



29th Baltic Sea Hydrographic Commission Conference

17–19 September 2024 – Tallinn, Estonia

MINUTES OF THE MEETING

A. Opening formalities

A.1. Opening of the Meeting

Documents:

- [BSHC29 List of Documents](#)
- [BSHC29 A1.3 List of Participants](#)

The Chair of the BSHC *Mr. Olavi HEINLO* (EE) opened the 29th Baltic Sea Hydrographic Commission Meeting and welcomed the participants. The Chair highlighted the importance of the meeting due ongoing projects and especially plans for cooperation in S-100 implementation in the region.

Delegates from all EU coastal states of the Baltic Sea participated in the Meeting. IHO Secretariat was represented by Secretary General *Dr. Mathias JONAS* and invited Observers from UK and US were also present.

All participants presented themselves.

The Chair declared that the meeting has a quorum.

A.2. Welcome from the host country

The head of Maritime Division of Estonian Transport Administration *Mr Kristjan TRUU* presented the welcome address to the Meeting.

Mr. Peeter VÄLING (EE) told housekeeping issues in relation to the meeting and went through the program practicalities including arrangements for the Conference dinner on Wednesday 18 September.

A.3. Adoption of the Agenda

Document:

- [BSHC29 A3 Agenda for 29th Meeting of the BSHC](#)

The meeting reviewed the draft agenda for the meeting. The meeting adopted the draft agenda as presented. The Chair expressed thanks to all member states when providing their reports and documents in timely manner for the meeting.



A.4. Minutes and actions of the 28th BSHC Conference

Documents:

- [BSHC28_A.4.1_BSHC28_Final_Meeting_Minutes](#)
- [BSHC28_A.4.2_BSHC28_List_of_Actions](#)

The Chair recalled that the minutes from the 28th BSHC Conference was approved earlier by correspondence. The meeting agreed that there was no need to review the minutes.

The meeting reviewed the status of the Actions from the 28th Conference. Actions that could not be closed, including permanent and pending Actions, will be discussed under agenda items of this meeting or are to be copied to the Draft List of Actions of this meeting

Discussion :

Commission discussed results of Actions BSHC28/1 and BSHC28/2 related to Lithuania's IHO membership. As it was explained Lithuania has started internal procedures regarding to become a member of IHO, but no international - and is not ready to join IHO currently, hopefully things will change in future. Actions planned as below.

Commission discussed Action BSHC28/13 related to informing NSHC about closing BSMSDIWG. Sweden mentioned that NSHC closed the MSDIWG as well.

ACTION BSHC29/1: Lithuania to report to BSHC Chair and to IHO Secretariat when to send support letter for Lithuanian IHO-membership to LTSA and the Ministry of Transport on the behalf of BSHC and IHO Secretariat by the end of 2024.

ACTION BSHC29/2: BSHC Chair to send the support letter for Lithuanian IHO-membership to LTSA and the Ministry of Transport on the behalf of BSHC on Q1 2025.

B. IHO work program 1 – "Corporate Affairs"

B.1. Information about the activities of the IHO

Document:

- [BSHC29_B.1_IHO Secretariat Report https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC29/BSHC29_B.1_IHO_SEC_Report_V1_Presentation.pdf](https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC29/BSHC29_B.1_IHO_SEC_Report_V1_Presentation.pdf)

IHO Secretary General *Dr. Mathias JONAS* presented the report of the IHO Secretariat, with emphasis on:

- Cabo Verde became the 99th and Kiribati the 100th -IHO member state.
- Council 8 agenda items :
 - Update of S-100 roadmap
 - Update on the establishment of the S-100 Infrastructure Centre
 - IHO Strategic Plan 2027-2032 preparations
 - Bathymetry proposed to become IOC recognized Essential Ocean Variable(hydrography to the Global Ocean Observation System)
 - Proposal by Bulgaria, Georgia, Romania, Türkiye and Ukraine: Consideration of the



definition of Hydrographic Interest.

- GEBCO strategy and governance reviewed, 2024 GEBCO grid covers 26,1% of the Oceans in good resolution (100 m)
- Nippon Foundation to support Seabed2030 after 2030
- IHO Secretariat domestic items, such as
 - Work on the new IHO portal done by KHOA.
 - Belgium, Canada, Denmark, Norway, UK and USA support for the continuation of the Empowering Women in Hydrography project.
 - Work has continued on INTogIS III to include tools for RHCs scheming/planning S-100 Phase I Products and Data Services – KHOA supported.
 - Mr Yves Guillam is the first recipient of the new Ex Abyssis ad Alta Award

Discussion

FI asked about if registration is needed for the new IHO portal ? IHO: Registration is needed but the Portal is open for all with no limits.

The Chair thanked the IHO Secretary General for the report and confirmed that the Commission took note of the report.

B.2. Information on Council issues of the IHO

Reference document:

- *BSHC29_B.2_Council Report https://iho.int/uploads/user/Inter-Regional/Coordination/RHC/BSHC/BSHC29/BSHC29_B2_2024_EN_Council_Report.pdf*

Mr. Magnus WALLHAGEN (SE) informed about the outcomes of the 7th IHO Council meeting C-7, held in Monaco on 17-19 October 2023.

- The new Council was established. Pia Dahl Højgaard (DK) new Council Chair and Dr Masayuki Fujita (JP) Vice-Chair.
- IHO Strategic Plan 2027-2032 will be reviewed.
- Timeline for S-100 Phase 1 was confirmed. Need to strengthen the resources at the IHO Secretariat for technical, operative and administrative infrastructure for S-100. Phase 1 is in the approval phase by HSSC.
- Continuation the Empowering Women in Hydrography (EWH) as a project.
- Discussion about IHO meeting modalities, no decisions.
- Endorsed a Project Team on Fund Generation of IHO' Project Initiatives. PT established under IRCC.
- No agreement to establish a IHO portal for Marine Protected Areas (MPA), but IHO Secretariat to liaise with relevant MPA data providers to implement S-122 capability.
- Endorsed a proposal from HSSC and IRCC for an annual Champion of Hydrography Award .

The 8th IHO Council will meet on 15-17 Oct 2024. SE will continue have Council membership



appointed by the BSHC. Beside Council Members, all other MSs are welcomed to participate as observers.

The C-8 agenda highlights:

- Proposal from HSSC for an interim establishment of an IHO Infrastructure Centre for technical, operative and administrative support of S-100 and other technical IHO services (e.g. INTToGIS, registration portal). Finance from Republic of Korea (ROK)..
- Updates on the S-100 timeline. After approval of Phase 1 focus will shift to Phase 2.
- Establishment of a Strategic Plan Review Working Group (SPRWG) to work on a draft revise IHO Strategic Plan.
- Consider input from HSSC and IRCC on the IHO Strategic Plan 2027 – 2032.
- Update on the new IHO Portal.

Discussion :

LV : ROK finances the IHO Infrastructure Centre (IC), employees also ? SE : Yes, ROK is committed to finance also staff cost. IHO needs long term agreement. ROK commitment is now until 2035. IHO : unit about 10 people, no contribution of IHO MS, long term commitment (9-10 years at least), KHOA not only finances but hosts the IC. Interim establishment should start 2025 with a permanent establishment from 2026, pending a decision at IHO Assembly-4.

DK : how to involve others than ROK ? SE : it should be an international Centre as current IHO Secretariat. DK : how to work in the project -remotely quite hard and be in place as well ?

FI : Will the final decision about the ROK and IHO agreement to be done by Assembly ? IHO : yes assembly should approve this.

