

Dublin, Ireland

21 - 23 June 2016

A.1 Formal opening

The Chair, Captain Marc van der Donck Director of the Netherlands Hydrographic Office, welcomed all the delegates to the 32nd NSHC conference. The attendance of Director Mr. Gilles Bessero (IHB), Mrs. Pauline Weatherall (GEBCO), Mr. George Elenbaas (US Navy) and of representatives from the industry was very much appreciated.

The Chair mentioned today's celebration of World Hydrography day, with the theme "Hydrography: the key to well managed seas and waterways". He thanked the host for the excellent and welcoming arrangements, especially for the beautiful and historically important venue, Dublin castle.

Since NSHC 31, there has been a closed and an open session of the meeting. Some Members wondered if the balance between the two sessions was right. The Chair will use the experience gained at this meeting to evaluate the division for the next conference. See [action 1/2016](#).

All delegates were invited to give a quick update on the status of the individual HO's, highlighting mayor developments.

In advance of the meeting an apology for his absence was received from the representative of the Open Geospatial Consortium (OGC), Mr. Scott Simmons.

A.2 Agenda

Doc: NSHC3-A.2 - Annex 2

The Chair outlined the intend and set up of the agenda. Some last minutes changes were made. Item E.3, IHO GIS, was included in item B.1, IHB. Item G.1, OGG topics, was replaced by a short update by NL due to the absence of Scott Simmons of OGC.

A.3 Report 31st conference

Doc: NSHC32-A.3 – NSHC31 Minutes

There were no comments on the minutes of the 31st NSHC. The conference consequently approved the minutes. The Chair thanked NO for its excellent work. This was widely endorsed by the Members.

A.4 Statutes: Selection IHO council

Doc: NSHC Letter 02/2016 + enclosures - A procedure for the NSHC to designate representatives to the IHO council

Doc: NSHC Letter 04/2016 - A procedure for selection of Member States for the IHO Council

Doc: NSHC32-A.4.1 - Selection IHO council presentation

32nd NORTH SEA HYDROGRAPHIC COMMISSION MEETING

In NSHC letter 02/2016, the Chair proposed a procedure for the NSHC to designate representatives to the IHO Council. In letter NSHC 04/2016, the Chair reflected the feedback received on the use of the word “representative” in this proposal. Subsequently, he formulated 2 decision points for NSHC 32: one on the wording and one on the meaning of “representative”. On the wording, it was decided that it should be “Member States selected by the NSHC” instead of “representative of the NSHC”. On the meaning, the Members agreed that the selected Member State should be able to act without active counselling of the other Member States, but the selected Member State had a ‘moral’ obligation to take the views of the NSHC into account. Both constitute NSHC decision 1/2016.

In order to prepare for the IHO Council a standing agenda item will be added to the agenda of the NSHC conference to cover IHO Council matters. In years without an ordinary NSHC conference, the Chair will organise a ‘video teleconference’ to address especially IHO Council matters. This constitutes NSHC decision 2/2016.

The Chair will amend the statutes accordingly, to reflect the decisions made on the selection of Member States for the IHO Council and the preparation for it. See action 2/2016.

Post conference note: Annex 1 to the minutes reflects the amendments for IHO council selection.

A.5 Conclusions: Proposal way ahead

Doc: NSHC Letter 03/2016 - Way forward for the conclusions of the NSHC

Doc: NSHC32-A.5.1 - Conclusions Proposed way ahead presentation

The Chair presented his proposal on the way forward for the list of conclusions. The underlying problem is that the current list is long (115 items), spans 53 years, has a varied character (mix of actions and decisions) and has an unclear overall aim.

It was agreed that the primary aim of the list is to guide current and future activities, in other words to focus the managerial attention of the NSHC. It was also agreed to work with separate action and decision lists, instead of a single list of conclusions and to apply the following set of definitions for the action items.

- Open action items. These action items still await concrete deliverables.
- Continuous action items. These action items are standing activities/responsibilities that are not covered elsewhere, i.e. not inherent to the standing responsibilities of (NSHC) Working Groups.
- Completed or closed action items. These action items do not need individual review at Commission level. Either they are completed, taken over by events, or do not require further action (at the commission level) as they are inherent to the standing responsibilities of the (NSHC) Working Groups.

This constitutes NSHC decision 3/2016.

The lists of new and updated actions and decisions will be annexed to the conference minutes. Furthermore, only ‘active’ action items (open and continuous) are to be retained. Action items declared completed or closed at each conference are to be scrubbed from the next conference’s list. This constitutes NSHC decision 4/2016.

The Chair will amend the Statutes to reflect the use of actions and decisions instead of conclusions. See action 3/2016.

Post conference note: Annex 2 to the minutes reflect the amendments of the Statutes for the use of decisions and actions.

In Annex A to NSHC letter 03/2016, the Chair also provided status updates for the ‘active’ conclusions based on the new set of definitions above. The Chair introduced those remaining ‘active’ conclusions

32nd NORTH SEA HYDROGRAPHIC COMMISSION MEETING

with reference to the appropriate place in the agenda. Subsequently, the Chair was tasked to modify the current list of conclusions in line with decision 4/2016 above, the proposed way ahead in Annex A of NSHC letter 03/2016 and the results of discussions during the various agenda item of the conference. See [action 4/2016](#).

Post conference note: Annex 3 to the minutes reflect the modifications of 'active' conclusion into actions.

B.1 IHB

Doc: NSHC32-B.1.1 - IHO report presentation

Doc: NSHC32-B.1.1a - IHB Report final

IHB gave an overview of the transition towards the new IHO structure. With the 48th approval of the Protocol of Amendments to the IHO Convention underway, there are sufficient approvals to continue with the new IHO structure.

The conference noted the report and took for action the various requests.

