

36th North Sea Hydrographic Commission Conference

29–30 March 2023 – virtual remote meeting

FINAL MINUTES OF THE CONFERENCE

A. Opening formalities

A.1. Opening of the Conference

CHAIR

Documents:

- [NSHC36 A1.1 Programme](#)
- [NSHC36 A1.2 List of Documents](#)
- [NSHC36 A1.3 List of Participants](#)

The Chair of the NSHC, *Mr. Magnus Wallhagen (SE)*, opened the 36th North Sea Hydrographic Commission Conference and welcomed the delegates and IHO Secretariat representatives. The Chair presented the programme and thanked Norway for the VTC arrangements.

Since last year's Conference, in particular work around S-100 has progressed at IHO and at the national Hydrographic Offices. This should provide the NSHC with a good starting point for implementing the new products in the North Sea area. Regional coordination of S-100 implementation is therefore an important agenda item for the Commission (agenda item C.2). Another important action was to revise the NSHC statutes, in order to incorporate adjustments necessary due to the new IHO organisation. The drafted revised statutes are up for decision at this Conference (agenda item E.1).

The delegations from all NSHC Member States¹ briefly presented themselves. In total, the Conference had about 30 participants, including NSHC vice chair *RAdm Rhett Hatcher (UK)* and most Member States' national Hydrographers. The IHO Secretariat was represented by Secretary General *Dr. Mathias Jonas* as well as Assistant Director *Sam Harper. Benjamin Hell (SE)* served as Conference secretary.

A.2. Adoption of the Agenda

CHAIR

Document:

- [NSHC36 A2 Draft Agenda 2023-03-22](#)

The delegates reviewed the Conference agenda, which has been ordered according to the IHO work programme structure. The Chair informed the Commission that Agenda item C.4 for practical reasons

¹ Belgium (BE), Denmark (DK), France (FR), Germany (DE), Iceland (IS), Ireland (IE), Netherlands (NL), Norway (NO), Sweden (SE), United Kingdom (UK)

needed to be handled on day 2 of the Conference.

DECISION 1: The Commission adopted the agenda.

A.3. Minutes of the 35th NSHC Conference

CHAIR

Document:

- [NSHC35 Minutes](#)

The minutes from 35th NSHC Conference had been approved earlier by correspondence.

DECISION 2: The 36th Conference confirmed the approval of the NSHC35 Minutes.

A.4. Actions of the 35th NSHC Conference

CHAIR

Document:

- Original [NSHC35 List of Actions](#)
- [Updated working version of NSHC35 List of Actions](#)

The Commission reviewed and updated the status of the Actions of the 35th Conference. Action items that could not be closed, as well as permanent and pending Actions, were moved to the 36th NSHC Conference Draft List of Decisions and Actions, see agenda item H.

DECISION 3: The Conference decided to close Actions 8/2022, 10/2022, 2/2021, 3/2021, 6/2021, 7/2021, 10/2021, and 10/2016.

ACTION 1: CBSC representative to include an update on the Empowering Women in Hydrography initiative in the NSHC Conference report.

Regarding closing Action 1/2012 and the suggestion to include reporting on new survey methods in the RWG report instead, Germany raised the issue that not all Member States are participating in the RWG. Therefore, the Commission rephrased the Action in order to stress the responsibility of the Member States:

ACTION 2: MS to supply input on new hydrographic survey methods to RWG chair, for incorporation in the RWG report.

B. IHO work program 1 – Corporate Affairs

B.1. Information about the activities of the IHO

IHO SECRETARIAT

Presentation:

- [NSHC36-B1 IHO Sec Report v1](#)

IHO Secretary-General, *Dr. Mathias Jonas*, presented the Secretariat's work, Council matters and informed the Commission about status of the IHO Work Programme 1 and the IHO's Strategic Plan.

Currently, the IHO consists of 98 Member States, with Panama and Bolivia indicating strong interest to join. Serbia and Syria are currently suspended, and Lebanon will likely also become suspended.

As laid out in the revised IHO constitutional framework, the Council has become the main contributor to the Assembly and endorsed a number of proposals, including a new triennial Work Programme and Budget to Assembly-3.