SE : S-100 catalogs dependent on KHOA

DK : Question on how key IHO stakeholders have responded to the proposal ? IHO : looks like branch office of IHO in Korea, could be issue in Monaco.

IHO : SPRWG is open to all MS who interested.

Discussion followed on the importance of the work of IHO Infrastructure Centre and it's working arrangements.

BSHC29 notes that IHO Infrastructure Centre has very high importance in supporting the S-100 related tasks.

The Chair thanked Sweden for the report and confirmed that the Commission took note of the report.



B.3. National reports

B.3.1 National report of Denmark

Document:

- *BSHC29_B3.1_National_Report_Denmark* https://iho.int/uploads/user/Inter-Regional/Coordination/RHC/BSHC/BSHC29/BSHC29_B3.1_2024_EN_National_Report_Denmark.pdf

Presentation:

- *BSHC29_B3.1_National_Report_Denmark* https://iho.int/uploads/user/Inter-Regional/Coordination/RHC/BSHC/BSHC29/BSHC29_B3.1_National_Report_Denmark_Presentation.pdf

Ms. Elizabeth HAGEMAN (DK) presented the highlights of the national report of Denmark, with emphasis on:

- Large organisational restructure 1 Nov 2024.
- Cdr Lars Strange instead of Lars Hansen.
- New depth model, 50 m covers Danish EEZ. In one Vert Datum .
- Using of SDB data started in Ghana, now in Greenland, also test in Danish waters to Efforts to collect trusted CSB, especially in Greenland, from scientific ships, so MB data. Involved in the DQWG PT dealing with the questions on CATZOC and CSB
- S100 timeline : 2024 Q4 prod syst design, working Q3 2025. Gridding of Danish waters finished end of 2024.
- In 2023 surveyed a total of 26 815.9 km survey lines. DK surveyed large parts of the innter route in the North Sea, leading traffic safely through the planned offshore windmill areas.
- 4084 km survey lines were surveyed around Greenland. 3 priority areas of surveying have been defined near Greenland.
- Near Faroe islands surveys have been performed by Faroese Marine Research vessel Jákup Sverri, mainly whilst the vessel is on research trips, totally 5300 miles of survey lines.
- DGA has introduced a dedicated section on their website for Notices to Mariners (NtM), both P- and T-notices.
- The Danish Hydrographic Office has taken initiative to establish a national S-100 coordinating working group together with the Danish Maritime Authority, the Danish Meteorological Institute and Joint GEOMETOC Support Centre to foster collaboration among organizations for the development, maintenance, and distribution of S-100 services, such as S-101, S-102, S-104 and S-111.
- DGA “The Marine Map of Denmark” (MSDI) has transitioned to a new ESRI platform, which offers new opportunities for displaying and combining data.
- DGA and DanPilot have in 2023 entered into a pilot project concerning the use of S-102 data.
- DGA is using satellite imagery in Greenland to accurately map coastlines, intertidal zones, and areas of navigational risk. Total budget allocation of 4.4 million DKK (590 000 €) and a timeline stretching from the first quarter of 2024 to mid-2025.
- Denmarks Depth Model is under improvement with help of EOMAP using satellite



technology to provide better mapping of shallow waters.

- DGA participates in the EU project “MobiSpaces - New data for green mobility” – CSB data collection project.
- Through collaboration with the Danish Maritime Authority and the Ghana Maritime Authority, the Danish Geodata Agency is engaged in a project aimed at improving navigational safety on Lake Volta in Ghana using CSB and satellites.
- DGA engages in the development of prototypes S-101 and S-102 products within the test areas under the Baltic Sea e-Nav project.

Discussion

EE : which vert datum for Dept Model ? DK : will find that out - **Mean Sea Level** .

SE : SDB in Kattegat – more detail in MWG about this ? DK : OK.

US : CSB of MB data ?, should not be as CSBWG has excluded these ? DK : will consider that .

ACTION BSHC29/3 : DK to give a report to MWG about SDB data usage in Kattegat area.

The Chair thanked Denmark for the report and confirmed that the Commission took note of the report.

B.3.2 National report of Estonia

Document:

- BSHC29_B3.2_National_Report_Estonia https://iho.int/uploads/user/Inter-Regional/Coordination/RHC/BSHC/BSHC29/BSHC29_B3.2_National_Report_Estonia.pdf

Presentation:

- BSHC29_B3.2_National_Report_Estonia https://iho.int/uploads/user/Inter-Regional/Coordination/RHC/BSHC/BSHC29/BSHC29_B3.2_National_Report_Estonia_Presentation.pdf

Mr. Peeter VÄLING (EE) presented the highlights of the national report of Estonia, with emphasis on:

- Information on the hydrographic surveys and chart production.
- In 2023 totally 1650 km² area has been surveyed, which means about 23000 km of survey lines sailed.
- S-102 areas defined.
- Common S-102 dataset with Latvia from Irbe test area has been produced and delivered to BS e-Nav Project place. S-101 dataset compilation from the same area is under progress.

Discussion

SE: is the S-102 coverage only initial plans or will it stay so ? EE : plans right now, might be some changes.



The Chair confirmed that the Commission took note of the report.

B.3.3 National report of Finland

Document:

- *BSHC29_B3.3_National_Report_Finland* https://iho.int/uploads/user/Inter-Regional/Coordination/RHC/BSHC/BSHC29/BSHC29_B.3.3_National_Report_Finland.pdf

Presentation:

- *BSHC29_B3.3_National_Report_Finland* https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC29/BSHC29_B.3.3_National_Report_Finland_Presentation.pdf

Mr. Rainer MUSTANIEMI (FI) presented the highlights of national report of Finland with emphasis on:

- The hydrographic surveys continue on shallow, nearshore HELCOM category III areas with LiDAR and multibeam technologies. Same in some inland waters.
- Need to study how long are the CAT I data valid ?
-
- The bathymetric data migration of the sea area to the Bathymetric Data Management System (MERTA) has been completed. The migration of inland waters is ongoing.
- The implementation of the "New vertical chart reference BSCD2000" (~FIN N2000) has completed in the Bay of Bothnia, the Quark, the Bothnian Sea and in the Northern part of the Archipelago Sea.
- 2 new ENCs, 34 new ENC Editions, 10 new Printed Charts, new publications.
- A lot of activities in National Coordination of S-100 implementation.
- In September 2023 when the Fairways Unit was established, which is now responsible for waterways related tasks. The FHO's team structure was reviewed respectively. A revised Agency organisation will take place on 1. October 2024. No major impact to FHO mission or activities.
- New recruits and use of consultants will strengthen the resources and speed up BSCD2000 work.
- Total surveys 975 km².
- The Finnish part of the HELCOM-BSHC Revised Harmonised Hydrographic Re-Survey Scheme has been enhanced.
-
- Traficom has made available WMS,WFS and WMTS services – nautical charts info.
- S-100 objective is to have the systems ready and capable to product S-57 and S-101 cells (parallel production) and S-102 data sets before the end of the year 2024. S-101 test data 1/2025,S-102 same time. S-104 and S-111 test data Q4/2024 by FMI.



Discussion

EE : is it possible to have more info about LIDAR+MB surveys to MWG ? FI : OK

DE : surveying of base points on land , why ? FI : Because of legislation, Territorial base points need to be review every 30 years..

US : how to test S-104,S-111 with S-101 ? FI : BS eNav project will include interoperability tests.

DK : how to distribute S-104,S-111 ? FI : Do not know yet.

The Chair thanked Finland for the report and confirmed that the Commission took note of the report.