B.2 IRCC 7 & 8, including way ahead on IRCC decisions and actions

Doc: NSHC Letter 02/2015 - IRCC report

Doc: NSHC Letter 25-02-2016 + Attachments – Report to IRCC8

Doc: NSHC Letter 05/2016 - Preparation for IRCC8

Doc: NSHC32-B.2.1 - IRCC7 and 8 presentation

Doc: IRCC8-08B - Relations with Stakeholders

The Chair reported on the IRCC7 and IRCC8 meetings. At IRCC8, there was a question on the status of the NSBD. At the meeting DE explained that it had view function only. Concerning a future download function two issues were identified: the willingness of the Members and the technical availability. DE followed up on this during its presentation on the NSDB (agenda item C.2).

In the NSHC report to IRCC8 following 'open' actions of IRCC were reported.

Action identifier	IRCC action description	IRCC status	Actions taken by NHSC
<i>IRCC7/20</i>	<i>Provide input on possible sources of CB funding</i>	<i>input expected</i>	<i>To be discussed at NSHC32</i>
<i>IRCC7/26</i>	<i>Report on status of procedures to select representatives to the Council</i>	<i>ongoing</i>	<i>Concrete proposal to be discussed at NSHC32. Agenda item A.4</i>
<i>IRCC7/43</i>	<i>Provide access to IHB to CB promotional material</i>	<i>input expected</i>	<i>Members are invited to share CB promotional material to the IHB as displayed at the EIHC 5 CB exhibition.</i>
<i>IRCC7/48</i>	<i>Consider nominating regional MSDIWG representatives</i>	<i>input expected</i>	<i>To be discussed at NSHC32.</i>

32nd NORTH SEA HYDROGRAPHIC COMMISSION MEETING

			Agenda item E.1
<i>IRCC7/56</i>	<i>Provide comments on relevance of information overlay services</i>	<i>expected via Action WENDWG5/01</i>	<i>Action is paused as the issue is still under consideration of the WEND WG (overlay services as AIO).</i> Agenda item B.2
<i>IRCC7/62</i>	<i>Consider providing IHO representatives at international meetings</i>	<i>input expected</i>	<i>Members are encouraged to provide IHO representatives at international meetings.</i>

Regarding action IRCC7/20, it was determined that Members are to make sure that the relevant CB coordinator is informed on their bilateral CB activities (in kind or financial). FR enquired what the EU can do for CB. That could be to raise awareness of the industry. See [action 5/2016](#).

Regarding action IRCC7/43, the Chair invited Members to share CB promotional material as displayed at the EIHC 5 CB exhibition with the IHB. This IRCC action was subsequently closed at NSHC level.

Regarding action IRCC7/62, the Chair handed out the relevant list of potential stakeholder events (Annex A to paper IRCC8-08B on “Relations with other International Organizations and IHO Stakeholders”). The Chair encouraged Members to provide IHO representatives at those events if they so choose. This IRCC action was subsequently closed at NSHC level.

IRCC7 actions 26, 48 and 56 were discussed in the relevant agenda item.

B.3 Wend WG

Doc: NSHC32-B.3.1 – WENDWG

Doc: NSHC32-B.3.1a - WENDWG Presentation

UK presented a report on the WENDWG highlighting the issues of the 6th WENDWG meeting of March 2016.

The conference noted the report, including a comment to work together to reduce overlaps by applying the WEND Principles in defining approved ENC schemes.

UK will continue to provide the representative of the NSHC to the WENDWG.

B.4.1 IENWG

Doc: NSHC32-B.4.1 – IENWG

DE presented a report on the IENWG. The conference noted the report.

Concerning the call for tender of DG Mare for the successor of the EMODnet project, GE reported it was open and now named High Resolution Seabed Mapping (HRSM). EMODnet and the Coastal Mapping project are to be merged into HRSM.

32nd NORTH SEA HYDROGRAPHIC COMMISSION MEETING

In light of the report, the Chair encouraged Members to take part in the mutual consortium managed by FR/SHOM. Furthermore, Members were requested to inform the NSHC Members if they don't wish to be part of the merged EMODnet 2 and Coastal Mapping consortia, i.e. deviate from the intended arrangements. This constitutes NSHC decision 5/2016.

Active conclusion 104 on the Joint European and Coastal mapping program can now be 'closed'.
Active conclusion 105 on EMODnet can now be 'completed'.

B.5 TWG Report

Doc: NSHC32-B.5.1 - Report from the Tidal WG

Doc: NSHC32-B.5.1a and 1b - Minutes 20th and 21st NSHC

NL presented a report on the NSHC TWG. The conference noted the report and approved the TWG work plan and action items. Members also approved the publication of the minutes of the 20th and 21st NSHC-TWG on www.nshc.pro.

The minutes refer to the TWG research on the differences between LAT realizations along adjoining boundaries of the Members, but without going into details. At the conference itself NL presented the concrete results of this research. During the conference, the large difference between DE and DK was clarified.

The new HRSM project could build on the results of this research. To that end, the TWG was requested to complete as many internal actions dealing with those LAT differences as possible by 31 December 2016. Until then, the publication of the results will be paused. See action 6/2016.

Furthermore the TWG was tasked to evaluate the 1%-norm which was used (LAT differences between divided by water depth) from different user perspectives and to report back to the NSHC. See action 7/2016.

Active conclusion 87 on the NSHC TWG is now over taken by action 7/2016 and can be 'closed'.

B.6 Temporal variation as indicator for chart quality

Doc: NSHC Letter 06/2016 + attachment: Data Quality working group

The DQWG invited the Members to take note of the paper they prepared for the S-100 WG and to provide feedback. UK expressed its concern on the growing workload to provide additional data attributes. This concern was addressed by mentioning that "unassessed" could be used as a value for "temporal variation".

