



28th Baltic Sea Hydrographic Commission Conference

19–21 September 2023 – Helsinki, Finland

MINUTES OF THE MEETING

A. Opening formalities

A.1. Opening of the Meeting

Documents:

- [BSHC28 List of Documents](#)
- [BSHC28 A1.3 List of Participants](#)

The Chair of the BSHC *Mr. Rainer MUSTANIEMI* (FI) opened the 28th Baltic Sea Hydrographic Commission Meeting and welcomed the participants. The Chair highlighted the importance of the meeting due to ongoing projects and especially plans for cooperation in S-100 implementation in the region. The Chair also pointed out that this year the Commission have it's 40th year anniversary.

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 Finnish Hydrographic Office, *Dr. Jouni LAPPALAINEN* (FI) presented the welcome address to the Meeting and briefly told about the history of the venue, Paasitorni building.

Mr. Jarmo MÄKINEN (FI) told housekeeping issues in relation to the meeting and went through the program practicalities including arrangements for the Conference dinner on Wednesday, 20 September.

A.3. Adoption of the Agenda

Document:

- [BSHC28 A3 Agenda for 28th Meeting of the BSHC](#)

The meeting reviewed the draft agenda for the meeting. The Chair informed, that more time is reserved for certain agenda items to be discussed while less time is allocated for national reports, for example. 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 27th BSHC Conference

Documents:

- [BSHC28_A.4.1_BSHC27_Final_Meeting_Minutes](#)
- [BSHC28_A.4.2_BSHC27_List_of_Actions](#)

The Chair recalled that the minutes from the 27th BSHC Conference was approved earlier by correspondence. The meeting agreed that there was no need to review the minutes.

The meeting reviewed and updated the status of the Actions from the 27th 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

B. IHO work program 1 – "Corporate Affairs"

B.1. Information about the activities of the IHO

Document:

- [BSHC28_B.1_IHO Secretariat Report https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_B1_IHO_SEC_Report_V2.pptx](https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_B1_IHO_SEC_Report_V2.pptx)

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

- The importance of S-100 implementation and that the Baltic Sea region could be a laboratory and good example of regional cooperation on regular S-100 data production and services implementation. "If we can make it here, we can make it everywhere", the Secretary General quoted Frank Sinatra. He thanked BSHC members noting that plenty of work has been done also between meetings and several BSHC member states represented in many IHO Working Groups.
- The good progress on various S-100 WGs, GEBCO activities (GEBCO week 6.-12.11. in Monaco, IHO + IOC and GEBCO). The SG informed on new relations with OECD as well as UN GGIM relations.
- IHO Secretariat domestic items, such as
 - Technical development on P-5 and C-55 maintenance tools
 - S-130 (S-23) project with planned test phase
 - New version of data protection scheme, ready for S-100 data protection;
 - Council meetings may also take place elsewhere than in Monaco. C-8 could be elsewhere, host considerations are welcome, preferably not overseas.
 - The change of the Secretariat's personnel as new term of the incoming IHO Director John Nyberg started on 1 Sept 2023.

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

The Commission decided as follows:



PERMANENT ACTION BSHC27/2: All MSs to check entry in the Yearbook P-5 and in C-55 and to report any updates or report no change to the IHO Secretariat (continuously, permanent).

B.2. Information on Council issues of the IHO

Reference document:

- BSHC28_B.2_Council Report https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_B2_Council%20Report.pptx
- Presentation https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_B.2%20Council%20Report_presentation.pdf

Mr. Magnus WALLHAGEN (SE) informed about the outcomes of the 6th IHO Council meeting C-6, held in Monaco on 18-20 October 2022. The C-6 meeting discussions included proposals to Assembly 3:

- New IHO resolution on S-100
- IHO Strategic Plan. Priority on Goal 1. MSDI focus on IHO Data-product-Services
- Amended IHO resolution on gender inclusive language
- 3-Year Work Programme and Budget 2024 – 2026
- The dual-fuel concept for S-100 ECDIS.
- Revision of IHO resolution of the Hydrographic Commission on Antarctica (HCA)
- The revised Capacity Building Strategy

The 7th IHO Council will meet on 17-19 October 2023. The C-7 meeting is proposed be chaired by Ms. Pia Højgaard from Denmark. SE will continue have Council membership appointed by the BSHC. Beside Council Members, all other MSs are welcomed to participate as observers.