The Secretary-General reminded of the IHO's Strategic Plan as the core of the Work Programme 2020-2026.

Regarding Goal 1, the focus of the current work lies on implementing the S-100 framework in ECDIS and S-1xx based products, while maintaining S-57 and building a future for the provision of paper charts. IHO will report S-100 implementation progress to IMO on a yearly basis.

Related to Goal 2, the IHO observes an increased interest in hydrographic data from the blue economy and ocean exploitation sectors. The revitalisation of GEBCO through e.g. the Seabed2030 is therefore an important initiative to target Goal 2.

With regard to Goal 3, IHO has participated in the UN Oceans Conference in Lisbon, supports regional activities such as EMODnet, and has ongoing consultations with ocean observation programmes such as ARGO and Mercator Ocean.

The Secretary-General furthermore informed the Commission that the 100 year anniversary issue of the International Hydrographic Review will be distributed as a printed version at the upcoming Assembly.

The Commission noted the report from the IHO Secretariat.

B.2. Information about IHO Council

NSHC REPRESENTATIVE
(GERMANY)

Document:

- [NSHC36-B2 Council Report](#)

Germany currently represents the NSHC in the IHO Council. *Mr. Thomas Dehling* (DE) informed the Commission about the outcome of the sixth meeting of the Council, C-6.

At C-6, updates to the S-100 implementation strategy were endorsed and the Council recommended to the Assembly that S-100 implementation should be the highest priority task for the IHO now.

The Council confirmed the A-2 decision on the automated production of paper charts, and endorsed the U.S. offer to develop S-4 based minimum chart content requirements to be used for automation of paper chart production.

The Council also endorsed a new capacity building strategy to be decided upon by the Assembly. Noting the significant decrease of non-earmarked capacity building funds over the last years, the Council also endorsed suggestions on how to financially strengthen the IHO Capacity Building programme. Related to this, the Secretary-General invited interested Member States to the Finance Committee meeting prior to the Assembly, where this topic will be discussed in more depth.

The Commission discussed the measurement of SPI 1.2.2², based on S-57 ENC CATZOC values. Both

² SPI 1.2.2: Percentage of navigationally significant areas (e.g. charted traffic separation schemes, anchorages, channels) for which the adequacy of the hydrographic knowledge is assessed through the use of appropriate quality

RENCs are working with an approach, which requires Member States to actively opt out to disallow extracting this CATZOC data and sharing it with the Secretariat. The RWG Chair reminded the Commission that the working group also has had Action 14/2022 dealing with SPI 1.2.2 and maintains a map with all Member States' CATZOC values, which can be forwarded to anyone interested.

The Commission noted the Council report.

B.3. Information about upcoming IHO Assembly-3

CHAIR

Document:

- [NSHC report A-3](#)

The Chair informed the Commission about the NSHC report that has been submitted, and will be presented at the forthcoming Assembly.

The Commission noted the information.

C. IHO work program 2 – Hydrographic Services and Standards

C.1. HSSC: Items relevant to NSHC, incl. S-100 implementation

HSSC CHAIR

Document:

- [NSHC36-C1 HSSC Report](#)

Reference document:

- [WENDWG13 List of Decisions and Actions](#)

The HSSC Chair, *Mr. Magnus Wallhagen* (SE), presented the progress in the HSSC working groups, also as an introduction to the next agenda item, which deals with S-100 implementation within the NSHC. The HSSC report focused on

- the progress in the development of the standards and product specifications, resulting also in changes to the S-100 Roadmap Annex 2,
- proposed new IHO Resolutions for decision at Assembly, regarding S-100,
- the IMO approval process for S-100 in the ECDIS Performance Standards, with the transition period from 2026-01-01 until 2028-12-31,
- highlighting the fundamental changes in S-100 ECDIS, related to ENDS and the interoperability between data layers, and the Dual Fuel concept,
- an update on the implementation of the recommendations on the Future of the Paper Nautical Chart, promoting the S-4 based approach to production automation agreed upon at the second Assembly in 2020.

Related to S-100, the HSSC Chair stressed the importance of IHO's implementation commitment

indicators.

towards IMO, leading to the HSSC and Council recommendation that S-100 implementation should be assigned the highest priority in the 2023–2026 Work Programme. This requires Member States to achieve substantial coverage with S-101 ENC's until 2026.

