

31st Baltic Sea Hydrographic Commission
Klaipėda, Lithuania
22 – 24 September 2026

Contribution to the IHO Work Programme 2026

Task 3.2.1.2

Support the Regional Hydrographic Commissions (RHCs) through participation of the Secretariat in RHC meetings – Baltic Sea Hydrographic Commission (BSHC)

High level summary:

- BSHC-31 was the first Commission meeting hosted and chaired by Lithuania as a full Member State of the IHO, closing a year of Lithuanian chairmanship led by Mindaugas Zakarauskas (LTSA).
- The Commission approved regional harmonisation guidance for S-104 (water levels) and S-111 (surface currents), completing the set of Baltic harmonisation rules begun with S-101 and S-102 at BSHC-30 and keeping the Baltic at the forefront of coordinated S-100 implementation.
- The EU funded Baltic Sea e-Nav project reported completed simulator and sea trials, a commercial S-101/S-102 rollout on the main Baltic shipping routes in 2026, and approval of a follow-on project, DynaNav ÖKS, for S-104, S-111 and S-124 services.
- The BSHC signed a Memorandum of Understanding with the Nippon Foundation–GEBCO Seabed 2030 Project, becoming the third Regional Hydrographic Commission to do so.

Details:

The 31st Baltic Sea Hydrographic Commission (BSHC) convened in Klaipėda, Lithuania, from 22 to 24 September 2026, chaired by Mindaugas Zakarauskas of the Lithuanian Transport Safety Administration (LTSA). This was a milestone meeting, as it was the first time Lithuania has hosted the Commission as a full Member State of the IHO. Delegations from Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland and Sweden attended, joined by observers from the United Kingdom. The IHO was represented by Dr John Nyberg.

A milestone for Lithuania. The conference was opened by Ms. Vilma Ketlerienė, the Head of the Waterborne Transport Department of the LTSA, who recalled Lithuania's welcome on stage in Monaco and said Lithuania was honoured to host and chair the Commission for the first time as a full IHO Member State. The Chair, presiding over a BSHC conference for the first time, set a warm and efficient tone, asking delegates for patience, keeping breaks short to recover time, and steering a full agenda to agreed decisions. Delegations commended his chairmanship throughout the year and to the preparation of the meeting; a long-standing delegate recalled earlier Commission meetings in Klaipėda in 2007 and 2016, underlining how far Lithuania's participation has come. On the final day Ms. Ketlerienė of the LTSA addressed the Commission, thanking members for their warm words and noting that belonging to the hydrographic community matters not only to the LTSA and its hydrographic team but to Lithuania as a country. She paid special tribute to Mr Zakarauskas and his team for bringing the year of Lithuanian chairmanship to a successful conclusion.

IHO reports. Dr Nyberg updated the Commission on the IHO Infrastructure Centre in Busan (building complete, phase 1 recruitment in its final stage), the approved IHO data protection scheme that will introduce charging for non-Member users of protected data, and continued improvements to the IHO portal and e-learning. He highlighted the growth in IHO membership, with Lithuania among the most recent Member States alongside Panama, The Bahamas and The Gambia, and previewed proposals

heading to Council later in the year. Members were reminded that the new Strategic Plan 2027–2032 will introduce new performance indicators, and that budget pressures may affect capacity and technical programmes. Mr. Thomas Dehling (Chair IRCC) reported on IRCC-18 in Lima, Peru, including the SWOT analysis prepared by the RHC chairs, which pointed to strong collaboration but slow processes, structural disconnects and resource and participation constraints.

RENC distribution and S-100. The main technical discussion concerned the distribution of official ENC and S-100 data through the Regional ENC Coordinating Centres (RENCs), which serve some 75 IHO Member States. Delegates stressed the cost benefits for small and medium hydrographic offices, equal commercial terms for value-added resellers, and established validation workflows. They stated that S-100 raises the stakes, more frequent, dynamic updates and cross-product validation make it essential that ships receive a single, current, validated version of each dataset, and parallel non-validated channels were identified as a risk. Sweden will prepare an input paper to WENDWG proposing a strong recommendation that official ENC and S-100 data for the SOLAS market be distributed via RENCs, circulating it to Member States for co-sponsorship by end of October 2026 and consolidating it by December 2026.

Regional S-100 harmonisation. The Chart Datum and Water Current Working Group presented harmonisation guidance for S-104 and S-111, which the Commission approved together with the updated roadmap and work programme. The guidance calls for common horizontal and vertical references across S-101, S-102, S-104 and S-111 (Baltic Sea Chart Datum 2000), bilateral coordination to avoid cross-border discontinuities, and consistent dataset naming. Open issues include validating S-111 where current measurements are sparse and communicating the combined uncertainty of S-102 depths and S-104 forecasts to mariners. National reports showed production under way: Finland and Sweden has converted its production databases and released first S-101 and S-102 datasets, Latvia has released S-101 and S-102, and several members are building automated dual S-57/S-101 production.

