Paper for Consideration by HSSC 16

S-124 data dissemination

Submitted by:	France
Executive Summary:	This paper complements paper HSSC16-07.1C from Germany
Related Documents:	S-124, ITU-R M.2010-2 and M.2058-1, WRC-23 resolution 364 "Coordination of services provided by the NAVDAT system"
Related Projects:	e-navigation

Introduction / Background

The paper HSSC16-07.1C recalls and underlines the conditions that apply to MSI dissemination systems within the framework of the SOLAS Convention and of the ITU-R Radio Regulations (RR).

The dissemination of MSI data requires systems other than those currently identified by IMO MSC.1/Circ.1645 (NAVTEX, EGC, HF NBDP).

The World Radio Conference 2023, instructed by the ITU, has acknowledged NAVDAT as a system for MSI dissemination and amended Appendix 15 of the RR to include the two international frequencies of NAVDAT: 500 kHz in the MF band and 4 226 kHz.

Analysis/Discussion

The NAVDAT digital system for broadcasting maritime safety and security related information from shore-to-ship is subject of ITU-R M.2010-2 and M.2058-1 publications (500 kHz and 4 226 kHz) and of WRC-23 resolution 364 "Coordination of services provided by the NAVDAT system".

NAVDAT is designed to distribute data files in a range similar to that of NAVTEX.

The S-124 Navigational Warnings product specification specifies that S-124 datasets are contained in data files.

S-124 does not specify the technical means by which the S-124 files are distributed.

E-navigation technical service concept does not only rely on IP based web services.

Conclusions

NAVDAT is a valid candidate for broadcasting S-124 data from shore to ship in accordance with GMDSS/MSI communication requirements and to contribute to e-navigation.

Recommendations

The NAVDAT system should be considered for dissemination of data at sea, in particular for MSI data which is the purpose of e-navigation MS 5 coordinated by the IHO (WWNWS-SC).

Other MSI data dissemination systems could be identified to complement the NAVDAT solution, taking into account MSI requirements.

Justification and Impacts

S-124 data have a high added value for e-navigation. They are not very complex to produce. Production systems are already being developed. In April 2024, France launched its PING platform, which will soon be delivering S-124 data. PING's source code will then be available under an open license for other countries to reuse it. The availability of S-124 data is therefore not far off.

The provision of S-100 MSI data should stimulate the modernization of the GMDSS, which must go hand in hand with e-navigation. The NAVDAT system meets this dual challenge.

Action Required of HSSC

The HSSC is invited to note the paper.