The HSSC Chair invited the NSHC Member States to the 15th meeting of the HSSC, and encouraged Member States to promote contributions to the planned stakeholder session.

The Commission noted the HSSC report.

The HSSC Chair furthermore informed the Commission about S-11 related decisions taken at WENDWG (Action WENDWG13/11 and WENDWG13/12 refer), as well as recommendations from IRCC, related to S-100 implementation.

C.2. NSHC questionnaire results on S-100 implementation

BELGIUM

Document:

- [NSHC36 C2 S100 questionnaire summary](#)

Presentation:

- NSHC36-C2

Mr. Koen Vanstaen (BE) presented the results of the S-100 questionnaire survey, as well as their recommendations for S-100 implementation coordination within the NSHC. He pointed out that especially the second recommendation, on timing, needed further discussion.

The Chair and the Commission commended Belgium for their work with the questionnaire, which served as a solid basis for the following in-depth discussion on S-100 implementation coordination.

The Commission's Member States shared the common opinion that a coordinated implementation of S-100 would yield the highest benefit for the end users, and thereby will strongly contribute to market adoption of S-100 within the shipping industry. The Secretary General pointed out that even if there will be few S-100 compatible ECDIS installed in 2026, stimulating the industry to invest into S-100 equipment needs to be “fuelled” by data with good coverage and added value.

The Commission by-and-large acknowledged the concrete recommendations from Belgium as how to distribute the responsibility for S-100 implementation coordination among the existing NSHC working groups. However, coordination of S-128 was not considered to be as relevant as it will mostly be carried out by the RENCs. The Commission also identified the potential problem in several countries that Navigational Warnings are not under the responsibility of the national Hydrographic Office, which may complicate S-124 implementation coordination.

With regard to the timeline of S-100 implementation as well as planned product coverage, the Commission concluded that both aspects should be dealt with so that added value for the end users is maximised as early as possible. As an example, focus should lie on the most important geographic coverage in terms of vessel navigation and a synchronized launch of different products in the same region as a complete S-100 stack of interoperable services.

The Commission also acknowledged that S-100 coordination is a new task and may require different skills and competence from the Member State representatives in the involved working groups.

Based on these discussions, the Commission agreed on the following decisions and resulting actions.

DECISION 4: The Commission decided to task the NSICCWG with overall S-100

implementation coordination in general, including the critical standards framework as applicable, as well as S-101 and S-102 implementation coordination specifically.

DECISION 5: Considering that Actions 3/2022 and 4/2022 will be dealt with by the revised NSICCWG ToR, and that Action 7/2022 has been overtaken by NSICCWG S-100 coordination, the Conference decided to close these Actions.

ACTION 3: NSICCWG to propose revised ToR to NSHC37, with regard to coordination of S-100, S-101 and S-102, also taking into account Actions 3/2022 and 4/2022.

ACTION 4: NSICCWG to refine the S-100 implementation questionnaire and use it as a basis for their annual S-100 implementation report to the NSHC Conference.

ACTION 5: MS to consider the S-100 related competence needed in the WG, with regard to their WG representatives.

DECISION 6: The Commission decided to task the TWG with S-104 and S-111 implementation coordination, and TWG to report to NSICCWG on the progress.

ACTION 6: TWG to report to NSICCWG on the progress of S-104 and S-111 implementation.

DECISION 7: The Conference decided to task the NSMSIWG with S-124 coordination, and to report to NSICCWG on the progress.

ACTION 7: NSMSIWG to consider revising ToR/WP with regard to coordination of S-124, until NSHC37.

ACTION 8: NSMSIWG to report to NSICCWG on the progress of S-124 implementation.

C.3. Report of Resurvey Working Group (RWG)

RWG CHAIR

Document:

- [NSHC36-C3 Report RWG final](#)

The RWG Chair, *Mr. Leendert Dorst* (NL), reported from the most recent 12th meeting of the RWG, which took place in Amsterdam in December 2022, see written report. Furthermore, two online meetings have been held since the last NSHC Conference.