C.1 EMODnet & Coastal mapping

Doc: NSHC32-C.1.1 - Litto3D

Doc: NSHC32-C.1.1a - SHOM coastal survey presentation

Doc: NSHC32-C.1.2 - Coastal mapping and EMODnet

FR presented a paper on Coastal Mapping and EMODnet. The conference noted the paper. As stated earlier during agenda item B.4.1, Member States were encouraged to join the EMODnet III Consortium.

FR give a presentation on the LITTO3D project.

C.2 NSBD (and website)

Doc: NSHC Letter 01/2015 – NSHC website

Doc: NSHC Letter 03/2015 - Baltic Sea Bathymetric Database

Doc: NSHC Letter 04/2015 - North Sea Bathymetric Database

Doc: NSHC32-C.2.1 – North Sea Bathymetry Database

DE gave a report on the setup of nshc.pro and the North Sea Bathymetry Database (NSBD). The conference noted the report.

The NSBD is filled by DE with harmonised bathymetric data. Upon the question on the further maintenances and development of the NSBD in the light of the announced EMODnet III call, it was decided to pause until the outcome of the HSRM tender is known. This constitutes NSHC decision 6/2016.

Upon the question on the enhancement of the content offered under www.nshc.pro, all NSHC WGs were requested to distribute information on the NSHC website, unless sensitivity of the subject does not allow this, as assessed by the WGs. This constitutes NSHC decision 7/2016.

C.3 GEBCO

Doc: IHO CL/11/2016

Doc: NSHC32-C.3.1a - GEBCO presentation

GEBCO gave an overview of its work. Even in the NSHC area, there are some gaps to fill. The Chair stated that Members need to be aware of such gaps while planning their survey efforts.

C.4 All aspects for big area survey

Doc: NSHC32-C.4.1 – The challenge of a large area bathymetric survey

Fugro gave a presentation on the process of planning and executing a large area survey.

C.5 Shallow water surveying

Doc: NSHC32-C.5.1 – Shallow water surveying

SE gave a presentation on the need for shallow water surveys in the Swedish coastal zone. The proposition was that a combination of Lidar and acoustic surveys would be the ideal way ahead. This would require an update of S-44 because of its strictness for the concept of fairways. SE suggested that they look into the matter and present an addition to IHO, possibly as part of the work of the IHO S-44 project team. The Members agreed.

C.8 Projects Southern Sunmøre (green laser scanning)

Doc: NSHC32-C.8.1 – Southern Sunmøre projects

Doc: NSHC32-C.8.1a - Southern Sunmøre projects presentation

NO gave an update on the three projects in the Sunmøre area. NO highlighted the call for tender for a Green Laser project which is open for industry until August 2016.

C.6 Results study quality SDB

Doc: NSHC32-C.6.1 – SDB Template

Doc: NSHC32-C.6.1a – SDB presentation

32nd NORTH SEA HYDROGRAPHIC COMMISSION MEETING

FR presented a paper for consideration by the NSHC: a FR SDB study. The conference noted the paper.

FR gave a complementary presentation on their results with Satellite Derived Bathymetry using two methods, the empiric method and the physics-based method. Although the methods are not S-44 compliant, SDB can provide a cost effective way to fill charting gaps.

C.7 SDB developments by ARGANS

Doc: NSHC32-C.7.1 – SDB ARGANS presentation

Argans presented their approach towards SDB. The challenge was to work with new techniques and apply algorithms in such a way that they provide useful products.

D.1 RWG report, including DSSS

Doc: NSHC Letter 15-07-2015 - NSHC RSW

Doc: NSHC32-D.1.1 – Report resurvey WG

Doc: NSHC32-D.1.1a and 1b - Report resurvey WG Annex a and b

NL presented the report of the NSHC RWG. The conference noted the report.

As response to the vacancy for the WG Chair, UK volunteered to chair the meetings of the RWG, taking over after the next meeting. That next meeting will take place directly after Hydro 16 in Rostock, parallel to the BSHC Survey Monitoring WG. The Members welcomed and accepted the offer of UK. This constitutes NSHC decision 8/2016.

The Dover Strait Survey Strategy (DSSS) Agreement will cease to exist. Relevant parts are to be included in the ToRs and RoPs of the RWG. Risk assessment is, for the time being, continued on the levels of (1) data exchange and (2) of mutual assessment of each other's policies using relevant datasets. There will be no North Sea wide Risk assessment, but the RWG will still review this for the DSSS area due to its specific characteristics (remit). See action 8/2016.

Active conclusion 89 on the NSHC RWG can now be updated as an open action item. Active conclusion 111 on the merging of the RWG and the DSSSWG is now taken over by action 10/2016 and can now be 'closed'. Active conclusion 112 on risk assessment can now be updated as an open action item.

D.2 Resurvey and risk assessment

Doc: NSHC32-D.2.1a Resurvey and risk assessment presentation Deltares

Deltares gave a presentation on quantitative seabed dynamics from bathymetric time series and shipping risk assessment on the Netherlands Continental Shelf. NL had adjusted its resurvey planning accordingly.

UK asked whether one can predict the movement of sand waves. Unfortunately, the time series are still too short for this.

D.3 Survey planning in UK waters

Doc: NSHC32-D.3 - CHP Survey Planning in UK waters

UK gave a presentation on the Civil Hydrographic Programme in UK waters. All data are freely available.

E.1 BSNSMSDIWG report, including MSP and new ToRs

32nd NORTH SEA HYDROGRAPHIC COMMISSION MEETING

Doc: NSHC Letter 10-09-2015 - BSHC MSDIWG

Doc: NSHC Letter 06/2015 - DQWG

Doc: NSHC32-E.1.1 – MSDI report

Doc: NSHC32-E.1.2 - Terms of reference BSNSMSDIWG

The WG is a shared WG between the NSHC and the BSHC. This was considered to be a positive development. How the BSNSMSDIWG is to be directed by both RHC will develop over time.

DK presented the report of the BSNSMSDIWG. The conference noted the report and endorsed the work plan.