Baltic Sea e-Nav project. The Swedish Maritime Administration presented the final status of the Baltic Sea e-Nav project, co-funded by the EU Baltic Sea Region programme and running from November 2023 to 31 October 2026. The partnership brings together the hydrographic offices of Sweden (coordinator), Germany, Finland, Denmark, Estonia and Latvia, with Lithuania and Poland as associated partners; the Research Institutes of Sweden (RISE) and Satakunta University of Applied Sciences (SAMK); the ECDIS manufacturer Furuno; the Finnish Meteorological Institute (FMI); and PRIMAR and IC-ENC as associated RENCs. The project has built production capability for S-101 and S-102 (and, in Finland, S-104 and S-111), established the regional harmonisation rules, and tested the products with mariners. Its 2026 commercial rollout delivers S-101 ENCs covering the major Baltic shipping routes, S-102 bathymetry on key routes, fairways and harbour approaches wherever survey data quality allows, and FMI overview services for S-104 and S-111, mainly in Finnish waters.

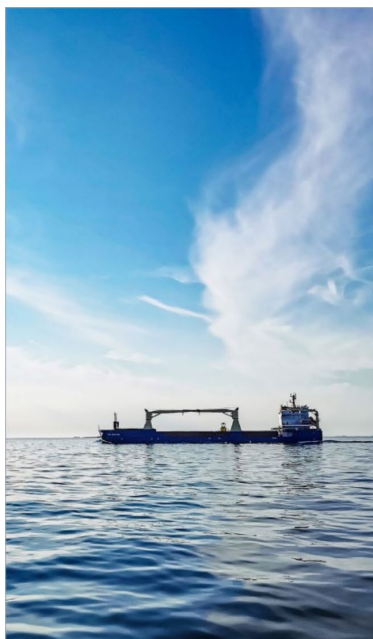
RISE and SAMK have delivered the final “Report on piloting and evaluation processes”. Trials involved 26 mariners in simulators plus onboard testing on the ferry Aurora Botnia, operating between Finland and Sweden, with four cross-border and twelve port scenarios comparing S-57 and S-100 during planning and monitoring, assessed for safety, efficiency and usability. Mariners strongly agreed that S-101 displayed appropriate information at each scale and that S-102 supported safer and more efficient passages. S-104 was rated as adding clear value to voyage planning; S-111 was also viewed positively, though its graphical presentation of currents drew more mixed responses than S-102 depths, and most found the products easy to learn. Route optimisation with S-111 indicated energy savings of roughly 3–8% in the Öresund and Skagerrak, with most of the saving achieved at the coarsest grid resolution tested, suggesting existing ocean model resolutions already capture most of the benefit. The conclusions also flagged the risk of screen clutter, the danger that highly detailed bathymetry or forecasts may be read as more accurate than they are, the challenge of keeping datasets current with limited connectivity, and the need for configurable, well-considered default layer combinations.

Building on this work, the follow-on DynaNav ÖKS project was approved in June 2026 under Interreg Öresund-Kattegat-Skagerrak (budget €5.4 million, 60% co-funding, August 2026 – July 2029). It will implement S-104, S-111 and S-124 with SECOM and Maritime Connectivity Platform distribution, further develop S-102 requirements for mobile seabeds, and trial S-421 route exchange in Norway. The United Kingdom described the work as world-leading and asked how it could be shared with other RHCs; Sweden noted that results have been reported to the IHO–EU Network Working Group to encourage other EU Member States to use Interreg, which funds implementation rather than research. The Commission noted the report.

National reports and surveys. Highlights included Germany’s contract for two survey vessels and operational AI for boulder and object detection; Finland’s operational AI boulder detection and satellite-derived coastline extraction; Estonia’s lightweight drone trials for shallow-water survey, which also exposed GNSS jamming and spoofing risks; Latvia’s AI-supported notices and publication system; Poland’s 777 km² of survey and plan to withdraw some 26 paper charts by 2028; Sweden’s procurement of one multi-purpose vessel (2030–2032) and two smaller survey launches and magnetometer work on cable burial; and Denmark’s organisational changes and growing charting needs around Greenland. The HELCOM re-survey programme reports about 65% of Category 3 areas and 6% of Category 2 areas still to be surveyed.

Seabed 2030, governance and outreach. Jamie McMichael-Phillips, Director of Seabed 2030, reported that 28.7% of the seafloor is now mapped to modern standards, and the BSHC signed an MoU with Seabed 2030, following the Nordic and North Sea Hydrographic Commissions. Members were encouraged to contribute data to the DCDB and support crowdsourced bathymetry, and to nominate a new regional ambassador as the current one reduces his working time. The Commission adopted its amended Statutes, to be signed jointly at the next in-person meeting, approved amendments to the Terms of Reference of the MSI Working Group and agreed that working groups should move documents and contact lists to the IHO portal, reporting any obstacles at BSHC-32.

Photo



Baltic Sea e-Nav - Scope



Project period November 2023 – October 2026

Goal	Period
Develop production capabilities for S-101 ENC, S-102 bathymetry and in Finland S-104 water level and S-111 surface currents	2023-2025
Establish harmonization rules for S-10x-products. Decisions was taken for S-101 and S-102 at BSHC30, 2025 and BSHC31, 2026, will hopefully approve the harmonization rules for S-104 and S-111.	2024-2026
Test, evaluate and refine the S-10x products	2025
Commercial rollout for S-101 and S-102 in the Baltic Sea. S-104 and S-111 in parts of FI.	2026

BSHC 31, Klaipeda Lithuania, 23 - 24 September 2026

Interreg
Baltic Sea Region

Co-funded by
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Illustration: Baltic Sea e-Nav project scope, BSHC-31 agenda item C.4. Courtesy of the Swedish Maritime Administration



Upcoming meetings:

BSHC-32 will be held in Rostock, Germany, from 21 to 23 September 2027