The C-7 agenda highlights:

- Proposal from HSSC to use additional funding (A3/20 and IRCC15 Decision 41) for sustainable technical and administrative S-100 infrastructure
- Future parallel production of S-57 and S-101
- Updates on the S-100 Roadmap
- Proposal from IRCC to change the EWH Project to a Programme
- IHO Strategic Plan 2026 – 2032
- IHO meetings face-to-face only/hybrid/streaming
- Proposal from the IHO Secretariat on a global MSDI layer for Marine Protected Areas



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:

- BSHC28_B4.1_National_Report_Denmark https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_B3.1_National%20Report%20DenmarkV1.pdf
- Presentation https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_B3.1_National%20Report_Denmark_Presentation.pdf

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

- Windfarm planning and construction is a "hot topic" in Denmark. The HO has emphasized the importance to receive the planning survey data to improve safety of navigation and nautical charts.
- 50 m grid bathymetry model was published at the end of 2022, based on averaging and interpolating approach. The model is not for navigational use.
- DGA has used a newly developed semiautomatic process to generate land data in Greenland.
- Together with partners from the Baltic Region and under Swedish leadership (Baltic Sea eNav project), DGA has secured funding from the EU Interreg Baltic Sea instrument to pursue S-101, S102, (and to an extent S-104) production and harmonization across the region (around 5 Mio € in total).
- As part of the National North Atlantic Budget, the Danish Government finances a Satellite project in Greenland aimed to map near-coast areas in 2023/2024.

Discussion

FI asked how the land data is updated? DK: Greenland there are only few updates, but in continental Denmark several updates on land side.

DE asked if the satellite project in Greenland also contains Satellite derived bathymetry? DK: No, it does not.

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:

- BSHC28_B4.2_National_Report_Estonia [https://iho.int/uploads/user/Inter-](https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_B3.1_National%20Report%20EstoniaV1.pdf)



[Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_B3.2_National_Report_Estonia.pdf](#)

- Presentation: https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_B.3.2_Estonia_presentation.pdf

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

- Structural changes in the organization. On 1.5.2023 vessels and floating AtoN (& lights) are under state fleet, a separate entity.
- Information on the hydrographic surveys and chart production as well as testing S-102 product through Primar.

Discussion

SE congratulated Estonia on the progress of S-102 and testing in Primar. SE further asked when S-102 products will be available? EE: Preliminary areas so far for testing but no set date yet. Also harmonization of products is needed before wider distribution.

US asked how EE sees the future of paper charts. EE: Estonia are gradually reducing the paper chart portfolio. No definite decisions yet.

US asked if EE maritime authority is planning to allow ENC-systems (Electronic Nautical Chart systems) for non-SOLAS registered vessels. EE: The authority is the Shipping Department. They are well aware of the situation, but they are not able to answer.

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

B.3.3 National report of Finland

Document:

- BSHC28_B4.3_National_Report_Finland https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_B3.3_National_Report_Finland.pdf
- Presentation: https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_B.3.3_National_Report_Finland_Presentation.pdf

Dr. Jouni LAPPALAINEN (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.
- The bathymetric data migration of the sea area to the Bathymetric Data Management System (MERTA) has progressed well. The migration of inland waters is also ongoing.
- The implementation of the "New vertical chart reference BSCD2000" (~FIN N2000) has completed in the Bay of Bothnia, the Quark and the Bothnian Sea.
- A lot of activities in National Coordination of S-100 implementation.
- The reorganisation of the Hydrographic and fairway unit into separate units.



- New recruits and use of consultants will strengthen the resources and speed up BSCD2000 work.

Discussion

SE noted, that the EU Interreg project MaDaMe is related to S-124 communications and data transfer between vessels and shore, as Fintraffic Ltd (VTS operator) is a partner, along with Swedish Maritime Administration. SE asked if Traficom is participating? FI: Traficom is an associated partner, but Finnish Transport Infrastructure Agency, among some other entities from Finland, is a partner. EE: Estonian Transport Administration is also an associate partner in MaDaMe.

US asked about the paper chart portfolio future as well as use of ENC's for non-SOLAS registered vessels. FI: There are no ongoing actions or plans related to these issues, but both themes are under close follow-up.

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

B.3.4 National report of Germany

Document:

- BSHC28 B4.4 National Report Germany https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_B3.4_National%20Report%20Germany.pdf
- Presentation https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_B3.4_National%20Report%20Germany%20Presentation.pptx

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

- A Call for interest has been launched to replace the two vessels *Deneb* and *Wega*, with smaller vessels than *Atair*.
- Artificial Intelligence is tested for stone detection. Augmented reality technologies tested for e.g. wreck investigations.
- Chart coverage is looked into to cover the new windpark areas. New charts are planned. Change of paper chart size to A0 and A1 is undergoing.

