

## **RTCM 12301.1, Standard for VHF-FM Digital Small Message Services, July 2009**

This 4-page standard specifies the minimum functional and technical requirements for VHF-FM Digital Small Message Services (VDSMS). VDSMS are designed to be embodied within an item of equipment capable of receiving and transmitting VHF communication. This is not an equipment standard. VDSMS are intended to provide for short messaging from ship-to-ship, shore-to-ship and ship-to-shore.

VDSMS are intended to operate on frequencies in the international VHF Marine Band defined in Appendix 18 of the International Radio Regulations (RR Ap 18), unless otherwise restricted by regulation. VDSMS may share channels with other services (e.g. voice services) on a non-interference basis. The VHF Data Link (VDL) access method for VDSMS is intended to ensure that a call in progress is not disrupted. VDSMS transmissions have a limited duration and a limited duty cycle to ensure the availability of the channel for other users. VDSMS transmitter emissions masking is intended to protect the users of the adjacent channels.

The body of this standard includes general requirements for VDSMS. Requirements for specific technology implementations will be contained in future separate Annexes that will include packet data structure, message types, error detection/correction and other technical details associated with each technology.