

Report of the ITU Conference Preparatory Meeting, Geneva, 23th March to 2nd April 2015

Int. Organization:	International Telecommunication Union - Conference Preparatory Meeting:
IALA interest:	Maritime mobile service including Global Maritime Distress and Safety System (GMDSS) and radiodetermination service
Specific:	AGENDA ITEM 1.16: spectrum allocations to enable possible new Automatic Identification System (AIS) technology applications and possible new applications to improve maritime radiocommunication in accordance with Resolution (development of VDES)
Meeting	ITU CPM meeting, Geneva, 23 March to 2 April 2015 Second session of the 2015 Conference Preparatory Meeting for the purpose of preparing the CPM Report to the World Radiocommunication Conference 2015 (WRC-15) and to address preparatory studies for the following Conference
IALA participation	Stefan Bober

Report of the meeting related to IALA specific interest on the development of VDES (Agenda Item 1.16)

The goal of this agenda item is to consider potential new and enhanced applications of the automatic identification system (AIS) technology for improvement of the maritime radiocommunication. New applications using AIS technology are intended to improve the safety of navigation and applications depending on information that is to be exchanged between ships, and between ships and shore.

According to the complexity four issues have been identified to develop methods to satisfy the agenda item. For each of these issues methods to satisfy the agenda item have been developed. The issues are complementary to each other.

Issue A: Application-specific messages, identification of new channels, protection of AIS1, AIS2 from blocking

- Method A1 identifies the channels 2027 and 2028 of RR Appendix 18 for the application-specific message (ASM) not necessary for the safety of navigation and ensure protection of AIS1, AIS2, 2027 and 2028 by not allowing ships to transmit on channels 2078, 2019, 2079 and 2020.
- Method A2 identifies alternate channels 87 and 88 for the ASM channels and ensures the protection of AIS 1 and AIS 2 by power limitation on channels 2078, 2019, 2079 and 2020.
- Method A3 identifies the channels 2027 and 2028 of RR Appendix 18 for the application-specific message (ASM) not necessary for the safety of navigation and ensure protection of AIS1, AIS2, 2027 and 2028 by appropriate actions including not allowing ships to transmit on channels 2078, 2019, 2079 and 2020.

Issue B: New applications for the maritime radiocommunication – terrestrial component

- Method B1 identifies the channels 24, 84, 25 and 85 for the terrestrial component of the VDE.
- Method B2 identifies the possibility to use the channels 24, 84, 25, 85, 26 and 86 for the terrestrial component of the VDE.

Issue C: New applications for the maritime radiocommunication – satellite component

- Method C1-A identifies a secondary allocation for the maritime mobile-satellite service (MMSS) (Earth-to-space) on the VDES channels 1024, 1084, 1025, 1085, 1026, 1086, 2027 and 2028. It also identifies a secondary allocation for the MMSS (space-to-Earth) on the VDES channels 2024, 2084, 2025, 2085, 2026 and 2086. To ensure protection of mobile and fixed services, it is proposed that a pfd mask be introduced in a new footnote to RR Article 5. To ensure protection of the nearest frequency band allocated to the radio astronomy service (RAS), modification of RR No. 5.208A and No. 5.208B are proposed.
- Method C1-B identifies a secondary allocation for the maritime mobile-satellite service (MMSS) (Earth-to-space) on the VDES channels 1024, 1084, 1025, 1085, 1026, 1086, 2027 and 2028. It also identifies a primary allocation for the MMSS (space-to-Earth) on the VDES channels 2024, 2084, 2025, 2085, 2026 and 2086. To ensure protection of mobile and fixed services, it is proposed that a pfd mask be introduced in Annex 1 to RR Appendix 5. To ensure protection of the nearest frequency band allocated to the radio astronomy service (RAS), modification of RR No. 5.208A and No. 5.208B are proposed. To ensure coordination with the terrestrial service provision of RR No. 9.14 shall apply, this is done by the modification of RR No. 5.226B.
- Method C2 identifies the frequency band 148 150 MHz (Earth-to-space) for the VDES satellite uplink, which is currently allocated to the mobile satellite service. It also identifies the frequency band 137-138 MHz (space-to-Earth) for the VDES satellite downlink, which is currently allocated to the mobile satellite service. No additional allocations or RR changes are required.

Issue D: VDES regional solution

- Method D provides a regional VDES solution, utilizing channels 80, 21, 81, 22, 82, 23 and 83.

Observations of the meeting:

IALA proposes channel plan A which transfers to methods A1+B1+C1-B of the above mentioned CPM text.

Issue A

Identification of ASM is widely supported (except for Russia). Both method A1 and A3 are very similar.

Issue B

The terrestrial component of channel plan A is supported by a vast majority of country; China is supporting the method B2

Issue C

The satellite component is widely supported (except from Russia) but with some difference in the regulatory introduction between Canada, China and Europe (C1-A and C1-B)

Further input by IALA

Further discussions on those issues will be held during the next meeting of ITU WP 5B in July 2015.

- IALA is invited to provide further input to ITU draft new report [VDES SELECT] to give additional rationales for channel plan A
- IALA is invited to further develop all aspects of VDES and provide input to ITU draft new report [VDES] (in track changes in the current document)
- IALA is invited to actively participate at that meeting.