ACTION BSHC29/4 : FI to give more information about LIDAR and MB surveys alignment to MWG

B.3.4 National report of Germany

Document:

- *BSHC29_B3.4_National_Report_Germany* https://iho.int/uploads/user/Inter-Regional/Coordination/RHC/BSHC/BSHC29/BSHC29_B3.4_National_Report_Germany.pdf

Presentation:

- *BSHC29_B3.4_National_Report_Germany* https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC29/BSHC29_B3.4_National_Report_Germany_Presentation.pdf

Mr. Thomas DEHLING (DE) presented the highlights of the national report of Germany, with emphasis on:

- Some changes in structure, 6 departments more than 1000 employees. 5 ships.
- New S-100 test dataset creation (S-127 – Marine Traffic Management – VTS Guide)
- New product, in 2024 the BSH published the first HD ENC.
- Many areas in Baltic Sea German waters have been re-surveyed, BSH investigated 99 wrecks in 2023 in the Baltic Sea.
- BSH is developing AI solution for automatically detecting boulders from survey data.
- BSH researches, implements and evaluates how new measurement techniques such as airborne laser bathymetry, UAV imagery, satellite-derived bathymetry, etc. can serve as complementary data sources to hydroacoustic measurements
- Modelling the SVP data almost real time
- Project of replacing DENEb and WEGA with new ships has been postponed to 2024 and the funding is not guaranteed yet. Max sizes 65 x 15 m, with ASV-s. Methanol fuelled.
- New S-100 compliant data sets for S-12x Products under development, S-128 is ready and S-127 under development. S-124 development started.
- MSP done by BSH.



- BSH is using semi-automated and common workflow of bathymetric data for the derivation of navigational products (ENC, bENC, S-102, Paper chart) from the DTM (1m). The resolution will deteriorate to a 10mx10m grid for products provided to international shipping.

Discussion

SE : what about S-100 from HPD ? DE : partly yes, but not all, but information for products like S-127, S-128 will be maintained in HPD.

PL : any feedback about AI boulder detection? DE : looks promising and almost finished, conclusions too early right now. Will give report to MWG.

PL : new ships built only in Germany or EU ? DE : in EU shipyard.

ACTION BSHC29/5 : DE to give a report about AI boulder detection to MWG.

The Chair thanked Germany for the report and confirmed that the Commission took note of the report.

B.3.5 National report of Latvia

Document:

- *BSHC29_B3.5_National_Report_Latvia* https://iho.int/uploads/user/Inter-Regional/Coordination/RHC/BSHC/BSHC29/BSHC29_3.5_National_Report_Latvia.pdf

Presentation:

- *BSHC29_B3.5_National_Report_Latvia* https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC29/BSHC29_B3.5_National%20Report%20Latvia_Presentation.pdf

Mr. Janis KRASTINS (LV) presented the highlights of the national report of Latvia, with emphasis on:

- Hydrographic Vessel K.Dals is under upgrade of the surveying equipment. Quite problematic. Hence surveys around 38 km² in 2024.
- All charts in BSCD2000 now. 2 new charts in compilation.
- Started testing S-101 production with CARIS.
- S-102 dataset production tests.
- Developing ATON-CHARTS-MSI-NtM DB system, partly in house.

Discussion

SE : what about S-104,S-111 ? LV : discussions started, low priority, not clear yet.

DE : will the new ATON-CHARTS-MSI-NtM DB be public ? LV : it's in house, available to port authorities also. Not completely open.



FI : Who is responsible of water level and currents in LV ? LV : meteorological administration, currents nobody. Water level measurements is for ports to do.

The Chair thanked Latvia for the report and confirmed that the Commission took note of the report.

B.3.6 National report of Lithuania

Document:

- BSHC29 B3.6 National Report Lithuania https://iho.int/uploads/user/Inter-Regional/Coordination/RHC/BSHC/BSHC29/BSHC29_B3.6_2024_EN_National_Report_Lithuania.pdf

Presentation:

- BSHC29 B3.6 National Report Lithuania https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC29/BSHC29_B3.6_National%20Report%20Lithuania_%20Presentation.pdf

Mr. Mindaugas ZAKARAUSKAS (LT) presented the national report of Lithuania with emphasis on:

- New organizational structure of LTSA entered into force from 1st of April 2024.
- Surveys carried out 209 km² in 2023 and 148 km² until July 2024. CAT I areas finished.
- GPS signal spamming near Russian border.
- Could be restrictions of showing depth data near shore.
- Paper charts not printed, pdf instead.

Discussion

SE thanked LT about data delivery to EMODNET.

DE : Is there only GPS jamming or spoofing also ? LT : position jumps.

SE : does GPS jams affect shipping ? LT : sometimes yes. PL - affects. EE and FI : constant problem in Gulf of Finland – navigational warning in force.

SE : discussions about jamming should be continued in MSIWG.

ACTION BSHC29/6: MSIWG to discuss what is appropriate reaction by MS in navigational warnings in case of GNSS jamming and/or spoofing issues in compliance with the applying regulations of the WMMWs.

Report back to BSHC30.

The Chair thanked Lithuania for the report and confirmed that the Commission took note of the report.



B.3.7 National report of Poland

Documents:

- *BSHC29_B3.7_National_Report_Poland* https://iho.int/uploads/user/Inter-Regional/Coordination/RHC/BSHC/BSHC29/BSHC29_B3.7_2024_EN_National_Report_Poland.pdf

Presentation:

- *BSHC29_B3.7_National_Report_Poland* https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC29/BSHC29_B3.7_National%20Report%20Poland_presentation.pdf

Mr. Dariusz KOLATOR (PL) presented the highlights of the national report of Poland, with emphasis on:

- Need for replacing old ships but nothing clear yet.
- Hydrographic surveys are proceeding as planned, between 16th July 2023 and 12th July 2024 surveyed 368 km² CAT I and 167 km² of CAT III areas.
- Commercial companies conducted hydrographic surveys in Polish waters in an area of 722 km². Data delivered to HOPN.
- The process of the implementation of the BSCD2000 in Polish waters (for all bands) is planned to be completed in 2024.
- Sales of ENC increasing, PC-s higher than in 2022 and about the same level as 2021.
- The Spatial Plan for Polish water is planned to be revised in 2024 due to windfarms.
- Depth data available at resolution of 50 m from DB.
- The first 5 ENCs in various bands were converted from S-57 to S-101 using Caris software and sent to PRIMAR for validation.
- The hydrographic studies programme cat. A at the Maritime University of Szczecin was certificated by HOPN. The programme is compliant with IHO S-5A.
- Commissioning of a new hydrographic boat Homar-2 for shallow water surveys. The boat is equipped with a multibeam system (Norbit B51).

Discussion

SE : What was the S-101 uploading response from PRIMAR ? PL : all OK.

IHO : any windfarms built yet ? PL : first building will be started on 2025 12 miles from shore.

LV : all these outside territorial waters ? PL : yes.

FI : Are all windfarms installed on seabed, no floating ones ? PL : yes

LT : any shipping regulations in or near Windfarms ? PL : yes some – no go in farms.

DE : should be MSP, shipping in farms not allowed.



LV : MSP done, changes needed – pressure to enlarge farms and decrease shipping routes.

DE : same pressure.

The Chair thanked Poland for the report and confirmed that the Commission took note of the report.

