

Report to the North Sea Hydrographic Commission from North Sea Maritime Safety Information Working Group

Submitted by GBR

SUMMARY

Executive Summary: The report summarises the discussions and outcomes of the 3rd meeting of NSMSIWG held Between the 28th and 29th of November 2023.

Action to be taken:

Related documents: 3rd NSMSIWG Minutes
NSMSIWG Terms of Reference
Report to the North Sea International Charting Co-ordination Working Group (NSICC) on the progress of S-124 implementation within NAVAREA I

1. Background

- 1.1 The 3rd meeting of the NSMSIWG was a hybrid meeting held in Taunton, UK on the 28th and 29th November 2023. The meeting was attended by representatives from Belgium, Denmark (inc. Faroe Islands) France, Germany, Iceland, Norway, Sweden and UK.
- 1.2 This meeting was primarily aimed at establishing the current level of understanding of the S-124 standards of each member state and to agree a roadmap for a consistent approach to implementing an S-124 service for the 1st January 2026.
- 1.3 The meeting also considered NAVTEX capacity, actions and outcomes from WWNWS and future MSI technologies amongst other agenda items.



2. Terms of reference (ToR)

- 2.1 Action 7/2023 C.2 of the NSHC requested NSMSIWG to consider revising ToR/WP with regard to coordination of S-124, until NSHC37.
- 2.2 The chair provided a draft update to the ToR to the WG which encompassed adding S-124 coordination and implementation.
- 2.3 There was much discussion on whether the scope of the WG was limited to S-124 or whether it should consider related standards which may require coordination with S-124 (including S-125 & S-201) or share the same broadcast technologies such as the S-4xx (Meteorological services).
- 2.4 It was noted by the METAREA I coordinator, that there is no similar group to NSHC or NSMSIWG at WMO (World Meteorological Organization).
- 2.5 It was agreed that S-124 (Navigation Warnings) should be the focus of the group and that NSMSIWG should request NSHC to provide guidance on the scope of the NSMSIWG in regard to related standards noting that MSI provides for both Navigational warnings and Meteorological Warnings and Forecasts as per IMO resolution A.705(17).
- 2.6 A draft ToR was produced for consideration by NSHC including the addition of *“Promote the development of IHO S-124 Navigation Warning standards and coordinate its implementation in the North Sea Hydrographic commission area, whilst giving consideration to other S-100 based MSI services.*

3. S-124 implementation

- 3.1 Decision 7/2023 C.2 and Action 8/2023 C.2 tasked the NSMSIWG with reporting to NSICCWG in the progress of S-124 implementation.

- 3.2 NSMSIWG has produced a report to NSICCWG on the progress on S-124 implementation. Reports from each member state and S-124 implementation progress can be found in the report to NSICCWG.
- 3.3 It was noted at the meeting that NSMSIWG will need to coordinate with BSMSIWG (Baltic Sea MSI Working Group) on the implementation of S-124 as both RHC's are within the area of NAVAREA I.
- 3.4 In summary, the majority of members are aware of the standards and are planning to have a service by 2026 however current understanding of the standard is limited. There are several operational hurdles to overcome before 2026 including the lack of production & validation systems or clear direction of how MSI will be promulgated. Ongoing dual-fuelling of both S-53 and S124 is likely to be an ongoing challenge and may add to the costs of services. Harmonisation between S-100 services and a consistent approach to this throughout the World Wide Navigation Warning Service will be essential to its success.

4. NAVTEX Capacity

- 4.1 The chair wish to highlight the challenges in the UK with NAVTEX infrastructure capacity. At WWNWS15 the UK made the following statement:

“With an increase in offshore development, activity, and continual growth of vessel traffic around the UK, the UKHO is now receiving a higher volume of viable information concerning potential risks to navigation than can be consistently transmitted over NAVTEX. This additional load on the system is carefully managed and clear procedures are in place for prioritisation to ensure mariners remain in receipt of critical and important warnings. It has been noted that NAVTEX capacity becomes more of an issue during periods of poor weather where more frequent and larger Met Warnings and forecasts are produced and where there are attendant increases in reports of navigational hazards. However, to mitigate against the potential for Navigation Warnings being withheld from broadcast, changes are required to ensure that the mariner continues to receive the appropriate information, via the appropriate service.

NAVTEX remains a reliable and robust method for the promulgation of MSI in the UK but to meet the rising demands in the marine environment, the service needs to be optimised to accommodate the volume of information for which it was not originally designed. On considering the development of S-124 in line with the IMO's e-Navigation Strategy on the provision of MSI, standardised geographical areas have been proposed to replace their existing naming conventions (Shipping forecast areas). Not only will this aid in reducing the size of our Navigation Warnings, it will also make warnings more consistent and compatible in developing S-124 by allowing for a degree of automation in the future.

Due to the density of NAVTEX services in NAVAREA I, establishing new stations or amending existing service areas is not considered a practical or efficient solution at this time.”