Moreover, the Members identified some further adjustments to be made to the ToRs to reflect better the Bi-Regional nature of the BSNSMSDIWG and its' peculiarities. See Annex 4 to the minutes. The Chair is to communicate those requested adjustments to the Chair of the BSNSMSDIWG. See action 9/2016.

Lastly, it was determined that a single yearly report for both BSHC and NSHC would meet the requirement of the NSHC as opposed to specific reports for each individual NSHC and BSHC conference. This constitutes NSHC decision 9/2016.

E.2 Cross border MSP for the EEZ, a case study from the Baltic Sea

Doc: NSHC32-E.2.1 – Cross border MSP for the EEZ

DE presented a paper on cross border MSP for the EEZ, a case study from the Baltic Sea. The conference noted the report.

DE highlighted that the EU funded project NorthSEE deals with Marine Spatial Planning (MSP). BSH is a partner, however no other HOs are involved. Members were requested to contact their national responsible organizations/agencies to warrant the hydrographic interest. See action 10/2016.

E.3 IHO GIS (alternative as part of main report)

This item was included in the IHB report at agenda item B.1.

E.4 Implementation of INSPIRE

Doc: NSHC32-E.4.1 – Implementation of INSPIRE presentation

A short round table was conducted to take stock of progress on conclusion 107: a national status report on INSPIRE implementation. It was concluded that INSPIRE is a national responsibility with no specific role for the NSHC. Relevant subjects, though, can be dealt with in MSDIWG for technical matters, or IENWG for policy issues. The work on the update of the INSPIRE definition of LAT was passed on to the IENWG. This constitutes NSHC decision 10/2016.

Active conclusions 107 on INSPIRE can now be 'closed'.

E.5 GeoNorge, main NSDI portal

Doc: NSHC32-E.5.1 – GeoNorge presentation

NO presented the Norwegian Geoportal. Although, at the moment, the portal is in Norwegian, the importance of a translation into English was felt strongly.

F.1 NSEHWG and ICCWG report

32nd NORTH SEA HYDROGRAPHIC COMMISSION MEETING

Doc: NSHC32-F.1.1a - NSEHWG report

Doc: NSHC32-F.1.1b - ICCWG report

Doc: NSHC32-F1.1b.1 - ICCWG Presentation

UK presented a paper with a proposal to disband the NSEHWG. The ENC schemes are mature. The ICCWG can also coordinate ENCs. It was therefore decided to disband the NSEHWG. This constitutes NSHC [decision 11/2016](#).

The remaining relevant tasks of the NSEHWG WG are to be incorporated into the ICCWG. The ToR and the name of the ICCWG are to be changed accordingly. See [action 11/2016](#).

UK also presented the NSHC ICCWG report with an overview of the major changes in the INT area D. The conference noted the report.

The report shortly touched on the revised management review and monitoring of INT charts as discussed at the IHO ICCWG meeting in Monaco in April 2016. The responsibility for updating the INTtoGIS system for chart updates now lies with the Member States rather than the INT Chart Coordinator. See [action 12/2016](#).

G.1 Open GIS Consortium topics

The Open Gis Consortium (OGC) held a meeting in Dublin concurrently with the NSHC conference. This provided an excellent opportunity to give cross presentation at each other's meeting. Unfortunately Mr. Simmons of OGC was unable to attend. His presentation will be distributed by NL. Mr Dorst of NLHO gave a presentation at the OGC meeting on MSDI issues and some general information on the IHO and NSHC on the afternoon of Thursday 23 June.

IHB stated that OGC is already present at HSSC meetings as an observer. The relation with IHO will be formalized in an MoU.

G.2 Solution for S102

Doc: NSHC32-G.2.1 - S-102 project

Doc: NSHC32-G.2.1a - PRIMAR S-102 project presentation

NO presented a paper demonstrating the advantages of navigation with S-102 and 3D interactive bottom visualization.

G.3 Transition S-57 to S-101

Doc: NSHC32-G.3.1 – CARIS S-100

Caris presented their solution on converting S-57 data into S-100 data. DE expressed its concern that Members could end up maintaining 2 databases, as one still has to produce S-57 ENC's. Caris explained that S-57 ENC's can be produced from the S-100 database, with some limited loss of information. Since it is suspected that ECDIS manufacturers may be reluctant to switch to S-100, the Members felt that the IHO should endeavour to create a market demand for S-100 capable ECDIS.

G.4 New technology - ASV

Doc: NSHC32-G.4.1 New survey platform

NO presented a paper on the renewal of data acquisition platforms. It showed a way of overcoming the shortage of data in shallow waters by using unmanned surface survey vessels controlled from

32nd NORTH SEA HYDROGRAPHIC COMMISSION MEETING

shore. In cooperation with Maritime Robotics, NO will test a prototype. The first full trials will be in 2018. The conference noted the paper.

G.5 New Generalization Policy for paper charting in UK

Doc: NSHC32-G5.1a – Generalization policy Discussion paper for Area D members

Doc: NSHC32-G.5.1b - New Generalization Policy presentation

UK presented a discussion paper on a new generalization policy for small scale Admiralty charts. This new approach generalizes information for charts in areas where larger scale charts exist. Navigational concerns are addressed by inserting a so-called ‘omission of detail line’ and adding a note of what has been left out. UK stressed that the note has passed an internal legal check to secure liability issues. A paper is available. Members are requested to provide comments on the matter (if any). See [action 13/2016](#).

G.6 FAMOS status report

Doc: NSHC32-G.6.1 – FAMOS status report

SE presented a paper on the multidisciplinary FAMOS project. The conference noted the paper.

G.7 Human error during survey

Doc: NSHC32-G.7 Qimera - Reducing human error

QPS introduced Qimera, a software package that speeds up survey processing and aims to prevent human errors.