With regard to Action 18/2022, the North Sea Shipping Group has participated in the 12th RWG meeting and the Action can be considered done.

One important achievement of the RWG are the CATZOC and resurvey frequency overview maps that have been produced.

DE highlighted the international coordination and consultation on the required survey quality, which is an important contribution for political decisions related to surveying.

The Commission noted the RWG report and discussed the items raised by the RWG.

With regard to coordinating S-102 implementation (Actions 3/2022 and 4/2022 refer), it was confirmed that this is not a task for the RWG, see Decisions 4 and 5 above.

Regarding the regional measurement of SPI 1.2.2, the Commission appreciated that Action 14/2022 has been overtaken by events. Considering that CATZOC harvesting from RENCs will be used by the IHO Secretariat to follow up on SPI 1.2.2, it may complicate for the Secretariat to use the RWG maps instead.

DECISION 8: The Commission decided to close Action 14/2022.

The risk assessment analysis, Action 6/2014, is still relevant but covered by the RWG ToR. Therefore the Commission considered the Action as done.

DECISION 9: The Commission decided to close Action 6/2014.

The Commission's in-depth discussions about the future leadership of the RWG did not produce any nominations for a new working group chair, although UK kindly offered to host the next meeting. Consequently, the Chair suggested that the only solution would be to keep the RWG dormant for the coming year, and encouraged Member States to instead focus resources on the global HSWG for the time being. BE expressed support for the Chair's suggestion.

DECISION 10: The Commission decided to keep the RWG dormant for the coming year.

ACTION 9 (considering and rephrasing 17/2022): Member States to consider nominating a new chair for the RWG, in order to ensure the continuity of the work, and in the meantime focus related efforts on the IHO HSWG.

The Commission thanked NL for chairing the RWG until now, and appreciated the RWG's achievements.

C.4. Report of Tidal Working Group (TWG)

TWG CHAIR

Document:

- [NSHC36-C4 TWG Report-SE](#)

The acting chair of the TWG, *Mr. Thomas Hammarklint* (SE), presented the report.

Two virtual meetings have been held since the last Conference, the working group's 24th and 25th meetings. The next meeting is planned to be a physical meeting. Alongside, the work has mainly been carried out by email correspondence. To ease their work, the TWG expressed the need to revive the NSHC web site, see also agenda item D.9.

The TWG suggested to update their Terms of Reference, in order to include S-104 and S-111 coordination as decided and to refine the process of how to select a WG chair. Furthermore, the TWG suggested to amend their Work Programme accordingly with more specific tasks.

The Commission noted the report.

DECISION 11: The Commission approved the ToR for the TWG.

The Commission discussed the matter of LAT differences at national boundaries, which should not exceed 1% of the water depth, and whether this norm can be justified based on e.g. applicable standards. The TWG considered to use a S-44 based Total Vertical Uncertainty measure for comparing LAT surfaces, and proposed to further investigate the implications of such measure.

DECISION 12: The Commission decided to close Actions 6/2016 and 8/2021 and approved the proposed way forward.

Decisions related to task the TWG with regionally coordinating S-104 and S-111 implementation had already been taken under agenda item C.2.

C.5. Sunsetting of ADMIRALTY paper charts

UK

Oral Presentation:

- NSHC36-C5 Future of Digital Charting updated

The UK (*RAdm Rhett Hatcher*) provided the Commission with an update on the plan to withdraw from the paper chart market.

Since the announcement was made in summer 2022, the work implementing the withdrawal from paper charts has commenced and the initial target date 2026 has been moved forward to 2030, based on the feedback received. The UK confirmed that the transition will be done step by step, informed by additional market research along the way.

The UK invited MS to participate in a [questionnaire about the sub ECDIS segment of the market](#).

According to the UK, the robust plans that exist for S-100 implementation in ECDIS are less clear for the sub ECDIS market, although at least parts of this segment are already applying a digital first approach. There is a need for officially regulated Electronic Charting Systems, and other regulation for the shipping sectors below the ECDIS carriage requirement thresholds.

The UK expressed the concern that not acting on this will result in safety risks, mostly due to the possibility of using unofficial data for navigation, the lack of standardisation around presentation and validation, as well as an increased cyber security risk.