B.3.8 National report of Sweden

Document:

- BSHC29_B3.8_National_Report_Sweden https://iho.int/uploads/user/Inter-Regional/Coordination/RHC/BSHC/BSHC29/BSHC29_B3.8_National_Report_Sweden.pdf

Presentation:

- *BSHC29_B3.8_National_Report_Sweden* https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC29/BSHC29_B3.8_National%20Report%20Sweden_Presentation.pdf

Mr. Magnus HOVBERG (SE) presented the highlights of the national report of Sweden, with emphasis on:

- A new Director General Erik Eklund has been appointed at the Swedish Maritime Administration.
- Icebreaking staff now in SMA.
- SMA 124 persons, no changes in structure.
- Surveying project ongoing to chart Swedish power cables. SMA ships + survey ship Svea, owned by Swedish University of Agri-cultural Sciences, manned and operated by SMA
- In 2023 a total amount of 1700 km² was surveyed in Swedish waters by SMA.
- Problems of getting data from ports.
- ENC sales increasing 23% within 3 years.
- BSCD2000, implemented in areas from the FI – SE border to Norrköping and continues now from Ystad, south coast of Sweden, up to north Göteborg. First ENC-s and 6 months later PC-s.
- DIS is currently undergoing a migration from ArcMap to ArcGIS Pro.
- SMA has developed workflows for automatic sounding selection, creation of depth contours and depth areas using CARIS Base Editor. A first production test was carried out in Q2 2024 with good results. Full implementation should begin on the second half of 2024. Should reduce the current manual workload of sounding selection and contouring by 70 %.
- German chart DE40 INT1201 was released as SE 91 INT1201 in beginning of May. SE Chart 74 has been withdrawn.



- The SMA has improved the process for planning and producing New Editions for paper charts, based on 5 criteria's. Target is that SMA will not have any candidates for NE older than six months, by the end of 2024.
- S100 timeline: S-101, S-102, S-128 Q4 2026, 104,111 with SMHI 2028, 2029 – data from SMHI, product by SMA. Distribution via PRIMAR.
- ECS, no regulations for vessels < 100 GT.

Discussion

US : all ships in US can navigate only with digital data, no need for PC-s then.

DK : how about S-128, via PRIMAR or not ? SE : starting in PRIMAR, later themselves.

IHO : how to do S-131 ? SE : not started yet, the plan is to start in 2028.

FI : Does EE has DataBase for port information. EE : yes but it is not S-131.

EE : how SE gets info from ports ? SE : problem, intention to reduce CATZOC for ports to encourage them to give data. DK : same problem.

LV : software for S-124, S-122 ? SE : not clear yet.

DK : how S-122 will planned, who has initiative ? SE : SwAM started that.

IHO : about S-122, US has analysis about this worldwide – S-122 should be finished soon.

LV : MPA-s are in legislation.

The Chair thanked Sweden for the report and confirmed that the Commission took note of the report.

B.4 IHO Strategic Plan Review and BSHC Input

Document:

- [**BSHC29 B4 IHO Strategic Plan Review and BSHC Input**](#)

Mr. Olavi HEINLO (EE) presented the input of HSSC and IRCC to the IHO SPR, with emphasis on:

- At C-8 a report and recommendations from the Correspondence Group for the preparatory process of IHO Strategic Plan 2027-2032 proposal on the scope and TORs of a Strategic Plan Review Working Group will be submitted for approval and implementation.
- At HSSC16 Member States were invited to select their top three Strategic Plan additions from a list of items derived from the HSSC Chair Group session. HSSC Chair to report input to the SP to C-8.
- IRCC16 discussed RHC inputs to the IHO SP and will include the results of the discussion to the C-8. BSHC did not submit input to IRCC16.
- BSHC Chair recommends that the BSHC brainstorming session at BSHC29 or a separate video conference with MS representatives will be organized to gather input on the IHO SP. The input will be submitted directly at the SPRWG meeting organized at the C-8 in October



Discussion

SE : no need for discussions before C8, SPRWG will take care.

DE : no need either or if then only on strategic level

FI : paper about this has been done in Nordic HC.

https://iho.int/uploads/user/Inter-Regional%20Coordination/IRCC/IRCC16/IRCC16-08.2D_NHC_Input_IHO_Strategic_Plan_review.pdf

DK : same suggestion, paper reachable from IRCC website.

IHO : any MS can input into SPRWG.

DK : one MS to be BSHC representative in SPRWG ?

US : encourage all to correspondence to SPRWG.

BSHC29 noted that there is no need to provide common input from BSHC about the IHO Str Plan. If some MS want, then they can do that.

ACTION BSHC29/7: MS are encouraged to read the Nordic HC input to the IHO Strategic Plan and provide input to SPRWG and SE. https://iho.int/uploads/user/Inter-Regional_Coordination/RHC/NHC/NHC67/NHC67_2024_D1.1_EN_NHC_Inputs_to_the_IHO_SP.pdf

The Chair confirmed that the Commission took note of the report.

C. IHO work program 2 – Hydrographic Services and Standards

C.1. HSSC16 Report

Document:

- BSHC29_C1_HSSC_Report https://iho.int/uploads/user/Inter-Regional_Coordination/RHC/BSHC/BSHC29/BSHC29_C1_2024_EN_HSSC_Report.pdf

The HSSC Chair, *Mr. Magnus WALLHAGEN*, presented the HSSC report, focusing on:

- S-100 Edition 5.2.0 approved by IHO Members States.
- Core phase 1 Product Specifications in line with the S-100 timeline. IHO MS approval is assumed in December 2024.
- S-98 Interoperability PS and S-164 Tests datasets PS delayed. IHO MS approval is assumed August 2025.
- S-411 Ice Information and S-412 Weather and Waves Warnings now part of Phase 2 PS. Included in the S-100 Timeline.
- Establishing the IHO Infrastructure Centre at C8 for support the development, operation and management of IHO governed products and required IHO services with a common base



infrastructure. Initial tasks : quality control and secure delivery of S-100 catalogues and S-164 test datasets ; operative processes for the S-100 Part 15 security scheme.

- Security Scheme PT : new draft agreements S-63/S-100 OEM. Needs approval of the process by MS and collaboration with S-100 PT.
- Dissemination of S-100 data – who will distribute, which technology (IP?) and how to ensure security ? HSSC16 tasked NIPWG to recommend the way forward.
- SENC Delivery will not be implemented for S-100. S-100WG will further test if the security regime in S-100 is fit for purpose.
- Project Teams under S-100WG (S-101PT, S-102PT, S-129PT) will remain active at least until 2026.
- S-100 Sea trial areas : St-Lawrence River IHO Canada, IHO UK-FR Channel, Baltic Sea ?
- MASS PT is proposed to become a working group – MASS WG. To be discussed at C8.
- HSSC endorsed Ed. 2.0.0 of S-66 - Facts about Electronic Charts and Carriage Requirements – merging S-66 and S-67 into one publication.
- HSSC endorsed the Ed. 4.4.0 of S-57, Appendix B.1, Annex A - Use of the Object Catalogue (UOC) for ENC, Ed. 8.0.0 of S-58 - ENC Validation Checks and S-44 edition 6.2.0.

Discussion:

EE : use the BS eNav test areas as IHO trial areas ? IHO and SE : when known what the trial areas are.

DK : can be considered.

LV : some countries have MASS test polygons, how to announce the trial area in Baltic Sea ?

SE : connection between MSI and S-124 ? Not clear yet.

IHO : do trial areas need equipment on board ?

FI : There is plan to have Beta S-100 ECDIS equipment on board in one of the BS e-Nav test areas.

IHO : S-100 can act as doorway to IP broadcast for ships ? Is the S-100 still good name or should it be something else – like Marine Data Model ?

ACTION BSHC29/8: MS to respond to HSSC CL 02/2024 calling for the endorsement of the “operational” Editions of S-100-based product specifications of S-101, S-102, S-104, S-111 and S-129 which is now available for voting on the HSSC webpage ([link](#)). Deadline: 14 October 2024.

