

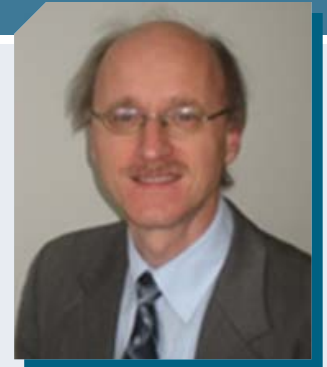
# Title Abstract: Developments in maritime radio communication - Outcome of the World Radiocommunication Conference 2019

**Topic: Connectivity and resilient PNT**

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Stefan Bober is a senior engineer within the Traffic Technologies Centre of the German Federal Waterways and Shipping Administration. Since 1987 he has been working on radio aids and transponder techniques. He has been involved in several projects concerning AIS and in the development of the German AIS Service for maritime and inland navigation. He is actively engaged in the AIS and VDES standardisation process. Stefan Bober is member of various national and international working groups dealing with development and standardisation of AIS and VDES. He is member of the Telecommunication WG within the IALA e-Navigation Committee, chair of IEC AIS WG and chair of the European expert group for Vessel Tracking and Tracing for Inland Navigation. He represents IALA at the International Telecommunication Union (ITU).



## Abstract:

The availability of appropriate maritime radio communication systems is essential for the introduction of e-Navigation and the digitisation of the shipping. IALA has been always involved in the development and the introduction of digital maritime radio communication systems. Prominent examples are the introduction of AIS in the 2000's and the ongoing work on VDES, where IALA is the focal point of the process. IALA publishes the Maritime Radio Communication Plan (MRCP), which provides an overview of systems in the maritime mobile radio communication service and their mode of operation.

New developments in digital radio communication systems will bring more dynamic in the application of e-Navigation solutions and new digital applications for the maritime industry. Topics on the agenda of the World Radiocommunication Conference 2019 (WRC-19) include Satellite component of the VHF Data Exchange System (VDE-SAT), Autonomous Maritime Radio Device (AMRD), Navigational Data System on HF for broadcasting maritime safety and security related information (NAVDAT), digital voice service on maritime VHF and R-Mode applications in the marine VHF band.

The paper will present the outcome of the WRC-19 and its consequences for the work at IALA and other international standardisation bodies for the development of digital maritime radio communication systems.