Following the presentation by the UK, the Commission discussed the topic thoroughly.

Several other Member States appreciated that UK have raised the issue in IHO, but highlighted that regulatory changes likely need to be handled at IMO and by the national regulatory authorities first. Only after that, and based on a revised regulatory framework, IHO could deal with adopting the relevant hydrographic standards if necessary. ENC data, in S-57 format, is already used today by the sub ECDIS market. It should be suitable to use S-57 or S-101 also in the future. Changes in IHO standards might not be necessary.

The Chair concluded that this will be an agenda item for Assembly, but certainly also for HSSC and probably even IRCC.

ACTION 10: Member States to contribute to the sub ECDIS market survey³ conducted by UK [deadline end of May 2023].

³ Survey available at <https://www.surveymonkey.co.uk/r/6CKJYZL>

C.6. (INF) French project to modernize nautical charting: The unified cartographic source

FRANCE

Document:

- [French project to modernise nautical charting: The unified cartographic source](#)

France (*Mr. Laurent Kerléguer*) presented a project aiming at the simplification of their chart production, which is needed in order to streamline dual fuel ENC production alongside with paper chart production. Their unified cartographic source approach addresses discontinuities in the display of ENCs within and in-between usage bands, as well as between SHOM and other organisations' ENCs.

Their approach is data centric instead of a product centric, with a single (best) charting scale in any given area. Based on how challenging navigation is locally, one of in total four different scales can be used. The result is a unified cartographic source, the basis for all charts and ENCs. From this unified source, products can be derived either directly, or after generalisation. The result of generalisation is a minimal depiction of the chart content, stimulating the navigator to use a better scale chart for the particular area.

SHOM will start the rollout of production according to this strategy in 2024.

The Commission noted the information from FR.

DE and SE expressed interest in exchanging experiences with FR, as they share the same basic production system.

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

D.1. Actions requested by IRCC

CHAIR / IRCC CHAIR

Reference document:

- [IRCC14 List of Actions, Decisions and Recommendations to RHCs](#)

With assistance from the IRCC Chair, *Mr. Thomas Dehling* (DE), the Commission discussed the Actions and Recommendations by the IRCC to all Regional Hydrographic Commissions. The Commission concluded that the recommendations are either continuously being taken care of by the NSHC working groups, in collaborative projects such as EMODnet⁴ or by the Member States individually⁵. Other IRCC recommendations have been incorporated in the Conference agenda⁶ or have already been overtaken by events⁷.

DECISION 13: The Commission decided to consider all remaining open IRCC Actions and Recommendations done and close them.

⁴ IRCC14 Recommendations 15, 16

⁵ IRCC14 Recommendations 2, 4, 8, 9

⁶ IRCC13 Action 6; IRCC14 Recommendations 5, 6, 7

⁷ IRCC14 Recommendation 11, 13

D.2. IHO-EU Network Report

NSHC REPRESENTATIVE
(GERMANY)

Document:

- [NSHC36-D2 IENWG Report](#)

On behalf of Germany as the NSHC representative in the IHO-EU Network, *Mr Thomas Dehling* (DE) informed the Commission about the work done in the IHO-EU Network Working Group (IENWG).

The Memorandum of Understanding between the European Commission and IHO has been signed 10 years ago. The IENWG is the operative link for this and open to all Member States, not only RHC representatives. A ten-year anniversary event has been held in Brussels last year.

The working group has been dealing with compatibility issues towards the EOOS systems. Regarding EMODnet, bathymetry still the most important theme for the IHO, and interoperability between EMODnet and IHO standards is an important topic.

Marine Spatial Planning (MSP) has always been a topic for discussion in the working group, where it is considered important to link between the Hydrographic Offices and MSP experts, which most often are not the same organisation.

The matter of the Open Data Directive, with its list of High Value Datasets, has been discussed. As per current understanding, High Value Datasets do not include (marine) ENC's but only inland ENC's.

The next meeting of the IENWG will be held in conjunction with the European Maritime Days in Brest, May 2023.

The NSHC noted the report.

D.3. Report of the Baltic Sea North Sea Marine Spatial Data Infrastructure Working Group (BS-NSMSDIWG).