ACTION BSHC29/9: DE to contact Canada to specify the Canadian S-100 Sea Trial Area conditions and report back to BS e-Nav project lead by end of Oct.



The Chair thanked HSSC Chair for the report and confirmed that the Commission took note of the report.

C.2. Report of the Re-Survey Monitoring Working Group (MWG)

Document:

- *BSHC29_C2_MWG_Report_2024_FI* https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC29/BSHC29_C2_MWG_Report_2024_FI.pdf

Presentation:

- *BSHC29_C2_MWG_Report_2024_FI* https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC29/BSHC29_C2_MWG_Report_2024_FI_Presentation.pdf

The MWG Chair *Ms. Maarit MIKKELSSON* presented the MWG report and gave an overview of the re-survey status. The WG Chair focused on:

- The MWG 24th meeting is planned for 22 October 2024 in Gdansk, Poland.
- DE nominate Mr. Philippe Wischow (Philippe.Wischow@bsh.de) as a member of the MWG
- CAT I completed in Baltic Sea.
- Reporting of re-survey status to EU SBSR PA Safe meeting on 13 June 2024.

Discussion

IHO : where to get AIS info ? FI : every MS should do this itself

The Chair thanked MWG Chair for the report and confirmed that the Commission took note of the report.

C.3. Report of the Chart Datum, Water level and Currents Working Group (CDWCWG)

Document:

- *BSHC29_C3_CDWCWG_Report-SE* https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC29/BSHC29_C3_2024_EN_CDWCWG_Report.pdf

Presentation:

- *BSHC29_C3_CDWCWG_Report-SE* https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC29/BSHC29_C3_CDWCWG_Presentation-SE.pdf

The CDWCWG Chair *Mr. Thomas HAMMARKLINT* presented the report, summarizing:

- CDWCWG transition period from CDWG road map and timeline have been updated. Also, The BSHC CDWCWG web pages are updated.



- CDWCWG on site meeting on 26-27 March 2024 in Helsinki, Finland.
- WG is promoting the Baltic Sea geoid model and specification on the Baltic Sea Chart Datum 2000 has been updated. Now promotion of implementing S-104 and S-111 added.
- The first version of the BSCD2000 Height Transformation Grid (Geoid model) has been released in November 2023.

Discussion

DK : thanks to CDWCWG Chair for making DK understand the need for BSCD2000. It has taken time for them to realize the importance of this work. They have realized that some charts and ENCs need to be updated. Cooperation is needed in the future. They are working on this further. By the beginning of next year they will be on track.

The meeting raised the issue of the size of the group and that it may affect the possibility to organize meetings for MS.

Comment from FI: regarding representatives. Two categories of experts are needed. New members will be added. More people with oceanographic expertise will be needed.

FI : have all experts been invited to the meetings? SE answer: yes.

DE : investigating which new members can be added.

EE : will host the next meeting, March 25-26, 2025. The number of members needs to be reviewed in order to hold the meeting. Too many could be a problem.

SE agrees that the number of members needs to be reviewed and maybe limited in order to hold meetings.

BSHC29 Comment : to keep WG member amount reasonable for face to face meetings, valid for all WG.

The Chair thanked CDWCWG Chair for the report and confirmed that the Commission took note of the report.

C.4. S-100 implementation activities in Finland

Document:

- *BSHC29_C.4_S-100 implementation activities in Finland* https://iho.int/uploads/user/Inter-Regional/Coordination/RHC/BSHC/BSHC29/BSHC29_C.4_S-100_Implementation_activities_in_Finland.pdf

Mr. Rainer MUSTANIEMI (FI) presented the S-100 implementation activities in Finland with emphasis on:

- National coordination between Traficom, FMI and Fintraffic on S-100 implementation.
- Major challenges : how to organise the production in order to keep published products up to date and how to disseminate near real time S-100 datasets to vessels ?



- Traficom's plan for S-100 implementation : S-101,S-102,S-124 and S-128 production from 2025. S-121 and S-127 later.
- FMI to start S-104 and S-111 production same time. S-411,S-412,S-413,S-414 in near future.
- FTIA and Fintraffic plan to start production of S-125,S-201,S-210,S-212,S-240 and S-421 in near future.

Discussion

IHO : S-4xx data situation not clear. SE : WMO responsible of S-411,S-412, in S-100 timeline.

The Chair thanked Finland for the presentation.

C.5. New Symbology for rocky areas in Nautical Charts

Document:

BSHC29_C.5_New Symbology for rocky areas in Nautical Charts https://iho.int/uploads/user/Inter-Regional_Coordination/RHC/BSHC/BSHC29/BSHC29_C.5_New_symbology_for_rocky_areas_in_Nautical_Charts_FL.pdf

Mr. Jarmo MÄKINEN (FI) presented the *New Symbology for rocky areas in Nautical Charts* with emphasis on:

- Implementing the foul area symbol for rocky areas.
- Aim to reduce the number of rock symbols so the charts will be clearer and easier to read, better for chart plotters, clearer to mariners, partly automated creation.
- Used on one chart since summer 2024.

Discussion

DE : does it follow S-4 ? FI : Yes (IHO S-4, B-422.9, B-420.1)

SE : how to analyse feedback ? FI : one product done, waiting feedback from yachtsmen.

EE : more or less work ? FI : semi-automatic – less work.

DE : AI boulder detection could help in charts compiling.

ACTION BSHC29/10: FI to report on user feedback about the new symbology of rocky areas to BSICCWG

The Chair thanked Finland for the presentation.



C.6. S-127 Marine Traffic Management data production

Document:

BSHC29_C.6_S-127 Marine Traffic Management data production https://iho.int/uploads/user/Inter-Regional_Coordination/RHC/BSHC/BSHC29/BSHC29_C6_Input_paper_S-127_BSH.pdf

Annex1 :

https://iho.int/uploads/user/Inter-Regional_Coordination/RHC/BSHC/BSHC29/BSHC29_C6_Annex1_VTS_Guide_Germany_extract.pdf

Annex2 :

https://iho.int/uploads/user/Inter-Regional_Coordination/RHC/BSHC/BSHC29/BSHC29_C6_Annex2_VTS-Guide_from_S-127.pdf

Presentation :

https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC29/BSHC29_C6_BSHC_S-127_Presentation.pptx

Mr. Jens SCHRÖDER-FÜRSTENBERG (DE) presented the S-127 Marine Traffic Management data production with emphasis on:

- To create and make use of an S-127 conform dataset to produce the VTS Guide out of it.
- Steps : defining sections from VTS Guide , creating Excel form for S-127 data fields and filling these, from HPD extracting relevant nautical and geographical data, merging that in QGIS.
- Python script for creating S-127 gml from QGIS
- Another script for creating this to pdf.
- Challenges : still too much manual work, how to do updates, unique ID-s for features.

Discussion

SE : plans of publishing this to users ? DE : all VTS guide to S-127 and deliver to users, also publishing as pdf.

FI : Is all source data for S-127 products located in BSH ? DE : yes.

FI : FI has started planning S-127 production as well, good to get experience from DE.

The Chair thanked Germany for the presentation.



D. IHO work program 3 – "Inter Regional Coordination and Support"

D.1. Actions requested by IRCC

Reference document:

- [IRCC16-12_EN_List_of_Actions_Decisions_Recommendations_v1](https://iho.int/uploads/user/Inter-Regional_Coordination/IRCC/IRCC16/IRCC16-12_2024_EN_List_Actions_Decisions_Recommendations_v1.pdf) https://iho.int/uploads/user/Inter-Regional_Coordination/IRCC/IRCC16/IRCC16-12_2024_EN_List_Actions_Decisions_Recommendations_v1.pdf

The IRCC Chair *Mr. Thomas DEHLING* presented the work of the IRCC since the previous BSHC Conference, focusing on the IRCC's recommendations to the Regional Hydrographic Commissions (RHC).