G.8 WCI by MBES for improved object detection

Doc: NSHC32-G.8.1a – WCI by MBES for improved object direction presentation

Kongsberg showed the advantages of extra detection capability by the use of WCI.

G.9 Increase your Bathymetric contour lines

Doc: NSHC32-G.9.1 –Increase Bathymetric Contour Lines

SevenCs presented a contouring tool which enables a swift production of extra depth lines. Extra depth lines are valuable for many ENC users as they facilitate a better use of safety contours.

NL asked to share the algorithms used, for a better understanding of the tool. A brochure on the contouring tool (Bathymetric Plotter) will be provided by SevenCs at the beginning of July, at the release of the tool.

H.1 Any Other Business

Doc: NSHC32-H.1 –NSHC in IHR

DK had represented the NSHC in the International Hydrographic Review (IHR) Editorial Board since 2010 and wished to hand over this task. It was agreed that the NSHC Vice-Chair will be the future NSHC representative in the Editorial Board of the IHR. That will be BE for the coming period. This constitutes NSHC [decision 12/2016](#).

H.2 Review conclusions

32nd NORTH SEA HYDROGRAPHIC COMMISSION MEETING

The new decisions and actions as stated in the Annexes 3 and 5 to the minutes were reviewed and approved.

Post conference note: when writing the minutes, the provisional wording of the decisions and action was refined, without changes to actual content of decisions or actions.

H.3 Lessons identified

The Chair requested comments, now or later via correspondence, especially on the division between the open and the closed sessions. See action 1/2016. The aim is to improve the proceedings of the NSHC conference. IHB underlined the importance of timely submission of papers for the NSHC meetings, for the purpose of thorough consideration and preparation.

H.4 Introduction new Chair

The outgoing Chair stated that it had been a pleasure executing the responsibilities of the Chair and that he had enjoyed bearing the flag of the NSHC for its Members. He also expressed his gratitude for the constructive support and trust he had encountered. IE, as the incoming Chair, looked forward to his tenure and expressed his expectations to live up to the standards.

H.5 Next meeting

The dates for the 33rd NSHC in 2018 will be left to the new Chair, taking into consideration that the IRCC meeting is due to be in June. The NSHC expressed a preference for a March 2018 conference.

BE had not yet decided on the venue for next conference.

H.6 Closing remarks

The Chair once more thanked IE for hosting the 32nd NSHC conference. He expressed his sincere appreciation for the excellent organization and the very enjoyable social events. As token for his appreciation the Chair presented a gift to IE as the host nation. The Chair was also commended on his leadership during the conference.

The Chair concluded the conference by thanking all the participants for their contributions and also commended them on the outstanding work achieved.

The conference was closed at 12:00.

All documents are available on the NSHC website;

http://www.iho.int/mtg_docs/rhc/NSHC/NSHC_Misc/NSHC_Letters.htm

Annex 1: NSHC Statutes as amended at the 32nd NSHC conference

Annex 2: Annex A of NSHC Statutes as amended at the 32nd NSHC conference

Annex 3: NSHC Action list after the 32nd conference

Annex 4: Amendments to the ToR BSNSMSDIWG

Annex 5: NSHC Decision list after the 32nd conference

PROCEDURE FOR THE SELECTION OF MEMBER STATES BY THE NSHC FOR THE IHO COUNCIL

Selection of Member States by the NSHC for the IHO Council shall be determined in compliance with IHO General Regulations Articles 2 and 16.

Role and Authority of Member States selected by the NSHC for the Council

1. IHO Member States selected by the NSHC, shall occupy their seat on the Council for all sessions of the Council throughout the inter-sessional period between Assemblies.
2. All expenses connected with the participation of Member States selected for the Council shall be defrayed by their respective State, in accordance with IHO General Regulation Article 3.
3. In carrying out their role as a Member State selected by the NSHC for the Council, the selected Member States shall take into account the views of the Commission.

Selection Procedure (see also flowchart Appendix 1)

4. Three months before an ordinary session of the Assembly, the Secretary-General shall inform the Chair of the NSHC of:
 - a. the number of seats allocated to the NSHC, and
 - b. those Member States that are eligible for selection by the NSHC.
5. If the number of Member States eligible for selection by the NSHC for the Council is equal to the number of seats on the Council assigned to the NSHC by the Secretary-General under the terms of clause 4 above, then the aforementioned eligible Member States will be selected by the NSHC.
6. If the number of Member States eligible for selection by the NSHC for the Council is greater than the number of seats assigned to the NSHC by the IHO Secretary-General under the terms of clause 4 above, then the Chair of the NSHC will invite those Member States that have been designated as eligible for selection to the Council to indicate if they wish to be considered as candidates for selection.
 - a. If the number of candidate Member States is equal to the number of seats on the Council assigned to the NSHC, then these candidate(s) will be selected by the NSHC.
 - b. If the number of candidate Member States is smaller than the number of seats on the council assigned to the NSHC, the candidate(s), if any, will be automatically designated and will be complemented by the eligible Member State(s) that have not been selected by the NSHC for the Council for the longest time. If this proves inconclusive, the Chair will designate eligible Members State(s) as selected by the NSHC.
 - c. If the number of candidate Member States is greater than the number of seats on the Council assigned to the NSHC, the candidate(s) to be selected by the NSHC for the Council will be designated through a voting procedure.

Voting Procedure

7. The voting procedure will take place in the three months prior to the Assembly, preferably at a Conference of the NSHC otherwise by correspondence if no NSHC Conference is scheduled.