BS-NSMSDIWG CHAIR

Document:

- [NSHC36-D3 BSNSMSDIWG DNK](#)

The BS-NSMSDIWG is a working group shared between the Baltic Sea and the North Sea Hydrographic Commissions.

The interim working group Chair, *Mr. Christian Thellufsen* (DK), informed the Commission about the journey of the group during the last year, trying to refocus and redefine its tasks and work. Despite a detailed and seemingly ambitious work programme, no members have signed up for the respective work tasks.. Several members of the group have questioned the benefit of the working group for the NSHC. A decision needs to be taken on whether to shut down the working group or to continue the work with a sharpened focus.

Therefore, the group has tasked a few of its members to simplify and specify concrete goals for the group and propose changes to the Terms of Reference.

The group only has an interim Chair (DK), signalling a wish to step down, and there were no candidates for the Chair position at the time of the Conference.

The Commission noted the report.

In his capacity as Chair of the BSHC Strategic Correspondence Group, *Mr Magnus Wallhagen* (SE)

informed the Commission about a proposal to be submitted to BSHC28 (September 2023) that BSHC should withdraw their engagement in the BS-NSMSDIWG and focus resources on the global level MSDIWG instead.

The Commission discussed in depth the future of the BS-NSMSDIWG.

One conclusion, expressed by several Member States, was that the relevance of MSDI for Hydrographic Offices has diminished significantly since the group was established many years ago. At that time, many Hydrographic Offices did not naturally consider spatial data, MSDI and data use beyond navigation – such as for Marine Spatial Planning. However, this has been changed with the S-100 paradigm shift. Furthermore, structures for dealing with these questions nationally and internationally have been established, for example with the implementation of the EU INSPIRE Directive. This paradigm shift was partly enabled by the MSDI working groups. Now, regional S-100 coordination can fill much of the remaining regional aspects of these groups' previous role and the limited resources should be focused on where they produce the greatest benefits.

On the other side, the concern was raised that while the IENWG can address policy questions related to MSDI, a forum for exchanging operative views on e.g. INSPIRE and EMODnet is needed. Consequently, maybe the BS-NSMSDIWG could be developed into a truly European MSDI working group.

The Chair concluded that this discussion could not have been prepared before the meeting and suggested to make the working group dormant during the coming year, in order to take a final decision on either starting up again or finally close the group at the next Conference.

DECISION 14: The Commission decided to keep the BS-NSMSDIWG dormant, until a final decision to continue or shut down the work will be taken at NSHC37.

ACTION 11: MS to submit proposals on the future of BS-NSMSDIWG to NSHC37.

D.4. Report of the North Sea MSI Working Group (NSMSIWG)

NSMSIWG CHAIR

Documents:

- [NSHC36-D4 NSMSIWG Report PPT](#)
- [NSHC36-D4 draft ToR's North Sea Maritime Safety Information Working Group V2](#)

The acting NSMSIWG Chair, *Mr. Christopher Gill* (UK) presented the report of the working group.

Since the last Conference, where the NSMSIWG was established, the working group has had two virtual meetings, with participation from all NSHC Member States.

At the first meeting, the working group agreed upon proposed Terms of Reference and discussed the NAVAREA I self-assessment for the WWNWS-sub-committee, as well as S-124 and the implementation of the Iridium SafetyCAST broadcast system.

At the second meeting, the working group was updated on the outcomes of the WWNWS14 meeting, and discussed the chairpersonship of the group as well as several technical matters. The UK volunteered as candidate for both Chair and Secretary of the working group.

The Commission noted the report.

DECISION 15: The Conference approved the NSMSIWG ToR and chair election (UK), and

noted that UK is also acting as the WG secretary.

DECISION 16: The Commission decided to close IRCC14 Recommendation 5, as this has been taken care of in the NSMSIWG report.

The Netherlands informed the Commission about the fact that MSI is nationally organised under the NL Coast Guard, and they are hopeful that the Coast Guard will participate in future meetings.

The Chair reminded the Commission about the correlation between met-ocean information and warnings and navigational warning services, which is important to consider in relation to the applicable S-12x and S-41x product specifications.