The Commission discussed several of the IRCC-15 recommendations:

1. RHCs to consider supporting the IHO Secretariat in enlarging the IHO membership.
 2. RHCs to encourage Members to increase the participation in the EWH project using the financial and in-kind opportunities provided by the IHO Member States.
 3. RHCs to advise MS to respond to the IHO CLs in a timely manner to avoid delaying the S-100 Phase 1 product specification approval process.
 4. The request from CIRM that the IHO considers defining a retirement date for S-57.
 5. CB issues (importance in different areas, funding)
 6. RHC's to review and adjust governance documents regarding participation roles defined as Member State, Associate Member and Observer.
 7. Question about implementing Member States IMO recognized mobile satellite services for MSI transmission.
 8. CSB opportunities.
 9. DCDB input.
 10. MS support to PT on Fund generation.
 11. Discussion about development of a communication strategy regarding the products from the S100 suite.
 12. RHC's to develop their schedule to meet the 2026 IMO target (S-100 ECDIS) and share their own roadmap at the next WENDWG meeting.
 13. RHCs to ask members involved to engage bilaterally to address the ENC's overlaps and to resolve them as a top priority issue.
 14. EU need of hydrographic and cartographic data and the support to projects related to hydrography and navigational products.
 15. CSBWG participation
 16. RHCs to encourage Member States and community bathymetric.
-



17. MS contributions to the DCDB (regardless of origin), liability issues.
18. Next meeting 03-05 June Monaco

Discussions:

US : BS states should show the way to others in CSB as their ships sail around the world.

IHO : IRCC meeting same time as UN ocean conference in Nice, good opportunity to attend this too.

PERMANENT ACTION BSHC29/11 : MS to consider increasing the participation in the EWH project operated by the IHO Secretariat through funding or in-kind support

The Chair thanked Germany for the presentation.

D.2. Status Report of the IHO-EU Network WG (IENWG)

Document:

- *BSHC29_D2_IENWG* https://iho.int/uploads/user/Inter-Regional/Coordination/RHC/BSHC/BSHC29/BSHC29_D2_IENWG.pdf

Mr. Magnus WALLHAGEN (SE) on behalf of the IENWG representative (Ms Annika AXNE), presented the highlights of the work done in the IHO-EU network (IENWG), with focus on:

Several EU projects related ongoing (EU projects presented to EU).

14th meeting in Svendborg, DK, 29 May 2024:

- Ocean Observation Project
- HVD survey results
- EMODNET, Seabed2030
- Baltic Sea e-nav and MaDaMe projects
- CB, IHO Fund Generation Project Team

Discussion

DK : new project period of EMODNET, opened for all.

DE : OOP is important, we should be more visible.

PL : problems with EU regarding open data (charts free of charge ?) EE : could be issue of interpreting EU documents. SE : nautical products are not public. FI confirms that. DK : confirms as well.

The Chair thanked Sweden for the report and confirmed that the Commission took note of the report.



D.3.

D.3.1 Report of the Baltic Sea Bathymetric Database Working Group (BSBDWG)

Document:

- BSHC29_D3-1_BSBDWG_Report_SE https://iho.int/uploads/user/Inter-Regional/Coordination/RHC/BSHC/BSHC29/BSHC29_D3_1_BSBDWG_Report.pdf

Mr. Magnus WALLHAGEN (SE) on behalf of the BSBDWG Chair (Mr. Hans Öiås) presented the report.

- BSHC 28 took the decision to close down the BSBD portal and refer to the EMODNet Bathymetry Portal instead.
- Still BSBD can be downloaded from the BSHC website (ver 0.9.6), WMS service is available as well.
- Proposed to close the BSBDWG since it is not needed any more.

Discussion

DK : supports closing the WG.

FI : supports also.

DE : agrees as well.

LV : also supports.

EE : supports, how to supply EMODNET with data ? SE : depends on EMODNET projects.

PL : supports.

Commission thanked SE for hosting the BSBD.

The Commission decided as follows:

DECISION BSHC29/1. BSHC29 decided to keep the current BSBD dataset, as a historic dataset, at the BSHC website and to close the BSBDWG.

ACTION BSHC29/12: BSHC Chair to add joint GEBCO,EMODNET,CSB item on BSHC30 agenda for SE to report

The Chair thanked Sweden for the report and confirmed that the Commission took note of the report.



D.3.2 EMODNET Report

Document:

- [BSHC29_D3-2_EMODNET_Report_SE https://iho.int/uploads/user/Inter-Regional/Coordination/RHC/BSHC/BSHC29/BSHC29_D3_2_EMODNET_Report.pdf](https://iho.int/uploads/user/Inter-Regional/Coordination/RHC/BSHC/BSHC29/BSHC29_D3_2_EMODNET_Report.pdf)

Presentation:

- [BSHC29_D3-2_EMODNET_Report_SE https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC29/BSHC29_D3_CSBBWG_Emodnet_Presentation.pdf](https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC29/BSHC29_D3_CSBBWG_Emodnet_Presentation.pdf)

Mr. Magnus WALLHAGEN (SE) presented the report.

- CSB meetings: legal issues, CHS – trusted CSB align well with MB data in rivers, , same says NOAA.
- CSB – better data than no data.
- Anna Wall at SMA acts as regional coordinator for the Baltic Sea region.
- The EMODNET 2024 model has the same resolution 1/16 Arc. Min. (115x57.5m at LAT 60deg.) as the former model.
- From Baltic Sea all available data has been merged together into a 1/32 min resolution grid and each cell has been linked to the available Metadata. This was interpolated to 1/16 min grid and delivered to EMODNET.
- EMODNET will soon create one homogenous DTM from all regions.
- The 2025-2026 Emodnet procurement was published in mid May and the tenders is currently under evaluation.

Discussion

The Chair thanked Sweden for the report and confirmed that the Commission took note of the report.

D.3.3 CSB-GEBCO-SEABED2030 Report

Document:

- [BSHC29_D3-3_CSBBWG-SEABED2030_Report_SE https://iho.int/uploads/user/Inter-Regional/Coordination/RHC/BSHC/BSHC29/BSHC29_D3_3_CSBBWG_SEABED2030_Report.pdf](https://iho.int/uploads/user/Inter-Regional/Coordination/RHC/BSHC/BSHC29/BSHC29_D3_3_CSBBWG_SEABED2030_Report.pdf)

Mr. Magnus WALLHAGEN (SE) presented the report.

- OLEX and Chart Plotter manufacturers collect CSB data, in BS region these are not used for chart production.
- CSB is not hydrographic survey or scientific research.
- The IHO Data Centre for Digital Bathymetry wants more HO:s to become “Trusted Nodes”



for collecting and delivering CSB data to DCDB.

- It is possible to get data loggers to plug into the vessel's existing system free of charge via the SEABED 2030 program, in exchange for data deliveries to DCDB – possibility to use on ships going from Baltic Sea to anywhere.
- The GEBCO DTM is produced in a resolution of 15 arc-seconds (1/4 arc-min) and the last DTM is dated 2024. From European waters gets data from EMODNET and from CSB where data are too sparse.
- NHC signed MOU with SEABED2030, BSHC ? BSHC MS already participate via EMODNET.

