

ITUEvents

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**3rd ITU INTER-REGIONAL WORKSHOP
ON WRC-19 PREPARATION
(Geneva, 4-6 September 2019)**

Panel Session 5 Maritime Related Issues WRC-19 agenda items 1.8, 1.9.1, 1.9.2

**(plus information on other issues in
AI 1.1, 1.10 and/or 9.1.4 as
appropriate)**

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Organized by:





WRC-19 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)

Resolution **359 (Rev.WRC-15)** 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, including consideration of the MSS allocations used, while ensuring the protection of all incumbent services, including those in adjacent frequency bands, from harmful interference (***Resolves 2***)









WRC-19 agenda item 1.8 (Issue A) – Methods proposed in CPM

Issue A (GMDSS modernization)

- Method A1 - no change
- Method A2 - includes frequencies to be used for medium frequency (MF) and high frequency (HF) navigational data (NAVDAT) systems, in support of GMDSS modernization
- Method A3 - similar to Method A2 with the following conditions:
 - NAVDAT transmits only from coastal stations
 - Usage is subject to agreement to be obtained with affected administrations

WRC-19 AI 1.8 (Issue A) – Regional Positions

Method	 APT	 ASMG	 ATU	 CEPT	 CITEL	 RCC
A1 – No Change						
A2 – Frequencies for MF and HF NAVDAT	Supports – also has views on protection and future work	Supports	Supports	Supports	Supports	
A3 – Frequencies for MF and HF NAVDAT, plus usage conditions						Supports









WRC-19 agenda item 1.8 (Issue B) – Methods proposed in CPM Report

Issue B (Introduction of additional satellite system into the GMDSS)

- | | |
|--|---|
| <ul style="list-style-type: none">• Method B1<ul style="list-style-type: none">• Footnote to identify use in GMDSS• Modifications to RR Nos. 5.364 and 5.368 to avoid inconsistency• Add frequency band 1 616-1 626.5 MHz to App 15 & No.s 33.50 & 33.53• Method B2<ul style="list-style-type: none">• B2a – retain secondary status of MSS allocation<ul style="list-style-type: none">• No change to RR No. 5.364• Footnote to prevent constraints on MSS in adjacent band• B2b – same as B4 & footnote to prevent constraints on MSS in adjacent band• Method B3<ul style="list-style-type: none">• No change | <ul style="list-style-type: none">• Method B4<ul style="list-style-type: none">• MMSS (space-to-Earth) upgraded to primary status in the band 1 621.35-1 626.5 MHz• Identify the band 1 621.35-1 626.5 MHz in APP15 for GMDSS• Modifications to RR Nos. 5.364 and 5.368 to avoid inconsistency• Modification to RR Nos. 5.372 to make protection of RAS mandatory<ul style="list-style-type: none">• Consequential modifications to RR No. 5.208B and Resolution 739 (Rev.WRC-15)• Consequential mods to RR Article 33 and suppression of Resolution 359 (Rev.WRC-15) with regard to <i>resolves 2</i> |
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WRC-19 AI 1.8 (Issue B) – Regional Positions

Method	 APT	 ASMG	 ATU	 CEPT	 CITEL	 RCC
B1 – Footnote for GMDSS use. Mod 5.364 and 5.368 Mod - App 15, RR 33.50 & 33.53	Support resolution of AI – No view on specific method		Supports		Supports	Support resolution of AI – No view on specific method
B2a – Retain secondary NOC RR No. 5.364. Footnote on MSS adj band						
B2b – Same as B4 & footnote on MSS adj band		Supports – some mods to footnote				
B3 – No change						
B4 - MMSS to primary Mod – App 15 for GMDSS Mod RR Nos. 5.372 RAS protection. Consequential mods.				Supports		



WRC-19 agenda item 1.9.1

to consider, based on the results of ITU-R studies, regulatory actions within the frequency band 156-162.05 MHz for autonomous maritime radio devices to protect the GMDSS and automatic identifications system (AIS)

Resolution **362 (WRC-15)** invites studies:

- to determine the spectrum needs and technical and operational characteristics of autonomous maritime radio devices operating in the frequency band 156-162.05 MHz
- to categorize the various autonomous maritime radio devices
- to ensure that no undue constraints are placed on the GMDSS and AIS
- to determine potential regulatory actions and appropriate frequencies for autonomous maritime radio devices within the frequency band 156-162.05 MHz



WRC-19 agenda item 1.9.1 – Methods proposed in CPM Report








Method A: Amend RR App 18 to allow AMRD Group A to operate on channels 70, AIS 1 and AIS 2 of RR Appendix 18.

Method B1: Amend RR App 18 to allow AMRD Group B using AIS-technology to operate on channel 2006. Such use should be in accordance with the latest version of Recommendation ITU-R M.[AMRD].

Method B2: Amend RR App 18 to allow AMRD group B using AIS technology to operate on channel 2006 and AMRD Group B using other, non-AIS, technologies to operate on channels 2078, 2019 and 2079. Such use should be in accordance with the latest version of Recommendation ITU-R M.[AMRD].

Method B3: Amend RR App 18 to allow AMRD group B using AIS technology to operate on channel 2006 and AMRD Group B using other, non AIS, technologies to operate on channels 2078, 2019 and 2079. Such use should be in accordance with the latest version of Recommendation ITU-R M.[AMRD] and AMRD e.i.r.p. shall be limited by [TBD] dBW.

