of the GMDSS.
* The existing frequencies used for NAVTEX should be retained and protected.

Regarding ***Resolves 2***:

China supports the ITU-R studies on possible regulatory actions for introduction of additional satellite systems into GMDSS to enhance safety of maritime.

Considering that some issues, including if the secondary allocaiton could be used for safety-of-life and the potential adverse impact of any change to the regulatory status and the coordination relationship with other incumbent services in-band and the adjacent bands, have not been studied or reached consensus, China don’t support any modification to the provisions of the Radio Regulations.

Based on the Draft CPM text, China supports Methods B3 and B4.

China proposes that the study on the CPM text and the PDN Report ITU-R M.[GMDSS‑SATREG] should be continued and to find solutions to ensure no additional impact on the existing services, particularly RAS, within the frequency band and the adjacent bands under study.

**3.1.10 Bangladesh** - **Document APG19-4/INP-111**

**For Issue A**, Bangladesh Supports Method A2 and modification of the Radio Regulations to allow NAVDAT system to use frequency band 495-505kHz for MF NAVDAT and the frequency bands described in the most recent version of Recommendation ITU-R M.2058 for HF NAVDAT.

**For Issue B**, Bangladesh could support the consideration of regulatory changes for additional satellite systems into the GMDSS, if this satellite system could meet all the necessary requirements as prescribed and approved by the IMO and regulatory requirement studied from responsible study group. Any modifications to the Radio Regulations to provide for additional satellite systems for the GMDSS should not have any impact on the existing services within the frequency band and the adjacent bands under consideration of this agenda item.

**3.1.11 India** - **Document APG19-4/INP-113**

Issue A: we may support No change to RR

Issue B: While in principle we support addition of one more satellite system into GMDSS, the addition of Iridium system could impact other services in L band. We therefore support further studies to assess the impact of the Iridium frequencies on other services.

**3.1.12 Indonesia** - **Document APG19-4/INP-122**

Issue A

Indonesia support any modernization of GMDSS in the MF and HF bands for navigational data (NAVDAT) systems.

Issue B

Indonesia supports ITU-R activities for the introduction of additional satellite systems into the GMDSS.

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

Regarding to ***Resolves 1***, APT Members support the ITU-R studies on possible regulatory actions to incorporate MF and HF NAVDAT system. APT Members also support the ITU-R studies on possible regulatory actions to provide additional satellite systems into the GMDSS while ensuring the protection of existing services, however some different views were expressed on the changes to the allocation status of the frequencies considered.

Regarding to ***Resolves 2***, Some APT Members are of the view that there is no need to directly or indirectly upgrade the MSS (space-to-Earth) allocation from secondary to primary. Some other APT Members support upgrading the MSS (space-to-Earth) allocation to primary.

No consensus was reached on the matter.

To this effect there is need that outstanding issues and concerns with respect to operational implementation should be taken into account and implemented. (See Section 5/1.8/3.2.1.2 in the Draft CPM Report in this regards)

In order to assist the APT members to follow the situation, Table 1 is attached for easy reference for information only.

Table 1: Summary of the APT member’s Views for APG19-4 meeting　(for information only)

| **ADM.** | **INP** | **B1** | **B2** | **B3** | **B4** | **B5(a)** | **B5(b)** | **Others** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Australia** | 19 R1 | B1 in conjunction with B2 | |  |  |  |  | noting that any modifications to the Radio Regulations… should not have any impact on the existing services within the frequency band and the adjacent bands …;.　　supports the APT Preliminary View from the APG19-3 meeting. |
| **New Zealand** | 26 | √ |  |  |  |  |  |  |
| **Thailand** | 33 |  |  |  |  |  |  | supports considering possible modifications, while ensuring no additional impact on the existing services, particularly RAS, within the frequency band and the adjacent bands… |
| **Viet Nam** | 40 |  |  |  |  |  |  | Support the introduction of an additional satellite system into the GMDSS, while ensuring the protection to existing services within the frequency band and the adjacent bands… |
| **Japan** | 63 |  |  |  |  |  |  | supports ITU-R studies.  The frequency bands which are currently identified existing services need to be retained and protected |
| **Korea** | 80 |  |  |  |  |  |  | support possible modifications to the provisions …. while ensuring no additional impact on the existing services, particularly RAS, within the frequency band and the adjacent bands ... |
| **Iran** | 87 |  |  |  | √ |  |  | the secondary MSS allocation in the space-to-Earth direction cannot be considered for GMDSS… |
| **Singapore** | 94 | √ | B1 in conjunction with B2 |  |  |  |  | There should be no impact to the existing GMDSS services operating in adjacent frequency bands |
| **China** | 99 |  |  | √ | √ |  |  | the study should be continued and to find solutions to ensure no additional impact on the existing services, particularly RAS, within the frequency band and the adjacent bands |
| **Bangladesh** | 111 |  |  |  |  |  |  | support the consideration of regulatory changes. Any modifications to the Radio Regulations should not have any impact on the existing services within the frequency band and the adjacent bands |
| **India** | 113 |  |  |  |  |  |  | support further studies to assess the impact of the Iridium frequencies on other services |
| **Indonesia** | 122 |  |  |  |  |  |  | supports ITU-R activities |

**4. APT Preliminary View(s)**

APT Members support the ITU-R studies on possible regulatory actions for GMDSS modernization to enhance maritime capabilities and the studies on sharing and compatibility with other services in the frequency bands and adjacent frequency bands under study and to ensure possible modification to the Radio Regulations to protect services to which the frequency bands are currently allocated without any constraints by additional GMDSS satellite systems, in accordance with the Resolution **359 (Rev. WRC-15)**.

