

68th Meeting of the Nordic Hydrographic Commission (NHC68) Helsinki, Finland 2 & 3 April 2025

Contribution to the IHO Work Programme 2025

Task 3.2.1.7

Prepare for and report meetings of the Regional Hydrographic Commissions: NHC

High level summary:

- The meeting agenda focused on maritime digitalization and its development, particularly from a hydrographic perspective.
- e-Navigation and S-100 standards are key concepts in advancing the maritime sector, aiming to improve the safety, efficiency, and environmental sustainability of shipping through digital technology and standardized information exchange.
- All Nordic authorities are working closely to promote these concepts across sea areas.

Details:

The 68th Meeting of the Northern Hydrographic Commission (NHC68), was held from 2 to 3 April 2025 in Helsinki, Finland.

The meeting was chaired by Mr Rainer Mustaniemi, National Hydrographer of Finland. Fourteen delegates from five Member States (Denmark, Finland, Iceland, Norway, and Sweden) participated in the meeting. The IHO Secretariat was represented by Secretary-General Dr Mathias Jonas.

The meeting commenced with welcome words by Jouni Lappalainen (PhD), Head of the Finnish Hydrographic Office. The meeting proceeded with the approval of the agenda and the matters arising from the previous NHC67 Meeting and the respective list of actions.

Secretary-General Dr Jonas reported on the general progress on the global implementation of the S-100 roadmap and the preparations of the forthcoming UN Ocean Conference in Nice, France in June 2025

Member States provided their detailed national reports. All countries reported about notable investments in technical and human resources for the uptake of S-100 based data production and services. A lively discussion arose about the share of the world fleet of ships on international voyages carrying ECDIS.

In order to coordinate these transition processes regionally, it was agreed to continue with the support of the regional Nautical Chart Production Experts Group (NCPEG) that supports the engagement with new standards and the future of paper charts for instance, or matters on compilation of hydrographic and other chart data (bathymetric, terrain, fairways, AtoNs, etc.). The working group is formed by technical experts with marine data and cartographic background. The Commission also confirmed the ongoing existence of the Nautical Survey Experts Group (NSEG) with a focus on the automation of post-processing of survey data, mainly data cleaning.



The Commission received reports on recent activities of the relevant IHO subordinate bodies such as HSSC, IRCC, WENDWG and GEBCO Guiding Committee.

Sweden reported on the planned commercial rollout of the Baltic Sea e-Nav in 2026. For S-101 ENCs, full coverage of the major shipping routes in the Baltic Sea expected while S-102 Bathymetry will cover most relevant shipping routes, fairways and harbor approaches, where hydrographic survey data of sufficient quality is available. The amending data service for S-104 Water Level and S-111 Surface Currents of the Finnish Meteorological Institute (FMI) will establish overview services for mostly the Finnish areas of the Baltic Sea. Swedish Estonian Met Offices are also partly involved.

The lessons learned from the S-57 the implementation have shown that establishing harmonization routines before production, reduces duplication of efforts for HO's and enhances safe of navigation. As the implementation of S-100 approaches, along with the dual-fuel transition period, it is important to create new harmonization processes to ensure continued ENC consistency in the Baltic Sea. This has been a priority in the project. After 15 years of experience, previous S-57 ENC recommendations have been re-evaluated, and new recommendations have been formulated for S-101 ENCs. Harmonization recommendations were created for:

- Harmonization of scales
- Harmonization of scale minimum (SCAMIN)
- Harmonization of features
- Production routines to ensure harmonization
- Baltic Sea roll-out plan for S-101

A draft of the new S-101 harmonization recommendations was completed in December 2024. It will be submitted to the Baltic Sea Hydrographic Commission for approval in September 2025.



Photos



Group photo of the participants at the NHC68 Meeting

Ongoing test of the S-100 products



- All HOs have delivered ENC S-101, ed 2.0.0 and bathymetry S-102 ed 3.0.0 to a test server.
- FMI has produced S-104 and S-111.
- RENCs have setup test server to test the delivery chain.
- First test is ongoing March April 2025. Second test planned for October 2025.
- Feedback loop to data producers to refine the products.





Progress in the implementation of the Baltic Sea e-nav Project



Upcoming meeting:

The 69th meeting is scheduled for spring 2026 – ideally before the IHO Assembly – to be in Reykjavik, Iceland.