



Input paper for the following Committee(s):

- ☒ ARM
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 ☐ VTS

Purpose of paper:

- ☐ Input  
☒ Information

Agenda item

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## REPORT OF ITU-R WP5B MEETING 6<sup>TH</sup> TO 17<sup>TH</sup> NOVEMBER 2017 AND Report of ITU-R WP5B meeting 21<sup>st</sup> May to 1<sup>st</sup> June 2018

### 1 INTRODUCTION

In the time period between IALA Committee meetings autumn 2017 and autumn 2018 ITU-R WP 5B held two meetings from 6th to 17th November 2017 and from 21<sup>st</sup> May to 1<sup>st</sup> June 2018. IALA was represented by Mr. Stefan Bober.

IALA had a specific interest in Maritime mobile service including Global Maritime Distress and Safety System (GMDSS) and radiodetermination service, with particular emphasis on the development of VDES, VDE-SAT, AIS and autonomous radio devices (AMRD) operating in the maritime VHF mobile band.

IALA had submitted input documents to ITU-R Working Party 5B (WP 5B) meetings in November 2017 and May 2018:

1. Liaison Notes regarding agenda item 1.9.1 WRC-19 (AMRD).
2. Liaison Notes regarding agenda item 1.9.2 WRC-19 (VDE-SAT) and
3. Liaison Note regarding revision of Recommendation ITU-RM.1371-5 (AIS).

### 2 ISSUES RELATED TO IALA WORK ADDRESSED DURING ITU-R WP 5B

#### 2.1 VDE Satellite as component of VDES (agenda item 1.9.2 (WRC-19))

WRC 15 WP5B continued working towards a Preliminary Draft New Report ITU-R M.[VDES-SAT] in response to WRC-15 Resolution 360. This report provides a summary of why a VDES satellite component is required, identifies the spectrum requirements, provides a technical description of the satellite component of VDES and the results of the appropriate sharing and compatibility studies. The input documents of IALA and from others were incorporated into the document.

However, different opinions regarding the protection criteria to other systems remain unsolved. Especially Russia still questions if the protection criteria as defined in Recommendation ITU-R M.2092-0 are sufficient.

Moreover the alternative frequency plan for VDE satellite downlink, as proposed by IALA, is under discussion. Japan proposed a modified frequency plan for that purpose.

ITU WP 5B also finalised the draft CPM Text for the submission to the Conference Preparatory Meeting. The draft CPM-Text will be consolidated during CPM in 2019. The CPM Text contains a Report on the ITU-R preparatory studies and possible solutions to the WRC agenda items, so called methods. The CPM text is to be used in support of the work of World Radiocommunication Conference 2019.



The draft CPM text contains 6 different methods for the solution of agenda item 1.9.2 (VDE SAT). Three of them are somehow in relationship to IALA's proposal on VDE SAT:

- Primary allocation for the 500 kHz with the pfd mask of 2092 (METHOD B)
- Primary allocation for the 500 kHz with a modified pfd mask (METHOD E)
- Secondary allocation for the 500 kHz with no pfd mask define (METHOD C)

**=> IALA may consider developing its own position on the proposed solutions in the CPM text for VDE SAT and my select one method which IALA may support in the communication with its members.**

**=> IALA is invited to further contribute to the development of the study on VDE satellite, especially to provide result of studies that show that the given protection criteria in Recommendation ITU-R M.2092-0 are sufficient.**

## **2.2 Autonomous maritime radio devices (AMRD) (agenda item 1.9.1 (WRC-19))**

WP 5B continued the work towards a new Draft Recommendation ITU-R M.[AMRD] defining autonomous maritime radio devices (AMRD) and their technical and operational characteristics. An AMRD is a mobile station operating at sea and transmitting independently of a ship station or a coast station.

Two groups of AMRDs are identified:

- Group A: AMRDs that enhance the safety of navigation, which uses the AIS channels or DSC VHF channel,
- Group B: AMRDs that do not enhance the safety of navigation, which shall use other channels assigned by WRC-19.

In this framework future amendments to Recommendations ITU-R M.1371 (AIS), ITU-R M.493 (DSC) and ITU-R M.585 (Identities in the maritime mobile service) might be required. WP 5B continued the work towards a new report "New Maritime Numbers (NEW\_MARNUM).

ITU WP 5B also finalised the draft CPM Text on agenda item 1.9.1 (AMRD). Four methods to satisfy this agenda item were developed.

- Method A considers amendments to RR Appendix 18 to allow AMRD group A to operate on AIS channels.

Three methods consider the harmonisation of the spectrum use for AMRD group B.

- Method B1 aims to use channel 2006 in RR Appendix 18 for AIS technology
- Method B2 aims to use channels 2078, 2019 and 2079 in RR Appendix 18 for non-AIS technology
- Method B3 aims to use the frequency band 161.4375 – 161.4875 MHz for non-AIS technology.

A liaison note to IMO and IALA was drafted on that issue.

**=> IALA is invited to contribute to the work on AMRD at ITU, especially on accepted applications of AMRDs Group A and their possible relationship to Mobile AtoN.**

**=> IALA may consider informing IMO on the definition of Mobile AtoN at the upcoming Joint IMO/ITU Expert Group meeting in first week of September 2018 as AMRD will be a topic on the agenda of that meeting.**

## **2.3 Revision of Recommendation ITU-R M.1371-5**

Input from China, USA and IALA proposing several changes to the existing AIS was received. WP5B started working towards the revision of ITU-R M.1371-5 but will continue at the next meetings.

**=> IALA may invite China and the USA to provide the proposed changes to ITU-R M.1371-5 to its committee meetings as well. IALA can provide the view of AtoN administrations as well as the expertise of manufacturers and integrators of AIS in the discussion of changing the AIS standards.**



## 2.4 Support modernisation of GMDSS – NAVDAT (agenda item 1.8 (WRC-19))

The CPM text proposes a method to satisfy WRC-19 agenda item 1.8; Includes frequencies to be used for medium frequency (MF) and high frequency (HF) NAVDAT systems, in support of GMDSS modernization.

Navigation data (NAVDAT) system is a kind of digital system for broadcasting maritime safety and security related information from shore-to-ship. NAVDAT is counted as an enhancement of existing NAVTEX and could be considered as a potential entity in next generation of GMDSS.

IMO will approve the revision of SOLAS chapter III and IV in 2022. For this reason, it will be important to keep on the agenda for WRC-23 the modernisation of the GMDSS. However, some actions could be considered and taken for the WRC-19. The regulatory recognition of the frequencies for the MF and HF NAVDAT could facilitate the work during the WRC-23. It will also help the administration given sufficient time to make available those frequencies for the MF and HF NAVDAT.

=> **IALA may observe this development and inform their membership accordingly.**

## 3 RELATED DOCUMENTS

- Liaison to IMO and IALA on AMRD
- Preliminary draft new report ITU-R M.[VDE SAT]
- Preliminary draft new Recommendation ITU-R M.[AMRD]
- Preliminary draft revision of Recommendation ITU-R M.1371-5
- ITU-WP5B-3 WORKING DOCUMENT TOWARDS DRAFT CPM TEXT AGENDA ITEM 1.9.1 (AMRD)
- ITU-WP5B-3 WORKING DOCUMENT TOWARDS DRAFT CPM TEXT AGENDA ITEM 1.9.2 (VDE-SAT)

## 4 IALA IS REQUESTED TO

**Note** this report on ITU-R WP5B meetings and the liaison note from ITU WP5B to IALA.