Discussion

SE enquired how mature the test dataset of S-128 is and is it build by BSH itself? DE: So far BSH own work, but not finalized yet. Development together with HSSC and WENDWG.

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:

- *BSHC28_B4.5_National_Report_Latvia* https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_B3.5_National_Report_LV_2023.pdf

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

- Some difficulties with survey vessel engine. New MBES system will be taken into use.

Discussion

US asked about the paper chart portfolio future. LV: Latvia produce paper charts based on demand, also for small crafts. No plans to change production at the moment.

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:

- *BSHC28_B4.6_National_Report_Lithuania* [https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_B3.6_%20National%20Report_Lithuania.p
df](https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_B3.6_%20National%20Report_Lithuania.pdf)
- *Presentation*: [https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_B3.6_%20National%20report%20Lithuani
a_presentation.pdf](https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_B3.6_%20National%20report%20Lithuania_presentation.pdf)

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

- New director of Maritime Department at LTSA, Ms. Vilma Ketlerienė.
- Analysis if there is need to re-categorize the HELCOM routes, due to Russian vessels sailing in LT waters.
- LT will participate to Baltic Sea eNav project as an associated partner.
- LT will produce paper chart as earlier, no plans to change the production.

Discussion

IHO Secretariat: Would LT engage more internationally, to become a member of IHO, being the last European coastal state not a member in IHO. LT replied, that the membership in both IHO and IALA is a decision of the Minister of Transport.

DE: Would a letter from BSHC and IHO Secretariat be helpful in the issue? LT: All initiatives are welcome, also MSs contacts to their IMO representatives.

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



The Commission decided as follows:

ACTION BSHC28/1. DE, EE and SE to prepare a draft letter of the support for Lithuanian IHO-membership to be sent to LTSA and the Ministry of Transport on the behalf of BSHC (the IHO Secretariat committed to write a supporting letter too).

ACTION BSHC28/2. BSHC Chair to send the support for Lithuanian IHO-membership to LTSA and the Ministry of Transport on the behalf of BSHC

B.3.7 National report of Poland

Documents:

- BSHC28 B4.7 National Report Poland https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_B3.7%20National%20Report%20of%20Poland.pdf
- Presentation: https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_B3.7_National%20report%20Poland_presentation.pdf

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

- Hydrographic surveys are proceeding as planned.
- New small waterboat (8m) for hydrographic surveys. Some challenges to operate DriX (USV).

Discussion

US asked about the paper chart portfolio future? PL: No plans to change production at the moment.

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:

- BSHC28 B4.9 National Report Sweden https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_B3.8_National%20Report%20Sweden.pdf
- Presentation: https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_B3.8%20National%20report%20Sweden-presentation.pdf

Ms. Annika AXNE (SE) presented the highlights of the national report of Sweden, with emphasis on:

- A new head for Survey operations - Mats Uhrfelt and a new head for Survey Management – Björn Gustafsson.



- Analytical Hierarchy Process to find out most significant depths.
- HELCOM Cat I & II completed 98%. Shallow water surveying with the smallest launch (income from the small craft market - hire 4-5 new people).
- Improvement of Survey-to-ENC Process using new tools for more efficient handling
- Upgrade of Depth Information System (DIS) – new ArcGIS software
- Development of Automatic Sounding Selection and Contouring from bathymetric data together with Canadian Hydrographic Service (CHS) and Teledyne Caris.
- No changes in paper chart production.

Discussion

FI asked that regarding to S-100 implementation, is there cooperation existing with SHMI (Meteorological Institute)? SE: Not as far as Traficom has with FMI. SHMI will provide SMA with water level, but SMA will produce the S-104 products.

FI asked what is Sweden's solution on automated depth contouring based on? SE: In cooperation with CHS (Canadian Hydrographic Service) special parameters and macros has been developed. Sounding selection is in production, contouring is still under development.

UK asked if there is a person to check the result of an automated process? SE: Yes, manual check by a person.

DE: Is Sweden facing challenges on Cat III surveys? SE: Areas are divided into three priorities to reason the surveys. Areas with no AIS tracks, challenges in reasoning and budgeting. FI informed plans to cover all areas of their Baltic Sea areas, not necessary with MBES only. Surveys are based on IHO S-44.

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

C. IHO work program 2 – Hydrographic Services and Standards

C.1. HSSC14 Report

Document:

- BSHC28_C1_HSSC_Report https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_C1%20HSSC%20Report.pptx

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

- S-100 development, product specifications and implementation. Encourage MS actively to support development in IHO WGs.
- S-101 ENC does not offer much benefits itself, but providing other S-100 products would be a game-changer.
- Effects of amended paper chart production practice.