D.4.1 (INF) PING: French national digital platform for nautical information using S-124

FRANCE

Document:

- [NSHC36-D4.1 FR PING project](#)

Mr. Julien Smeekaert (FR) informed the Commission about the French PING project, which aims at establishing a digital platform for the production and delivery of navigational warnings in various systems. This will increase integration and interoperability between the systems. It is part of a larger French initiative regarding nautical information digitalisation.

The PING system feeds both human and machine-readable interfaces as well as legacy NAVTEX, S-124 based services and can be extended to support other broadcasting systems in the future. The system will be deployed operationally in 2023, and its code base is planned to be released as open source.

The implementation was co-financed with EU Interreg funds within the MED OSMOSIS project, which ended in 2022.

The Chair congratulated France for the impressive progress made in the field of navigational warnings, based on the relevant S-100 standards. The Commission noted the report.

ACTION 12: FR to keep NSMSIWG updated on PING progress, in relation to their role to coordinate S-124 implementation.

D.5. Report of the NSHC representative to WENDWG

NSHC REPRESENTATIVE
(UK)

Document:

- [NSHC36-D5-WENDWG Report](#)

The NSHC Representative to the WENDWG, Mrs. Helen Wojcik (UK), presented her report. She commended Belgium for their efforts with the S-100 implementation questionnaire, which was used as the basis for the NSHC IGIF matrix submission to the WENDWG.

Member States are encouraged to contribute their S-128 data for testing and developing INTOGIS III.

The WENDWG Representatives were tasked to report on the Charting Regions' respective planned S-101 ENC schemes to WENDWG14.

The Commission noted the report.

The Commission discussed the responsibility for the submission of the IGIF matrix to the WENDWG in the future on behalf of the NSHC, and whether this should be dealt with by the NSICCWG (tasked with overall regional S-100 coordination) or the WENDWG Representative.

ACTION 13: WENDWG Representative to continue submitting the IGIF matrix for NSHC to WENDWG.

The WENDWG Representative noted that MSDI might not be very relevant to include in the IGIF Matrix, as per the discussion and decisions taken under D.3. The Commission agreed that this dimension might be left out in future reports if suitable, at the discretion of the WENDWG Representative.

D.6. Report of the North Sea INT Chart Coordination Working Group (NSICCWG)

NSICCWG CHAIR

Document:

- [NSHC36-D6 NSICCWG Report](#)

The NSICCWG Chair, *Mr. Ashley Hawkins* (UK), presented the report of the working group. The group has been active solely by correspondence until now, without any physical or virtual meetings involving the entire group.

The NSICCWG Chair reported updates to the INT Chart scheme, changes to the ENC scheme, the status of ENC gaps and overlaps in the region, and the completion of Action 8/2022.

The Commission noted the report, recognizing that the S-100 related decisions and actions concerning the NSICCWG had already been taken under agenda item C.2.

Germany informed the Commission about the status regarding HDENC implementation in Germany.

The Chair highlighted that the purely correspondence based work in the NSICCWG may need to change, with regard to the new tasks of coordinating S-100 implementation, and reminded the Member States to consider the S-100 related skills needed in the working group, when choosing their working group representatives. The Chair and the working group Chair briefly discussed that organising the three main coordination tasks in the future (paper charts, two generations of ENCs, S-102 bathymetry) may require dedicated task forces to be set up within the working group.

D.7. IHO Capacity Building Sub-Committee Issues Review (CBSC)

NSHC REPRESENTATIVE
(NORWAY)

The NSHC Capacity Building Sub-Committee representative, *Mr. Evert Flier* (NO), gave a short overview on the status of the IHO Capacity Building Programme. He also highlighted the proposal regarding capacity building to the Assembly, submitted by the U.S. and co-sponsored by several other Member States.

The non-earmarked capacity building funds from IHO Member States are currently only about 60 kEUR, while the remaining funds are earmarked and originate from the Nippon Foundation and South Korea. On the short term, the financial situation is positive, but this is mostly due to the backlog caused by the COVID pandemic.

The Chair draw the attention of the Commission to the substantial Redbook comments on the U.S. proposal, submitted by France and the IHO Secretariat to form a Project Team under the existing IHO structure.