Regarding ***Resolves 1***,

* APT Members support the incorporation of NAVDAT systems and NAVDAT frequencies, both MF and HF as described in Recommendation ITU-R M.2010 and ITU-R M.2058.
* The recognition of these MF NAVDAT and HF NAVDAT frequencies as GMDSS for inclusion into RR Appendix 15 would be considered at a future WRC after IMO concludes its work on the modernisation of the GMDSS.
* The existing frequencies used for NAVTEX should be retained and protected.
* The recognition of national NAVDAT frequencies in the bands 415-495 kHz and 505-526 kHz (505-510 kHz in Region 2) should not impose any additional constraints on existing services.

Regarding ***Resolves 2***,

APT Members support the introduction of additional satellite systems into the GMDSS, taking into consideration the activities of IMO, while ensuring no additional impact on the services to which the frequency band is allocated, particularly RAS, within the frequency band and the adjacent bands under study. No consensus was reached on Issue B (See also Section 3.2).

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

Regarding ***Resolves 1***,

None.

Regarding ***Resolves 2***,

See Section 3.

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

APT Members are encouraged to contribute their views, including identification of their preferred Method, taking into accounts the ITU-R studies, outcome of the CPM19-2 and draft APT preliminary views, and submit contributions to the next APG meeting (APG19-5) to develop the draft PACP on WRC-19 agenda item 1.8.

**7. Views from Other Organisations**

**7.1 Regional Groups**

**7.1.1 ASMG - Documents APG19-4/INP-09**ASMG Position is to support:

* reviewing the possible regulatory actions for modernization of GMDSS
* adding new satellite systems to GMDSS with insuring compatibility with the current system without adding new constraints on the services on the proposed and the adjacent bands.
* NOC to the frequency allocation table.
* Following-up the on-going studies in ITU-R.

**7.1.2 ATU- Documents APG19-4/INP-09**

On Issue A: modernisation of GMDSS

Method A2, which entails modifications to the provisions of RR to include regulatory provisions for the frequencies to be used for medium frequency (MF) and high frequency (HF) Navigational Data (NAVDAT) systems, in support of GMDSS modernization following related activity in the IMO, to satisfy Issue A.

On Issue B: introduction of additional GMDSS satellite system

Method B1, which entails introduction of additional satellite operator in the GMDSS, as approved by International Maritime Organization (IMO), in order to achieve, redundancy and global coverage in maritime safety services.

**7.1.3 CEPT** - **Document APG19-4/INF-23**

Issue A:

* CEPT supports the introduction of the MF frequencies for international NAVDAT, defined in the Recommendation ITU-R M.2010-0, in RR Article 5. • CEPT opposes of the introduction of the MF frequencies for international NAVDAT, defined in the Recommendation ITU-R M.2010-0, in RR Appendix 15 for this WRC.
* CEPT supports the introduction of the HF NAVDAT frequencies, defined in the Recommendation ITU-R M.2058-0, in RR Appendix 17.
* CEPT opposes of the introduction of the HF NAVDAT frequencies, defined in the Recommendation ITU-R M.2058-0, in RR Appendix 15for this WRC.

Issue B:

* CEPT support regulatory actions to introduce an additional satellite system into the GMDSS as follows: • the frequency band 1621.35-1626.5 MHz used for GMDSS is allocated to the maritime mobile satellite service (for both space-to-Earth and Earth-to-space) on a primary basis
* Regulatory provisions are amended as necessary in order to ensure the protection of services operating in the frequency bands concerned and in adjacent frequency bands is maintained.

**7.1.4 CITEL** - **Document APG19-4/INF-22**

IAP supporting Method B1 to amend Article 5, Table 15-2 of Appendix 15, No. 33.50 and No. 33.53 of Article 33 to enable the introduction of an additional GMDSS satellite system in the band 1 616-1 626.5MHz.

**7.1.5 RCC - Documents APG19-4/INF-24**

For Issue A,

* the RCC Administrations support designating the frequency band 495-505 kHz for digital broadcasting of maritime safety and security related information (NAVDAT LF system).
* The RCC Administrations support designating the frequency bands: 4221–4231 kHz, 6332.5–6342.5 kHz, 8438–8448 kHz, 12658.5– 12668.5 kHz, 16904.5–16914.5 kHz, 22445.5–22455.5 kHz to digital broadcasting of maritime safety and security related information (NAVDAT HF system) provided that the existing conditions for their allocation to radio services are maintained

For Issue B,

* the RCC Administrations support introducing additional non-geostationary MSS satellite networks in GMDSS, subject to their approval by IMO.

**7.2 International Organisations**

**7.2.1 ICAO - Documents APG19-4/INF-04**

ICAO Position:

* 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 to effectively communicate with vessels during disaster relief operations.
* To ensure that any regulatory provisions in response to this agenda item do not adversely impact SARPs compliance of aeronautical mobile-satellite (route) service satellite systems.

**7.2.2 WMO**

No contribution covering this Agenda Item.

**7.2.3 IARU**

No contribution covering this Agenda Item.

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