- New project teams (PT): S-100 Infrastructure Center Establishment (ICE) PT, Electronic Chart System (ECS) PT, S-100 Security Scheme PT.
- Maritime Autonomous Surface Ships - MASS PT
- Stakeholders' forum

Discussion:

IHO Secretariat: Data as individual layers in ECDIS may not be attractive enough for end users (to attract investments), but interoperability is needed as a game changer. This requires coalitions of e.g. industry and HO to develop new functionalities taking benefit from the consistent data model paradigm across all thematic layers.

FI commented on a maritime teacher's (and inspector's) note earlier in a shipping event: "concerned on capabilities of bridge officers as well as shipping companies' willingness to invest into new equipment and education".

US: IMO recognized ECDIS course - to update the training course.

IHO Secretariat: IMO model course on ECDIS is under renewal. BSH representative is involved.

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:

- BSHC28_C2_MWG_Report_2023_FI https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_C2_MWG_Report.pdf
- Presentation: https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_C2_MWG_report_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:

- MWG on site meeting on 16.3.2023 in Helsinki, including workshop on USV experiences;
- A questionnaire on Crowd Source Bathymetry was conducted and reported;
- Reporting of re-survey status to HELCOM Maritime (BSAP 2021 actions S2 and S3) and EU SBSR PA Safe meetings.

Discussion

IHO Secretariat: Are there national regulations in relation to USV? FI: Traficom does not have authority to forbid, neither to give permission. Hot discussion topic. PL: More discussion on drones than USVs.

DE: Will nominate new member soon for the MWG, but not for vice-chair position.



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

The Commission decided as follows:

DECISION BSHC28/1. Representatives of the MWG can select WG Chair and Vice-Chair among Working Group members.

ACTION BSHC28/3. HOs are encouraged to be in touch with their MS Maritime Transport Safety and Maritime Spatial Infrastructure Planning authorities to emphasize the importance of safe maritime traffic needs in maritime spatial planning.

ACTION BSHC28/4. DE nominates representative for MWG.

C.3. Report of the Chart Datum Working Group (CDWG)

Document:

- BSHC28_C3_CDWG_Report-SE https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_C3_CDWG_Report-SE.pdf
- Presentation: https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_C.3_CDWG_Presentation-SE.pdf

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

- CDWG14 on site meeting on 28.29.3.2023 in Göteborg.
- WG is promoting the Baltic Sea geoid model and specification on the Baltic Sea Chart Datum 2000 has been updated.
- Work has been conducted with NKG (geodesy) and BOOS (oceanography) within the Baltic Sea Region. Lot of co-operation with BOOS - need of oceanographic expertise to the WG.
- Proposal of amendments to TORs - proposed amendments of Work program, same TOR amendments have been proposed to the NSHC TWG.
- Proposed new name for the WG "Chart Datum, Water level and Currents WG (CDWCWG)".

Discussion

DE, FI, PL and SE supported the proposed amendments to ToRs and Work Program.

Discussion on the co-operation with BOOS - how this will be managed between institutions, from each MS. Co-operation can be done within WG.

FI: How to manage and change information between eNav project and CDWG activities? CDWG Chair: All activities should be coordinated under "umbrella" of BSHC.

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

The Commission decided as follows:

DECISION BSHC28/2. BSHC28 approved amendments to the CDWG TORs and Work Programme.



DECISION BSHC28/3. BSHC28 endorsed new name for the CDWG, a new name is "Chart Datum, Water Level and Currents WG (CDWCWG)".

ACTION BSHC28/5. Encourage experts in Oceanographic and Meteorological organisations to contribute CDWCWG work.

C.4. BSHC Sea Areas to be tested in the S-130 PT

Document:

- BSHC28_C.4 xxx https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_C4_BSHC%20Test%20data%20for%20S-130PT.pdf

Mr. Magnus WALLHAGEN (SE) presented the issue on S-130 Product Specifications and limits of the Baltic Sea with emphasis on:

- Edition 1.0.0 of the S-130 Product Specification has been approved by HSSC15.
- The S-130 standard is now ready for testing and evaluation.
- SE is proposing the BSHC Sea Limits data set to be used for S-130 Edition 1.0.0 testing.

Discussion

FI: Could final repository of the data (Baltic Sea limits and sea areas) be other than shape files, Geopackage file for example?

IHO Secretary: Not to deliver directly to Project Team, but to IHO Secretariat to whom Secretariat authorizes the work.

FI: If case of official dataset, the data should be verified by MSs or available at web-site for verification (with deadline).

EE: If polygons are made public, what are legal implications? IHO Secretary: Dataset to be used only for testing.