- 4.2 It was noted by Sweden that they have similar issues with their ariels at Gisloveshammer.
- 4.3 Norway acknowledges that during the winter months, more warnings were issued, but that capacity is managed and they do not overrun their timeslot.
- 4.4 The German aerial at Pinneberg was managed by only keeping warnings in force for 2 weeks before publishing them elsewhere, but that Wind farm development is and will continue to produce a lot of warnings.
- 4.5 The UK shared a presentation on upcoming changes to UK Coastal warnings which were intended to reduce the size of warnings and free up NAVTEX capacity. These changes entered into force in December 2023.
- 4.6 All member states acknowledged that that robust procedures should be in place to manage capacity and that all NAVTEX coordinators should ensure they do not overrun their timeslots.

5. Review of NAVAREA I WNWNS Self-assessment & Outcomes of WNWNS

- 5.1 The chair highlighted the concerns around completing the self-assessment and time scales in having information returned from member states.
- 5.2 The chair presented the latest report submitted to WWNWS.
- 5.3 It was noted that the self-assessment form was not in a good state and review of the form should be recommended to WWNWS.
- 5.4 It was noted that some of the data requested by WWNWS was difficult to obtain due to the age of equipment and software.
- 5.5 It was questioned as to whether the data produced was actually used by the IHO.
- 5.6 The chair provided a summary of the outcomes of WWNWS including:
- The progress of implementation of BeiDou Message Service System (BDMSS) at IMO and likely impact on GMDSS and WWNWS.
 - Update on the review of IMO Resolution A.1001(25) Criteria for the Provision of Mobile Satellite Communication Systems in the Global Maritime Distress and Safety System (GMDSS).
 - Upcoming changes to S53 IMO/IHO/WMO Joint Manual on Maritime Safety Information due to be published on 1st January 2025.
 - Harmonisation of IMO Resolutions A706 (17) (World-Wide Navigational Warning Service) and A707(17) (Charges for Distress, Urgency and Safety Messages)
 - Report from the Space Activity Working Group, noting the increased space activity within the North Sea.
 - Report of Volcanic Activity Working Group.

6. New MSI technologies

- 6.1 Sweden provided an overview of the MaDaMe (Maritime Data Methods for Safe Shipping) project. Services likely to be developed and piloted as part of the project include Digital Navigational Warnings, Digital Navigational Warnings Digital VTS (Vessel Traffic Services) services.
- 6.2 There was a discussion on VDES and its implementation as part of a Navigational Warning service. Denmark and Sweden confirmed that the MaDaMe Project was focussed on utilising VDES terrestrial technology. Operational concerns were raised regarding range, data transfer rate and implementation during the dual-fuel period. Norway noted that VDES could be a good way of promulgating local navigation warnings complementing the existing GMDSS services.
- 6.3 There was a discussion on NAVDAT and its possible future inclusion in GMDSS. France confirmed that ITU had just granted approval for the NAVDAT MF and HF frequencies to be appended to appendix 15 of the Radio Regulations. There was a conversation about the use case for NAVDAT as part of an MSI service. There was also discussion around range, data transfer rates and ongoing coordination.
- 6.4 There was extended discussion about the use of MCP (Maritime Communications Platform) and SECOM (Secure Communications) as part of the S-124 Navigation Warning Service. It was confirmed that warnings sent over IP (Internet Protocol) via services such as MCP would be a value-added service and that would not meet the vessels SOLAS requirements. To make a S-124 IP service compliant a significant amendment to SOLAS would be required and this would fundamentally change the principal of GMDSS.
- 6.5 France gave a brief update on PING, a navigational warning production system. France reminded the group that public IP's would allow access for members to test a beta version of Ping. Members wishing to access PING development project for a demonstration should share Public IP addresses with Yves Le Franc.

7. NAVAREA Geometries

- 7.1 Currently the NAVAREA limits are listed from the coastline to a position (Lat.Long) i.e 48° 27'N, 004° 46'W (France West coastline) to 48° 27'N, 035° 00'W to 66° 30'N, 035° 00'W

To enable machine reading and to provide a closed polygon, all NAVAREA's have been requested by WVNWS to agree the limits of the NAVAREA.

- 7.2 Chair asked the group to provide a line outlining the extent of their coastline so it could be incorporated into the wider NAVAREA boundary.

8. NAVAREA coordination

- 8.1 The chair as NAVAREA coordinator thanked national coordinators for their continued support.
- 8.2 The chair noted challenges with new types of hazards and operations which are impacting the NAVAREA, including Space operations and offshore activities.
- 8.3 The chair highlighted the importance of coordination between neighbours and the timely transfer of data.
- 8.4 The chair highlighted the support that could be provided by NAVAREA I coordinator in the issuing of NAVAREA warnings, coordination between national coordinators and technical support.

9. NSHC file sharing, document storage and website

- 9.1 It was noted that there are some difficulties with file sharing and making documents publicly available.
- 9.2 It was noted that the Baltic Hydrographic Commission has a website for storing information, operational contacts and meeting minutes and actions.
- 9.3 It was noted that the IHO website may also provide a solution for NSHC working groups to store data.

10. Actions requested?

- 10.1 Note the report.
- 10.2 NSHC to determine whether the work of the NSMSIWG is limited to S-124 or should include other related standards such as S-201, S-125 & S-4xx.
- 10.3 NSHC to review the updated ToRs based upon decisions made in action 10.2.
- 10.4 NSHC to note the current issues with NAVTEX capacity experienced by some members.
- 10.5 NSHC to consider providing website or other file sharing capabilities to NSMSIWG.