WRC-19 AI 1.9.1 – Regional Positions

	 APT	 ASMG	 ATU	 CEPT	 CITEL	 RCC
A – Allow Grp A to operate on chls 70, AIS1 & AIS2		Supports	Supports	Supports		Not oppose
B1 - Allow Grp B to operate on chl 2006. Rec. ITU-R M.[AMRD] applies	Supports				Supports	
B2 - Allow Grp B AIS to operate on chl 2006. Non-AIS on 2078, 2019 & 2079 Rec. ITU-R M.[AMRD] applies						
B3 - Allow Grp B AIS to operate on chl 2006. Non-AIS on 2078, 2019 & 2079 Rec. ITU-R M.[AMRD] applies. Also AMRD e.i.r.p. limited by [TBD] dBW		Supports	Supports – eirp limited to 100 mW	Supports		Not oppose subject to eirp limit of 100 mW



WRC-19 agenda item 1.9.2

to consider, based on the results of ITU-R studies, modifications of the Radio Regulations, including new spectrum allocations to the maritime mobile-satellite service (Earth-to-space and space-to-Earth), preferably within the frequency bands 156.0125-157.4375 MHz and 160.6125-162.0375 MHz of Appendix 18, to enable a new VHF data exchange system (VDES) satellite component, while ensuring that this component will not degrade the current terrestrial VDES components, applications specific messages (ASM) and AIS operations and not impose any additional constraints on existing services in these and adjacent frequency bands as stated in recognizing d) and e) of Resolution 360 (Rev.WRC-15);

Resolution 360 (Rev.WRC-15) – Consideration of regulatory provisions and spectrum allocations to the maritime mobile-satellite service to enable the satellite component of the VHF Data Exchange System and enhanced maritime radiocommunication



WRC-19 agenda item 1.9.2 – Methods proposed in CPM Report

Method A - NOC to the Radio Regulations except suppression of Resolution **360 (Rev.WRC-15)**.

Method B - New primary allocations to the maritime mobile-satellite service (MMSS) (Earth-to-space) and (space-to-Earth) using frequency plan alternative 2. The coordination mechanism with respect to terrestrial services under RR No. **9.14** is introduced with two options for the pfd-mask.







Method C - The same frequency plan as Method B but with new secondary allocations for the MMSS (Earth-to-space) and (space-to-Earth). Due to the proposed secondary status of the allocation to the MMSS, there is no coordination required between the MMSS and terrestrial services.

Method D – The same as Method C except with the addition of a pfd limit in RR Article **5** in order to protect the terrestrial services. This method includes two options, and the description of the pfd masks.

Method E - Proposes new secondary allocations for the MMSS (Earth-to-space) and (space-to-Earth) subject to agreement in accordance with No. **9.21** of the RR to be limited to the use of the VDES satellite component to ensure compatibility with existing services.

Method F - Proposes new primary allocations to the MMSS (Earth-to-space) and (space-to-Earth) using frequency plan based on alternative 3. Details on the pfd mask for coordination of MMSS (space-to-Earth) with respect to terrestrial services are provided in the section 5/1.9.2/5.5 of CPM Report.

WRC-19 AI 1.9.2 – Regional Positions

Method	 APT	 ASMG	 ATU	 CEPT	 CITEL	 RCC
A - No Change		Supports				
B – Primary allocation to MMSS (E-s) & (s-E). Freq plan 2. Coord RR No. 9.14 to protect terrestrial.	Supports resolution of AI: Secondary allocation. No pfd mask. Frequency plan 3.		Supports	Supports B, option 1	Supports B, option 2	
C – Secondary allocation to MMSS (E-s) & (s-E). Coord not req'd as secondary.						
D - Secondary allocation to MMSS (E-s) & (s-E). Coord not req'd as secondary. Pfd limit to protect terrestrial.						
E - Secondary allocation to MMSS (E-s) & (s-E). Agreement req'd RR No. 9.21 for VDES.						Supports
F - Primary allocation to MMSS (E-s) & (s-E). Freq plan 3.						









WRC-19 – other issues in AIs 1.1, 1.10 and/or 9.1.4

Agenda Item 1.1: *to consider an allocation of the frequency band 50-54 MHz to the amateur service in Region 1, in accordance with Resolution 658 (WRC-15)*







Agenda Item 1.10: *to consider studies on spectrum needs and regulatory provisions for the introduction and use of the global aeronautical distress and safety system, in accordance with Resolution 426 (WRC-15);*

Agenda Item 9.1.4 - Resolution 763(WRC-15) – Stations on board sub-orbital vehicles

WRC-19 AI 1.1 – Regional Positions

Method	 APT	 ASMG	 ATU	 CEPT	 CITEL	 RCC	
A – Primary allocation, Region 1, 50-54 MHz, or part	Support Region 1 allocation in all or part of 50-54 MHz. Need to protect incumbent services in Region 3	No regional position	Support				
B1 – Secondary allocation, Region 1, 50.080-50.280 MHz						Supports	
B2 – Secondary allocation, Region 1, 50-52 MHz for				Supports, plus footnote for primary			
C – Part Primary & part secondary allocation, Region 1, 50-54 MHz, or part							
D – No change							NOC for Region 2

WRC-19 AI 1.10 – Regional Positions

Method	 APT	 ASMG	 ATU	 CEPT	 CITEL	 RCC
A – Mod Art. 30 & new Art. 34A recognizing GADSS	Supports			Supports mods to Chapter VII but no specific details	Supports	
B – Mod Art. 30 & new Art. 34A recognizing GADSS (diff to Method A), plus new Resolution			Supports			Supports, but if not sufficiently specified then NOC
C – No change		Supports				

WRC-19 AI 9.1, Issue 9.1.4 – Regional Positions

 APT	 ASMG	 ATU	 CEPT	 CITEL	 RCC
<p>No change. Support ongoing studies</p>	<p>No change</p>	<p>No change</p>	<p>No change</p>	<p>No change. Further consideration needed</p>	<p>No change. Need to develop tech & operational measures via ITU-R Recs</p>