- a. Each Member State may submit one voting paper marking as many candidate Member States from the list as seats have been assigned to the NSHC (see example of voting paper in Appendix 2).
- b. The quorum for a valid voting procedure is set at 50% of Member States casting their vote. Member States of the NSHC taking a seat in the Council are then elected by simple majority. An incomplete or blank voting paper is a valid voting option and does not count against the quorum.
- c. If no quorum is achieved, the voting window is extended for two weeks and the Chair invites the missing Member States to cast their vote. The existing votes stand.
- d. If still no quorum has been achieved, the chair designates the Member States for the Council based on the votes cast.
- e. In case of a draw the candidate that has not been selected by the NSHC for the Council for the longest time is selected. If this proves inconclusive the Chair will designate a candidate as the selected Member State by the NSHC.

8. In order to warrant the integrity of the selection process, the Chair presents the voting forms to the observer of the secretariat of the IHO to the NSHC Conference, and requests this observer to confirm the integrity of the selection process.

Representation of Member State selected by the NSHC

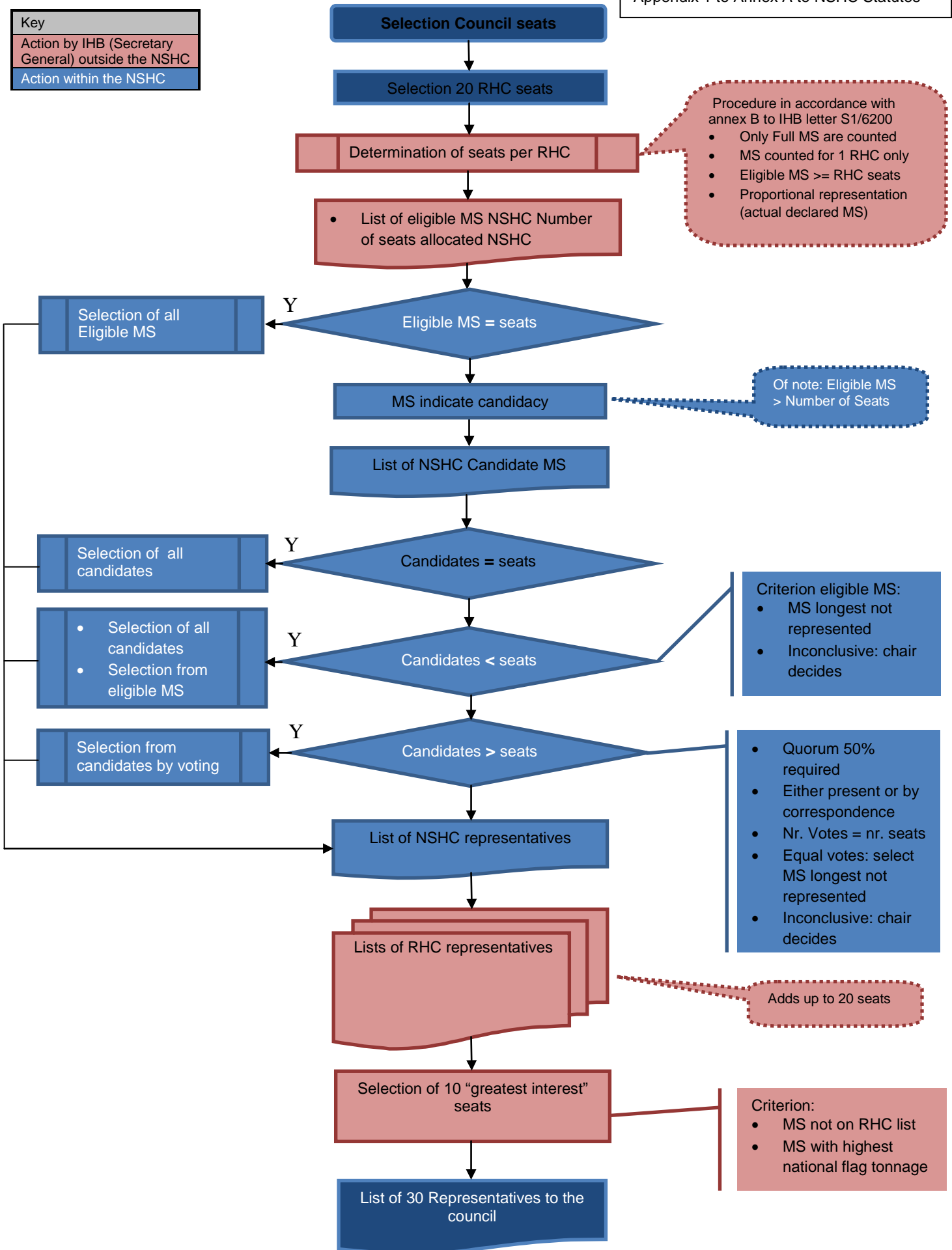
9. The Member States selected by the NSHC for the Council are normally represented by the head of the Hydrographic office. Each Member State shall inform the Chair of the NSHC and the Secretary-General of the IHO of the name of its official representative. An alternate may also be designated.

10. Member States selected by the NSHC shall inform the Chair of the NSHC and the Secretary-General of any changes in representation, whether permanent or temporary, as soon as practicable.

Annex 1 to the minutes of the 32nd NSCHC conference
ANNEX A to the STATUTES of the NSHC

Appendix 1 to Annex A to NSHC Statutes

Key
Action by IHB (Secretary General) outside the NSHC
Action within the NSHC



Appendix 2

SELECTION OF MEMBER STATES BY THE NSHC FOR THE IHO COUNCIL

Example of Voting Paper

Part A

Number of Seats on Council allocated to the NSHC: *Chair inserts number in here*

(This is the number of boxes that may be marked below)

Part B

To vote for a candidate State put an 'X' in the adjacent box. The number of boxes that may be marked is shown in Part A above.

<i>Chair inserts candidate State A in here</i>	<i>Votes indicated with an X here</i>
<i>Chair inserts State B in here</i>	<i>Votes indicated with an X here</i>
<i>Chair inserts State C in here</i>	<i>Votes indicated with an X here</i>
<i>insert other States if appropriate</i>	<i>Votes indicated with an X here</i>

Member State: Date:

Authorised By: Position:

(signature)

STATUTES of the NORTH SEA HYDROGRAPHIC COMMISSION
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As amended at the second (Stockholm), third (London), eighth (Härnösand), ninth (London), thirteenth (Oslo), twenty first (Stavanger), twenty ninth (Brest) and thirty second (Dublin) Conferences of the Commission.