Discussion

DK : tests DCDB how to review the data before input to DCDB, investigating how to manage the CSB data input.

FI : which CSB data in DK ? DK : both Greenland and near Denmark mainland.

IHO : contacting ship owners, CSB collection is going on but they do not want to send data to DCDB.

DK : CSB project in Ghana, looks OK.

FI : what about high seas ? IHO : does not work, as echosounders usually do not reach depths greater than 200m

US : CSB is here and will be. No reasons to restrict it. Usage is about willing.

DE : IRCC workshop of CSB.

EE : can the CL21 be updated ? SE : yes.

ACTION BSHC29/13 : DK to report on the use of the Coastal State Approval Tool linked to the DCDB and further work with CSB to BSHC30.

ACTION BSHC29/14: MS to consider signing the MOU with SEABED 2030 Project and report to BSHC30.

ACTION BSHC29/15 : MS to revisit their respective national position on CSB as requested in the IHO-CL 21/2020 and report to Secretariat if changes occur.

ACTION BSHC29/16: MS to consider encouraging the national shipping industry to contribute CSB data to IHO-DCDB

The Chair thanked Sweden for the report and confirmed that the Commission took note of the report.

D.4. Report of the Baltic Sea Maritime Safety Information Working Group (BSMSIWG)

Document:

- BSHC29_D4_MSI_Report https://iho.int/uploads/user/Inter-Regional/Coordination/RHC/BSHC/BSHC29/BSHC29_D4_BSMSIWG_Rev1.pdf

Presentation:

- BSHC29_D4_MSI_Report [https://iho.int/uploads/user/Inter-](https://iho.int/uploads/user/Inter-Regional/Coordination/RHC/BSHC/BSHC29/BSHC29_D4_BSMSIWG_Rev1.pdf)



[Regional%20Coordination/RHC/BSHC/BSHC29/BSHC29_D.4_BSMSIWG%20report_Presentation.pdf](#)

The BSMSIWG Chair *Mr. Johan von BÜLTZINGSLÖWEN* presented the report with emphasis on:

- 20 years of cooperation on 2024.
- BS sub area limits reviewed and confirmed.
- S-41x, BSMSIWG to cooperate with WMO.
- 1056 NAVTEX messages distributed in 2023. Is increasing each year.
- Increase may lead to problems due to 10-minute time slots for the NAVTEX transmitters.
- Coordination of implementation of S-124 in the BS.
- The issue concerning the cost for promulgating MSI via EGC.
- Is S-124 MSI ? Not yet but should be. All MSI providers to develop S-124.

Discussion

FI : new limits, does this align with BS areas ? SE: yes.

IHO : debate about S-124=MSI, broadcast of S-124 ? does S-124 absorb MSI fully or not ?

SE : S-124 via IP, too big for radio. S-124 covers MSI.

SE : connection between SOLAS and ITU ? DE : S-124 transmission is not possible over radio, no frequencies.

LV : most SOLAS ships are already online, so IP can be used for transmission.

IHO : IMO carriage requirement for ships. LV : old requirement, world has changed.

BSHC29 Conclusion : S-124 is MSI

The Chair thanked the BSMSIWG Chair for the report and confirmed that the Commission took note of the report.

D.5. Report of BSHC representative to WENDWG

Document:

- *BSHC29_D5_WENDWG Report FI* https://iho.int/uploads/user/Inter-Regional/Coordination/RHC/BSHC/BSHC29/BSHC29_D5_WENDWG_Report_FI.pdf

Presentation:

- *BSHC29_D5_WENDWG Report FI* https://iho.int/uploads/user/Inter-Regional/Coordination/RHC/BSHC/BSHC29/BSHC29_D5_WENDWG_Report_presentation.pdf

The BSHC representative in the WENDWG *Mr. Jarmo MÄKINEN* presented the report and



highlighted the outcome of the 14th WENDWG meeting in Norfolk, USA, in February 2024,, focusing on:

- S-100 Implementation and coordination, good status of S-100 readiness only in BSHC , USCHC and EAtHC.
- WEND-100 Product Matrix IGIF, further optional.
- Readiness status also from WENDWG Cls.
- WEND-100 Principles and S-1xx Implementation Guidelines
- S-101 ENC Scheming Guidelines
- INTToGIS III and S-128, INTToGIS III expected all phase I to be covered in Jan 2026.
- Both RENCS are well in line with the S-100 roadmap.
- S-100 should be attractive to end users, need for one stop secured shop for all S-100 along a given ship route.
- Digital signatures by HO-s only - stakeholders preferred, that it should be done by HOs

Discussion

DE : IGIF matrix not needed anymore (not updated for now). No need to ask readiness again from BSHC MS.

The Chair thanked the WENDWG representative for the report and confirmed that the Commission took note of the report.

D.6. Report of Baltic Sea INT Chart Coordination Working Group (BSICCWG).

Document:

- *BSHC29_D6_BSICCWG_Report_FI* https://iho.int/uploads/user/Inter-Regional/Coordination/RHC/BSHC/BSHC29/BSHC29_D.6_BSICCWG_Report_FI.pdf

Presentation:

- *BSHC29_D6_BSICCWG_Report_FI* https://iho.int/uploads/user/Inter-Regional/Coordination/RHC/BSHC/BSHC29/BSHC29_D6_BSICCWG_Report_presentation.pdf

The BSICCWG Chair *Mr. Jarmo MÄKINEN* presented the report with emphasis on what was discussed at the BSICCWG 10 meeting, held in Stockholm in May 2024:

- The focus of the work has shifted towards S-100 products.
- S-101,S-102 scheming : IHO needs to know plans about S-101, S-102 in 2026-2028 in order to report the expected coverage to IMO. Initially same scheming as for S-57.
- Was noted high dependency on software development (Caris/ESRI, D-kart, 7Cs) in order to prepare S-100 products.
- BS members are ready to start releasing S-100 products (especially S-101 and S-102) in



2026 (2025).

- WG Chair presented scheming and production plans of S-101 (S-102) in the Baltic Member states.
- Finland's idea with S-102 at the moment is to have one fairway on one S-102 product (Same for Estonia).
- Both Sweden and Finland need to get permissions about allowed areas for S-102.
- The common view in all countries was that the production of paper charts should be carried out with the less amount of work with automation.
- UK has taken responsibility for producing the INT120, published.
- Germany is abandoning the production the Baltic Sea overview ENC cell from 2025. In the future, each country will produce overview ENC from its own territory. Agreed common release date for ENC overview cells: 10.1.2025
- The initial testing phase of INTToGIS III by regional coordinators was going on between 8 July and 1 September 2024. Baltic Sea was taking part of the testing.
- S-101 harmonization plans and results (under BS eNav).
- S-102 harmonization initiated by FI, will analyze and deliver information to others by Nov 2024.
- Next meeting Lithuania 21-22.05.2025.
- Jarmo will retire in 2026, working group needs a new chair 2025

Discussion

SE : Chair and WEND representative is reasonable to remain same person.

DK : S-101 harmonization recommendations timeline ? FI : harmonisation recommendations should be ready this year. For approval: BSICCWG May 2025, final approval BSHC 30 (Sept 2025)

IHO : PC-s are not yet going away, should be produced from ENC-s in future.

DECISION BSHC29/2 : Commission agreed that BSICCWG Chair and BSHC WENDWG representative should be the same person.

DECISION BSHC29/3 : Commission decided that BSICCWG should nominate a vice-chair.