FI: Supports Sweden proposal to make the BSHC Sea Limits data available for S-130 standard testing purposes.

The Chair thanked Sweden for the presentation.

The Commission decided as follows:

DECISION BSHC28/4. BSHC28 approved Baltic Sea Limits test dataset to be used for S-130 experimental testing.

ACTION BSHC28/6. SE to send Baltic Sea Limits test dataset to IHO Secretariat for experimental testing purposes.



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

D.1. Status report of the BSHC Strategic Correspondence Group (SCG)

Reference documents:

- BSHC28_D1_INF_Status NHC Strategic work https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_D1%20SCG%20Status%20Report%20SE.pdf

The BS-SCG Chair *Mr. Magnus WALLHAGEN* informed the Commission about the work in the Strategic Correspondence Group (BS-SCG), focusing on:

- BSHC tasked the BSICCWG, the CDWG and the BSMSIWG to have specific responsibilities for the S-100 implementation in the region.
- The SCG discussed the status and future need for the BS-NSMSDIWG in the context of the strategy for the BSHC. The SCG was in agreement to recommend the BSHC to close the BS-NSMSDIWG.
- Discussions on the need for BSHC Strategic Plan.
- Proposal to close the BS-SCG.

Discussion

It was discussed if there is need to have a specific Strategic Plan for BSHC.

IHO Secretariat: BSHC Strategic Plan should be aligned with IHO Strategic Plan.

IHO Secretary General: Feels that BSHC does not need an individual a Strategic Plan. How to shake the process, how IHO Strategic Plan 2027-2032 should progress?

DE: Same view on the way forward. In IRCC has been discussed the RHCs input to IHO Strategic plan. Comments / contribution is possible and available.

DK: Congratulations to Magnus Wallhagen for chairing the SCG and having the possibility and platform to discuss the strategic issues. Very helpful. How do we get input from all the Regional HCs to IHO strategic Plan?

FI supported the option to close the BS-SCG.

The Chair thanked the BS-SCG Chair for the report confirmed that the Commission took note of the report.

The Commission decided as follows:

DECISION BSHC28/5. BSHC28 decided to close BS-SCG.

D.2. Actions requested by IRCC

Reference document:

- IRCC15-12_Draft_List_of_Actions_Decisions_Recomendations_v01 <https://iho.int/uploads/user/Inter->



[Regional%20Coordination/IRCC/IRCC15/IRCC15-12_Draft_List_of_Actions_Decisions_Recomendations_v1.pdf](#)

- Presentation https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_D2%20IRCC%20Report.pptx

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-14 recommendations:

1. WG chairs to verify gender-inclusive language
2. Completed, report to IRCC
3. Geo-coordinating role, completed
4. Debate on climate change related activities, open;
5. Mobile satellite services - issue for e.g. South-America.
6. MS to join CBSC work
7. RHCs to participate to WEND work
8. S-100 coordinator
9. Update the WEND 100 IGIF matrix
10. RHC Chart coordinators to report planned S-101 chart schemes (ongoing, waiting for the ver. 3 / 30.9.2023)
11. To appoint MSDI ambassadors, new chair Kaitlin (US). 4 reps from BSHC in the WG. Who acts as an ambassador for BSHC?
12. CSBWG participation
13. CBS initiative
14. MS contributions to the DCDB (regardless of origin), liability issues.
15. RHCs actively contribute with new data to GEBCO.
16. INT paper chart scheme appropriateness check
17. Paper chart updating procedures
18. Consider requirements for non-ECDIS mandated vessels, possibly ECSs. (HSSC related).

For the Baltic Sea, BSBDWG is already coordinating this on behalf of the BSHC Member States.

Discussion on item 4:

DK: Many ways to combat, not just mitigate. WGs are actually performing already.

SE: More specific guidelines needed from IRCC.

IRCC Chair: Difficult to specify, no further detail.



IHO: Secretariat brought the item into discussion. Affects all. We should focus on our expertise.

Discussion on items 13 and 14:

SE: Legislation do not allow CBS.

US: Bathymetry is being collected no matter what.

FI: Support CBS in general, but not relevant for Finnish waters.

DK: Have to follow regulation, support research vessels to do hydrographic surveys.

DE: Is there room for this, without changing the law. Regulations to acquire the data, not to distribute.

IHO Secretary: It is HO experts work to explain the reality to legislation, persistent.

- ➔ Collaborate with the DCDB on developing and highlighting annual regional breakdowns, as part of SPI reporting.

Discussion, on item 18:

US: Every MS shall look into this. To operate according to SOLAS or internally change their operation policies.