SECTION 1 – MEMBERSHIP

Article 1

The North Sea Hydrographic Commission (hereinafter called the Commission) shall be composed of the Hydrographers of the countries belonging to the zone D of INT charting (hereinafter called the member), who have given notice of their willingness to participate in or co-operate with programmes or joint actions, studies and exchange of information etc., pertaining to the field of hydrography, in accordance with the procedure laid down in these Statutes.

Article 2

Membership of the Commission shall be open to all Hydrographers who belong to the countries described in Article 1 and who accept these Statutes and is accorded to the Hydrographers signatories to these Statutes, i.e. the Hydrographers of Belgium, Denmark, France, Germany, Iceland, Ireland, Netherlands, Norway, Sweden and United Kingdom, who shall also decide on the acceptance of any new members.

SECTION 2 - PURPOSE

Article 3

1. The Commission shall promote and stimulate the furtherance of hydrographic and related knowledge and science, particularly regarding the North Sea and its entrances.
2. It shall foster and encourage the concept of close co-operation amongst its members with the object to obtain, with the available resources, maximum results beneficial to international shipping.

Article 4

The members shall co-operate whenever possible, and without influencing the internal affairs of their respective hydrographic officers or diminishing their national responsibilities, to exchange information regarding surveys, research, new developments and technical details, as well as organizational questions related to hydrography in its widest sense.

Article 5

The members shall participate of their own free will, either actively or in an advisory or assisting capacity, in hydrographic programmes which require concerted action, whenever practicable and possible without appreciably disturbing the fulfilment of their national hydrographic requirements.

SECTION 3 - CONFERENCES

Article 6

1. Conferences of the Commission shall be held regularly, with the proviso that the interval between consecutive conferences is not to exceed three years.

2. Time and place shall be decided upon by the members. Article 7

Article 7

1. Conferences of the Commission shall be held in the countries to which the members belong.
2. Members shall preferably attend the conferences in person or otherwise send a representative. At the conferences, officers of the hydrographic department of the host country may be present.
3. The Commission may create, for the examination and execution of specific projects, committees composed of members interested in such projects.

SECTION 4 - CHAIRMAN

Article 8

1. The conferences of the Commission are conducted by the Chairman. The members in whose country the conference takes place shall act as Vice-Chairman.
2. The Chairman is responsible for the preparation of the agenda for the conference. The Vice-Chairman is responsible for the organization of the conference.
3. Any expense necessary to organize and conduct the conference shall be met by the office of the Vice-Chairman.

Article 9

1. The Chairman shall hold office during the interval between consecutive conferences and shall act as the Bureau of the Commission during this interval.
2. He shall open the next conference by giving a report of the activities and results during the interval since the last conference.
3. The Vice-Chairman shall assume office as Chairman in the beginning of the last session of the conference.

Article 10

1. If the Chairman is incapacitated during the interval between conferences, his successor or the deputy hydrographer shall take the chair for the rest of the period.
2. If the Chairman is unable to act at the conference or any part thereof, he shall be prepared by his successor or the deputy hydrographer.

Article 11

1. The Chairman, as the Bureau of the Commission, shall prepare the **minutes** of the conference. This **minutes** shall contain a very general outline of the discussions that took place as well as the **actions and decisions** that were approved of.
2. The **minutes** shall be **approved** by the members who attended the conference.

SECTION 5 - AGENDA OF THE CONFERENCE

Article 12

1. Proposals for putting items on the agenda for the next conference should be sent to the chairman at least two months prior to the date of the conference.
2. The Bureau of the Commission, in consultation with the members in whose country the next conference take place, shall prepare the final agenda.

Article 13

1. The final agenda should reach the members at least two weeks prior to the date of the conference.
2. At the beginning of each conference the Commission shall adopt the agenda for that conference.
3. The Commission may, during a conference, modify the order of items on the agenda.

SECTION 6 - DECISIONS

Article 14

1. **Decisions** can only be arrived at by unanimous agreement, **including decisions on action items**.
2. Unanimously agreed **decisions** shall be part of the **minutes** of the conference.
3. Only the members or their representatives shall be allowed to vote.
4. Every member has one vote.

SECTION 7 – SELECTION FOR THE IHO COUNCIL

Article 15

1. **Annex A describes to procedure for the selection of Member States by the NSHC for the IHO council.**
2. **In order to prepare for the IHO Council, a standing agenda item during the NSHC conference will cover IHO Council matters. In years without an ordinary NSHC Conference, a ‘video teleconference’ will be organised to address especially IHO Council matters.**

SECTION 8 - MISCELLANEOUS

Article 16

1. If urgent questions arise, which cannot be solved by correspondence, and the discussion of which cannot be postponed till the next conference, the Chairman shall convene a special conference at the most appropriate place.
2. A special conference shall be organized and conducted by the Chairman, who shall not resign. The pertinent parts of articles 8 and 9 do not apply in case of special conference.
3. To special conferences, experts others than the members can be invited. Article 17

Article 17

1. In case unanimously agreed, common projects, such as publications etc. require the expenditure of money, expenses shall be divided equally between members.
2. Such expenses shall, however, be kept as low as possible.
3. Apart from that and the expenses mentioned in Article 8, sub-para. 3, subject to the provision in Article 16, sub-para. 2, every member shall meet his own expenses.

Article 18

1. The Commission may propose to amend these Statutes. Such amendments shall be discussed during a conference and shall be considered **decisions** in the sense of Article 14, sub-paras. 1 and 2.
2. The Commission may determine - when circumstances call for such action - rules of procedure that shall be an Annex to these Statutes.

