



13 – INTERNATIONAL

13.2 – ITU

13.2.1 – Report on current progress and objectives regarding VDES and ITU

Note by the IALA representative at ITU
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1. BACKGROUND

The VHF Data Exchange System (VDES) concept was developed to address emerging indications of overload of the VHF Data Link (VDL) of AIS and simultaneously enable a wider seamless data exchange for e-navigation, potentially supporting the modernization of GMDSS.

2. DEVELOPMENT OF VDES AT ITU

IALA has been involved in the development of VDES in close cooperation with ITU since the beginning.

- In 2008 IALA developed its vision and strategy for maritime systems proposing a significant shift from analogue to digital communications in the VHF maritime mobile band;
- ITU World Radiocommunication Conference 2012 (WRC-12) identified eight radio channels to enable new applications using digital data exchange on a trial basis;
- 2012 to 2015 IALA developed the concept of the VHF data exchange system (VDES) integrating the components AIS, ASM, VDE terrestrial and VDE satellite. IALA, in close cooperation with ITU, was the focal point for the development of VDES, e.g. - Selection of the channel plan for a VHF data exchange system (Report ITU-R M.2371) - Technical characteristics for a VHF data exchange system in the VHF maritime mobile band (Recommendation ITU-R M.2092).

ITU World Radiocommunication Conference 2015 (WRC-15) designated radio channels for global use of VDES for the components ASM and VDE terrestrial. However the decision for the component of VDE satellite was postponed to WRC -19 due to missing compatibility studies. WRC request further studies on sharing and interoperability between VDE satellite and other incumbent radio services (Resolution 360).

3. CURRENT PROGRESS AND OBJECTIVES

3.1. The current development on VDES at ITU is focusing on:

- Development of sharing studies for VDE SAT in response to WRC-19 agenda item 1.9.2; IALA is one of the main contributors to those studies. The studies will also include results from field trials;
- Preparation of documentation for the next WRC-19; IALA contributes to the preparation of the draft text on VDES for the Conference Preparatory Meeting (CPM);
- Revision of Rec. ITU-R M.2092; IALA is working towards the revision of ITU-R M.2092. to reflect the outcome of WRC-15 and to further develop the VDES technology.



The work towards WRC-19 is progressing well. In ITU there is substantial support for VDE SAT and constructive dialog on the way forward.

3.2. IALA is also contributing to:

- The revision of Recommendation ITU-R M 1371-5 (AIS); IALA is the focal point for AIS development;
- WRC-19 agenda item 1.9. 1 Autonomous Maritime Radio Device (AMRD); IALA may contribute to the definition and categorization from its expertise in maritime Aids to Navigation;
- Draft new ITU report on An overview of systems in the maritime mobile radiocommunication service and their mode of operation; This work is based on the IALA Maritime Radio Communication Plan (MRCP).

To emphasise the contributions from IALA at ITU a “Briefing Note to ITU-R WP 5B Representatives on digital maritime communications” was distributed to IALA members with the request to contact their national ITU representation seeking for support of the IALA contributions at ITU WP 5B.

4. THE COUNCIL IS REQUESTED TO

Note the report on current progress and objectives regarding VDES and ITU.