IHO: Semi-survey, if ongoing among participants. Round the table tour on MSs.

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

The Commission decided as follows:

ACTION BSHC28/7. WG chairs to verify gender-inclusive language (WG basic documents).

ACTION BSHC28/8. To have a climate change related items in the agenda of BSHC29.

ACTION BSHC28/9. To propose a BSHC Representative (MSDI Ambassador) for IHO MSDIWG.

ACTION BSHC28/10. MSs to look into their national requirements for non-ECDIS mandated vessels (e.g. are ECS systems acceptable) and report back to the BSHC.

D.3. Status Report of the IHO-EU Network WG (IENWG)

Document:

- BSHC28_D3_IENWG https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_D3_IENWG.pdf
- Presentation: https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_D.3_IENWG%20Report_presentation.pdf

Ms. Annika AXNE as BSHC's representative, 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).
- Align the work.



- Promote S-100 products
- Focus on capacity building programmes (Mediterranean)
- Focus on DG Move as well, not just DG Mare.

Discussion

DE: Lacking on strategic direction for the WG. BE, FR & NL do a lot of inter-session work

IHO Secretary: IENWG is different compared to other IHO working groups – since EU is regional political organization and IHO is a global technical consultative intergovernmental organization. The questions always is: Is there added value for both partner to collaborate via this entity?

Future discussion:

DK: how do we (IRCC/IENWG) approach EU more effectively as in the past?

The Chair thanked BSHC's representative for the report and confirmed that the Commission took note of the report.

D.4. Report of the Baltic Sea Bathymetric Database Working Group (BSBDWG)

Document:

- BSHC28_D4_BSBDWG_Report_SE https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_D.4_BSBDWG%20Report.pdf
- Presentation: https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_D.4_%20BSBD-WG%20report_presentation.pdf

Mr. Magnus WALLHAGEN on behalf of the BSBDWG Chair (Mr. Hans Öiås) presented the report, current status of the BSDB and future plans for the Working Group.

- BSDB is not operational at the moment and is proposing to shut down the database and the service. Temporary solution: would run 1 year from now.

Discussion

EE and DK supported the proposal and recommended to put efforts for EMODNet instead.

DE, LV, LT, PL, SE and FI supported the proposal as well.

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

The Commission decided as follows:

DECISION BSHC28/6. BSHC28 decided to close down the BSBD database and the service, respectively. A temporary solution will be available at the BSHC website until September 2024.

ACTION BSHC28/11. MSs to consider joining EMODNet as a project partner.



ACTION BSHC28/12. BSDBWG to ensure to stamp the BSDB bathymetric dataset historic.

D.5. Report of the Baltic Sea North Sea Marine Spatial Data Infrastructure Working Group (BS-NSMSDIWG).

Documents:

- BSHC28_D5_Status of the BSNSMSDIWG https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_D5_Baltic%20Sea%20North%20Sea%20MSDI%20Working%20Group.pdf
- Presentation https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_D5_Baltic%20Sea%20North%20Sea%20MSDI%20Working%20Group.pptx

Ms. Pia HØJGAARD on behalf of BS-NSMSDIWG Chair presented the report from the BS-NSMSDIWG.

- The WG has been in dormant state, waiting for the BSHC decision.

Discussion

FI: BS-NSMSDIWG work program have been quite empty lately indicating that the WG has fulfilled its mission for now. If there is needed in the future, a project team may be formed.

DK proposed to close the BSMSDIWG, LV supported.

US: The existing of IHO MSDIWG has been greatly as a result of BS-NSMSDIWG and acknowledges their important work. Still encourages other RHCs (less developed) to work with MSDI issues.

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

The Commission decided as follows:

DECISION BSHC28/7. BSHC28 decided to close Baltic Sea part of the BS-NSMSDIWG.

ACTION BSHC28/13. Inform NSHC chair about BSHC28 decision to close BSMSDIWG.

D.6. Report of the Baltic Sea Maritime Safety Information Working Group (BSMSIWG)

Document:

- BSHC28_D6_MSI_Report https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_D6_EN_BSMSIWG.pdf
- Presentation: https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_D.6%20MSI%20WG_presentation.pdf

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

- Updated TORs and ROPs to include coordination of S-124 in the Baltic Sea.
- Coordination of implementation of S-124 in the Baltic Sea. New systems piloted, but requires



funding. Possibility to have a common/open platform. Each MS does not have to develop their own production system. Also, an APP to look at all Nav Areas.

- North Sea WG is also working with same issues, coordination of efforts.
- Plenty of operational issues with Navtex (carriage requirement) transmitters (old). Global issue.