ACTION BSHC29/17: BSICCWG Chair to report S-101 , S-102 harmonization recommendations for approval on BSHC30

ACTION BSHC29/18: MS to consider candidates for Chair and Vice-Chair of BSICCWG

The Chair thanked the BSICCWG Chair for the report and confirmed that the Commission took note



of the report.

D.7. MSDI Activities at the BSH

Document:

- *BSHC29_D7_MSDI Activities at the BSH* https://iho.int/uploads/user/Inter-Regional/Coordination/RHC/BSHC/BSHC29/BSHC29_D7_Input_paper_MSDI_BSH.pdf

Mr. Jens SCHRÖDER-FÜRSTENBERG (DE) reported on the MSDI activities work, with emphasis on:

- S-100 works in BSH.
- GeoSeaPortal

Discussion

FI : do we have enough of MSDI activities in national reports ? DE : Important developments in MSDI should be sent to BSHC MSDI ambassador.

ACTION BSHC29/19 : MS to report to MSDI ambassador about MSDI activities relevant to IHO MSDIWG.

The Chair thanked the BSICCWG Chair for the report and confirmed that the Commission took note of the report.

D.8. IHO Capacity Building Sub-Committee Issues Review (CBSC)

Document:

- *Mr. Thomas Dehling* (DE) reported on the CBSC work, with emphasis on:

- Capacity building funds.
- IC-ENC has funded also, related to S-100. PRIMAR has similar plans.

Discussion

IHO : IHO can not fund all needed CB, good that there are other possibilities coming.

LV : PRIMAR has already opened some courses.

The Chair thanked Germany for the report and confirmed that the Commission took note of the report.



D.9. BSHC Website

Document:

- BSHC29_D9_BSHC_Website_Report https://iho.int/uploads/user/Inter-Regional/Coordination/RHC/BSHC/BSHC29/BSHC29_D9_BSHC_Website.pdf

Website:

- <http://www.bshc.pro>

Mr. Magnus WALLHAGEN (SE) reported on coordination, operation and maintenance of the BSHC website.

- Website has been up and working in the new infrastructure (Loopia web-hotel) and a CMS (Content Management System) based on Wordpress™.
- The CDWG section is the most frequently updated and visited.
- SMA is coordinating the site and will continue to publish information sent to sma@sjofartsverket.se for inclusion on the site. For the best result, please be clear when sending documents on where and how they should be published and also make sure all information is updated and relevant.
- Since July 2023 Sweden, US, Germany and Finland has been the most frequent users of the BSHC website

Discussion

FI : Structure of different WGs subpages are little bit different, may need harmonisation or use of best practises ? SE : it is decided by WG chairs, basic docs should be presented.

EE : obsolete WG should be removed. SE : OK will do.

EE : what about Russia listed as member on website ? SE : still member, just cooperation stopped.

ACTION BSHC29/20: SE to review BSHC WG content on the website and add a link to IHO BSHC subpage.

The Chair thanked Sweden for the report and confirmed that the Commission took note of the report.

D.10. Baltic Sea e-Nav Project

Document:

- BSHC29_D10_Baltic_Sea_e-Nav_Project https://iho.int/uploads/user/Inter-Regional/Coordination/RHC/BSHC/BSHC29/BSHC29_D10_Baltic_Sea_eNav_Project.pdf
- Website: <https://interreg-baltic.eu/project/baltic-sea-e-nav/>

Mr. Magnus WALLHAGEN (SE) presented the Baltic Sea eNav project.

- Project started and first period approved.
- Goal to Develop production capabilities for S-101 ENC, S-102 bathymetry and in Finland S-



104 water level and S-111 surface currents by 2025.

- Establish harmonization rules for S-10x-products. 2024-2026 Decisions must be taken for S-101 and S-102 by the 30th Baltic Sea Hydrographic Commission, 2025.
- Commercial rollout for S-101 and S-102 in the Baltic Sea. S-104 and S-111 in parts of FI :
S-101 - full coverage of the major shipping routes in the Baltic Sea; S-102 - most relevant shipping routes, fairways and harbor approaches, where hydrographic survey data of sufficient quality is available ; S-104, S-111 - The Finnish Meteorological Institute (FMI) will establish overview services for mostly the Finnish areas of the Baltic Sea
- 4 test areas defined. All relevant S-1xx activities started.

Discussion

The Chair thanked Sweden for the report and confirmed that the Commission took note of the information.

E. Any other business

E.1. Revision of the BSHC Statutes regarding associate membership

Reference document:

- *BSHC Statutes*

Mr. Olavi HEINLO (EE) presented the Revision of the BSHC Statutes regarding associate membership

How to become associated member of BSHC if not from Baltic Sea, change statutes ?

Discussion

Member states discussed the possibilities and pros/cons of changing the statutes. No decision was made.

The Commission decided as follows:

ACTION BSHC29/21 : Chair to invite MS to the discussion regarding revision of the BSHC statutes



E.2. HELCOM paper

Revised HELCOM recommendation about harmonizing e-navigation services.

Develop S-100 services in Baltic Sea area.

Develop e-navigation services

Discussion :

FI : this paper should be better prepared. DE : same

SE : will find out who did that and discuss .

ACTION BSHC29/22 : MS to contact their HELCOM representatives to advise revision of the HELCOM Recommendation 34E/2 - Update document and recommend liaising with BSHC.

ACTION BSHC29/23 : DE to inform MS after HELCOM Maritime meeting on the outcomes regarding BSHC29/22

E.3. BSHC participation at the EC Expert Group on Ocean Observation and EGSME seminar on "Cooperation for a Smart and Sustainable Baltic Sea"

Document:

BSHC Participation at the EC Expert Group and EGSMW https://iho.int/uploads/user/Inter-Regional/Coordination/RHC/BSHC/BSHC29/BSHC29_E2_BSHC_participation_EC_Expert_Group_and_EGSME.pdf

Mr. Olavi HEINLO (EE) presented the document.

BSHC representative to be present in Tallinn on 2 events. Explain plans of hydrographic surveys in Baltic Sea (Mr. Peeter Väling on behalf of MWG) and overview about BSHC activities and challenges (Mr. Olavi Heinlo on behalf of BSHC).

Discussion

F. Election of new Chair and Vice Chair

The Chair informed that according to BSHC Statues, current Vice-Chair is invited to become a next Chair for the Commission. The meeting unanimously elected *Mr. Janis KRASTINS* from Latvia as a BSHC Chair by acclamation.



The Chair also proposed, that based on BSHC Statutes and principle of rotation, Lithuania is invited to take a position of a Vice-Chair. LT informed that they are ready to take the responsibility of a Vice-Chair but need to confirm that first. The meeting supported the proposal unanimously.

The Commission decided as follows:

DECISION BSHC29/4. BSHC29 elected Mr. Janis KRASTINS (Latvia) as a next BSHC Chair.

DECISION BSHC29/5. BSHC29 elected Mr. Mindaugas Zakarauskas (Lithuania) as a next BSHC Vice-Chair. – to be confirmed by LT.

ACTION BSHC29/24 : LT to confirm about the vice-chairing of BSHC

G. Place and date of next Conference

Mr. Janis KRASTINS informed that Latvia is willing to host the 30th BSHC Conference in week 39 2025 in Riga. Exact time is 22-24.09.2025. Latvia to confirm place.

ACTION BSHC29/25 : Latvia to confirm place of BSHC30

H. Review of BSHC29 List of Actions

The Meeting reviewed the Draft List of Actions of the BSHC 29th Conference.

I. Closing ceremony

The Chair *Mr. Olavi HEINLO* expressed his thanks to participants for contributions to the meeting. He also thanked the working groups for their important work for the Commission.

The Chair then declared the Meeting and the Conference closed.