D.8. Status CSB/GEBCO/Seabed 2030

NORWAY

The Chair of the GEBCO Guiding Committee, *Mr. Evert Flier* (NO), updated the Commission on the work done for GEBCO and within the Seabed2030 initiative.

This year, GEBCO has its 120-year anniversary, which will be a highlight at the IHO and IOC assemblies. Ocean mapping is progressing globally, much thanks to the Seabed2030 project. As per today, 23.4% of the World Ocean is considered mapped, compared with 6% when Seabed 2030 began. The only goal of Seabed2030 is to improve GEBCO; the two are practically no separate initiatives.

Work has commenced to have the IHO Crowd Sourced Bathymetry initiative endorsed as a UN Ocean Decade action, but more contributions from Hydrographic Offices to the work of the CSBWG would be appreciated.

The Commission noted the report.

The Chair, as well as the IHO Secretary-General, stressed the importance of GEBCO and Seabed2030 for the IHO, both due to its history but also for the future.

D.9. NSHC Website

GERMANY

Document:

- [NSHC36-D9 DE NSHC website](#)

Mr. Thomas Dehling (DE) informed the Commission about the status and problems with the NSHC web site, which has been used for publishing information from NSHC working groups, and has been taken offline. Germany also made some proposals for a way forward.

The Commission discussed the need for a dedicated NSHC web site. The TWG expressed a substantial need for having a web site for internal and external collaboration. The web site is also mentioned in the RWG ToR. The IHO Secretary-General confirmed that the Secretariat does not have the capability for administering any Regional Hydrographic Commission web sites. Germany commented that for internal purposes a cloud based collaboration solution would be sufficient.

In lieu of a better solution, the Chair encouraged the affected WGs to suggest alternatives to a full-blown web site, such as a cloud-based platform. The proposal was supported by BE, NO and UK, and the remaining Commission members did not express any objections to this suggestion.

ACTION 14: Concerned WGs to consider and suggest alternative collaboration solutions to a full-blown NSHC web site until NSHC37.

ACTION 15: MS to consider taking over responsibility for hosting a NSHC web site or alternative solution.

E. Any other business

E.1. NSHC Statutes

CHAIR

Documents:

- [NSHC36-E1 NSHC Statutes](#)
- [NSHC36-E1 Annex A Draft NSHC Statutes ver 0.2 2023 SE and UK clean version](#)
- [NSHC36-E1 Annex B Draft NSHC Statutes ver 0.2 2023 SE and UK redline version](#)

Amendments to the NSHC Statutes had been proposed by the Chair (SE) and the Vice Chair (UK).

The Chair explained the proposed changes, which are partly based on structural changes within the IHO, decided at the first Assembly, since the last amendment 2016 (NSHC Action 1/2021 refers). Furthermore, the draft also implements a gender-neutral language, changes to how NSHC Conferences shall be organised, and minor editorial revisions.

The Commission discussed the topic and generally appreciated the revisions. Some Member States noted remaining minor editorial issues and proposed another review and approval process by correspondence, followed by a formal signing procedure at the next Conference.

DECISION 17: The Commission intends to approve the amended statutes by correspondence, followed by a formal signing procedure at the NSHC37 conference.

ACTION 16: Chair to circulate the draft amended statutes for feedback and comments (six weeks), to be followed by approval by correspondence.

DECISION 18: The Conference decided to close Action 1/2021.

F. Election of new Chair and Vice Chair

Not applicable, as the NSHC is chaired on two-year terms.

G. Place and date of next Conference

Sweden proposed to meet 8–10 April 2024 (in conjunction with NHC) in Malmö, Sweden.

The Commission approved the proposal.

H. Review of NSHC36 List of Actions

The Conference reviewed the draft List of Actions, which will be circulated for comments by the participants, together with the draft Meeting Minutes.

I. Closing ceremony

The Chair reminded the Commission about the fact that establishing a regional S-100 implementation coordination structure can be seen as an important milestone for the work ahead of the Commission. Also, it should not be seen as a failure to have dormant working groups, as long as the limited operative resources available then can be concentrated on the most prioritized work.

The Chair then declared the Conference closed, and welcomed the delegations to the planned physical 37th Conference in 2024 to Malmö, Sweden.