Discussion

FI commented shortly about EU funded MaDaMe project tackling mainly communications and transmitting issues.

IHO Secretary: FR has presented an APP for navigational warnings (so far not introduced in regular service).

SE: FR project was financed by EU, open-source software, not dealing with Communication, just the production of the data. Need to be aware what is happening in IMO level. At SMA other departments (than Hydrographic Office) involved with Navtex. Needs to be more sustainable for many years from now.

EE: ETA is also associate partner in MaDaMe.

LV: MAL is maintaining Web-page of all Navtex messages.

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

The Commission decided as follows:

DECISION BSHC28/8. BSHC28 approved updated BSMSIWG TORs and ROPs.

ACTION BSHC28/14. Contact MaDaMe project partners in Finland to connect with the BSMSIWG.

D.6.1 Nordstream Incident

Document:

- BSHC28_D.6.1_Nordstream Incident: https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_D6.1_Nordstream%20incident.pdf
- Presentation: See BSHC28 website

Mr. Johan von BÜLTZINGSLÖWEN gave a presentation of the Nordstream Incident.

Discussion:

DK asked how the radius of danger area was defined. SE assumed (wasn't 100% sure) that it was defined by gas company in safety plan.

The Chair thanked the BSMSIWG Chair for the presentation.



D.7. Report of BSHC representative to WENDWG

Document:

- BSHC28_D7_WENDWG Report FI https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_D7_WENDWG%20Report_FI.pdf
- Presentation: https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_D.7_%20WENDWG%20report_presentation.pdf

The BSHC representative in the WENDWG Mr. Jarmo MÄKINEN presented the report and highlighted the outcome of the 13th WENDWG meeting in Aalborg, DK, in February 2023, focusing on:

- S-100 Implementation and coordination
- WEND-100 Product Matrix IGIF, to be updated annually
- WEND-100 Principles and S-1xx Implementation Guidelines
- S-101 ENC Scheming Guidelines
- INTOGIS III and S-128

Mr. Jarmo MÄKINEN presented the new questionnaire (WENDWG letter) and encourage all the members to answer (deadline 15 November 2023) and also update the WEND-100 IGIF Matrix at the same time. WENDWG representative encouraged all MS to answer actively as before. WENDWG representative will collect the answers and inform WENDWG.

Discussion

Should MSs have more guidance to update WEND-100 Matrix ? It may be useful to share experiences and good practices in this regard.

DK: Matrix and questionnaire causes some confusion. It would be better to answer for both questionnaires at same time (matrix and questionnaire). SE agreed.

DE: IRRC15 recommendation is to update Matrix every year.

WENDWG representative: All MSs to answer actively as before.

WENDWG representative: Is there any feedback to WEND. DK: WENDWG representative informs well. It might be beneficial to share experiences within BSHC, pick up interesting observations from the statistics and ask one MS to prepare a presentation. The statistics might show in the presentation, that one MS might be ahead and it is beneficial for the other MSs to learn and improve processes. WENDWG representative: BSHC experiences may well be shared at WEND.

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

The Commission decided as follows:

ACTION BSHC28/15. To send WEND-100 IGIF Matrix and WENDWG questionnaire to BSHC members

ACTION BSHC28/16. All BSHC members to update the WEND-100 IGIF Matrix and response the



WEND questionnaire and send answers to the BSHC WEND representative.

ACTION BSHC28/17. BSHC WEND Representative to send answers to WENDWG Chair.

D.8. Report of Baltic Sea INT Chart Coordination Working Group (BSICCWG).

Document:

- BSHC28_D8_BSICCWG_Report_FI https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_D8_BSICCWG%20Report.pdf
- Presentation: https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_D.8_BSICCWG%20report_presentation.pdf

The BSICCWG Chair *Mr. Jarmo MÄKINEN* presented the report with emphasis on what was discussed at the BSICCWG 9 meeting, held in Rostock in May 2023:

- The focus of the work has shifted from paper charts towards S-100 products.
- It was noted that paper charts and S57 ENC's cannot be completely forgotten either. They are still official products for several years. 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.
- Germany is abandoning the production of both the Baltic Sea General INT chart (INT 120) and the Baltic Sea overview ENC cell. In the future, each country will produce overview ENC from its own territory. UK will consider whether to take over responsibility for producing the INT120.
- WG Chair presented scheming and production plans of S-101 (S-102) in the Baltic Member states.
- It is very important, that all the countries will start thinking about the areas where S-101 products could be first produced in the end of 2025. There should be a concrete plan for the Baltic Sea area, where and when S-101 (and S-102) products will be available.

Discussion:

- FI: There is a need for S-101 (and S-102) harmonisation recommendations for the Baltic Sea area. S-101 and S-102 harmonisation issues will be handled under umbrella of Baltic Sea eNav-project (and also in BSICCWG). All MS confirmed their commitment to participate in these harmonisation activities.

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

The Commission decided as follows:

DECISION BSHC28/9. BSHC28 approved updated BSICCWG TORs.

DECISION BSHC28/10. BSHC28 agreed that all MSs will produce their own overview ENC on their own region of responsibility.

DECISION BSHC28/11. BSHC28 agreed that S-101 and S-102 harmonisation issues will be handled



under umbrella of Baltic Sea eNav-project.

ACTION BSHC28/18. DE to verify how long they can take a responsibility for production of Baltic Sea overview ENC.

ACTION BSHC28/19. DE to deliver a copy of existing overview ENC to all MS.

ACTION BSHC28/20. UK will consider to take responsibility for producing INT120 from the Baltic Sea area.

D.9. IHO Capacity Building Sub-Committee Issues Review (CBSC)

Document:

- BSHC28_D9_ https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_D9%20CBSC%20Report.pptx

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

- The subcommittee is now chaired by Mr. Evert Flier (Norway).
- E-learning Center by KHOA.
- Empowering women in Hydrography.
- C-55 improvements.
- Capacity building funds.

Discussion

DE enquired if any Member State has a knowledge of any capacity building project, e.g. EU related, that he might not be aware of?

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

D.10. BSHC Website

Document:

- BSHC27_D10_BSHC_Website_Report https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_D10%20BSHC%20Website.pdf

Website:

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

Ms. Annika AXNE (SE) reported on coordination, operation and maintenance of the BSHC website. Member States should be more active to update the website first page, as well as WGs to bring their meeting material to the web-site.

Discussion

The Chair thanked SE to maintain the web-site.



FI enquired if e.g. Baltic Sea eNav information is updated to the web-site. To be considered if the upcoming Chair could take care to update the information to the web-site.

US enquired, if the web-site could contain links to e.g. EMODnet and other vital projects.

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

D.11. Baltic Sea e-Nav Project

Mr. Magnus WALLHAGEN (SE) presented the Baltic Sea eNav project. Start-up meeting will be in November in Sweden.

BSHC28_D.11_Baltic Sea e-Nav Project https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/BSHC/BSHC28/BSHC28_D11_Baltic%20Sea%20E-nav%20SE.pptx

Discussion

FI thanked SE for the contribution for the project.

Chair encouraged UK and US to contact any BSHC EU MS in case they need further information about the project.

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

E. Any other business

E.1. NGA's Global Maritime Traffic Density Service

Reference document:
- *BSHC27_E1_*

Mr. Kellen CASEM (US) presented the NGA's Global maritime Density Service (GMDTS).

Discussion

SE thanked US for a comprehensive report. SE will share CATZOC data with pleasure and encouraged other MS to do the same.

There was a roundtable discussion as to whether the US could use the CATZOC information available today (data existing in INTOGIS). PL and LT will consider, other MSs don't see any problem to share information.

The Commission decided as follows:

ACTION BSHC28/21. LT and PL to consider to permit US to use their CATZOC data (existing in the



INToGIS). Other MSs to confirm their permission. All to reply to BSHC Chair. BSHC Chair to inform IHO Secretariat and US of the results.

F. Election of new Chair and Vice Chair

The Chair informed that according to BSHC Statutes, current Vice-Chair is invited to become a next Chair for the Commission. The meeting unanimously elected *Mr. Olavi HEINLO* from Estonia as a BSHC Chair by acclamation.

The Chair also proposed, that based on BSHC Statutes and principle of rotation, Latvia is invited to take a position of a Vice-Chair. LV informed that *Mr. Janis KRASTINS* from Latvia will be ready take the responsibility of a Vice-Chair. The meeting supported the proposal unanimously.

The Commission decided as follows:

DECISION BSHC28/12. BSHC28 elected *Mr. Olavi HEINLO* (Estonia) as a next BSHC Chair.

DECISION BSHC28/13. BSHC28 elected *Mr. Janis KRASTINS* (Latvia) as a next BSHC Vice-Chair.

G. Place and date of next Conference

Mr. Olavi HEINLO informed that Estonia is willing to host the 29th BSHC Conference in Tallinn 17-19 September 2024.

H. Review of BSHC28 List of Actions

The Meeting reviewed the Draft List of Actions of the BSHC 28th Conference.

I. Closing ceremony

The Chair *Mr. Rainer MUSTANIEMI* 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.