Article 19

English shall be the working language of the Commission, as well as during the conferences. Article 20.

Article 20

1. The Commission shall not endeavour to become a separate group within the International Hydrographic Organization and shall guard against any duplication of efforts regarding the International Hydrographic Bureau.
2. Any **decision or action** in which Member States of the International Hydrographic Organization might have an interest shall be brought to the attention of the International Hydrographic Bureau. The decision to do so shall be part of the **minutes of the conference**.
3. **The Commission shall lay down its findings in the form of decisions and actions items, to be annexed to the minutes of the conference.**
 - **The Chair is responsible for the preparation of a list of extant decisions for each Conference, with an indication of their relevance. The Chair will update the list as part of the minutes of the Conference.**
 - **The Chair is responsible for the preparation of a list of action items for each Conference, with a suggested way ahead. The Chair will update the list as part of the minutes of the Conference.**

Original:	The Hague, 10 th January 1963
Amended:	Stockholm, 7 th September 1963
	London, 29 th January 1965
	Härnösand, 13 th September 1973
	London, 25 th April 1975
	Oslo, 2 nd June 1981
	Stavanger, September 1994
	Brest, 29 th September 2010
	Dublin, 23rd June 2016

NSHC Action list after 32nd Conference

Table below gives an overview over the new and updated NSHC action items after the 32nd NCHC Conference. For the 33rd Conference the closed and completed action items will be scrubbed and the status of the open en continuous action items will be updated at start document for the 33rd Conference.

legend	
White	Open (action) item
Light grey	Continuous (action) item
Light green	Completed or Closed item

No/year Agenda item	Subject	Action	Who	When	Status
New open and continues action items originated from the 32nd NSHC Conference					
1/2016 A.1	Conference programming	Evaluate the balance between the open and closed session based on experiences gained at the 32 nd conference.	Chair	33 rd NSHC	Open
2/2016 A.4	Statutes	Amend the Statutes to reflect the decisions made on the selection of Member States for and the preparation of the IHO Council. Decisions 1- 2/2016 apply.	Chair (NL)	1-Sep-16	Open
3/2016 A.5	Conclusions	Amend the Statutes to reflect the use of actions and decision instead of conclusions.	Chair (NL)	1-Sep-16	Open
4/2016 A.5	Conclusions	Modify the current list of conclusion in line with the decision 4/2016, the proposed way ahead in Annex A of NSHC letter 03/2016 and the results of discussions during the various agenda item of the conference.	Chair (NL)	1-Sep-16	Open
5/2016 B.2	CB-activities	Member States make sure that the relevant CB coordinator is informed on their bilateral CB activities (in kind or financial).	Member States		Continuous
6/2016 B.5	Vertical reference (LAT) comparison	Investigate the differences between the LAT along boundaries in accordance with the action items of TWG WP 18/1. Publication of those differences is	Chair TWG	December 2016.	Open

No/year Agenda item	Subject	Action	Who	When	Status
		paused until the outcomes of the investigations are available.			
7/2016 B.5	Work plan TWG	Consider the validity of a 1% norm from different user perspectives and report back to NSHC.	Chair TWG	33 rd NSHC	Open
8/2016 D.1	DSSS agreement	Pertinent parts of the DSSS agreement are to be incorporated in the ToR of the RWG, taking into account the remit for a common risk assessment of the DSSS area.	Chair RWG	33 rd NSHC	Open
9/2016	ToR BSNSMSDIWG	Communicate to the Chair BSNSMSDIWG the requested adjustments to be made to the ToRs.	Chair (NL)	1-Sep-16	Open
10/2016 E.2	MSP	Contact the national institutions/agencies involved in the "North Sea MSP project" to warrant the hydrographic interest.	Member States		Continuous
11/2016 E.5	TOR ICCWG	Incorporate the remaining relevant tasks left from NSEHWG (maintenance) and amend the ToR and the name of ICCWG accordingly.	Chair ICCWG	33 rd NSHC	Open
12/2016 F.1	Chart updates	Update the IHO INTToGIS system with chart updates.	Member States	-	Continuous
13/2016 G.5	Chart generalisation	MS provide comments on the UKHO paper on a new chart generalisation policy through the ICCWG.	Member states	Next ICCWG	Open
No/year Agenda item	Subject	Action	Who	When	Status
Updated action items based on open and continuous action at the start of the 32nd conference					
1/2004 (Concl. 80)	S-55 Database	[Updated text after 32 nd NSHC]. Put in place a systematic process for regular updates of national C-55 data even if there is no change.	Member states	-	Continuous. No irregularities.
2/2010 (Concl.87)	North Sea Tidal WG	NSHC tasked the NSHC TWG with the formulation of recommendations on the ways forward, to create common and unique reference surface for	NSHC WG	-	Closed. Overtaken by action 7/2016.

No/year Agenda item	Subject	Action	Who	When	Status
		the full North Sea area relative to the ellipsoid, based on the information presented in the annex D to the report of the 17th TWG meeting in Copenhagen in May 2010.			
3/2010 (Concl. 89)	NSHC Re-survey WG	NSHC decided to task the NSHC resurvey WG: - to complete the overview where applicable; - to publish the scheme on the internet; - to propose a way forward to harmonize the presentations of the resurvey schemes and of C55; - to include conclusion 28 "Resurveying of critical areas" in their work program.	Chair RSW	law. NSHC RSW action list	Open. - Overview is in progress. - Scheme is on NSHC.pro. - Harmonization is paused. - Inclusion of "resurveying critical areas in work program is completed.
1/2012 (Concl. 97)	Resurvey Working Group	[Updated text after 32 nd NSHC]. Incorporate a standing agenda item to NSHC Conference dealing with airborne and satellite bathymetry. Members are encouraged to participate and present input papers and in general to contribute to the work with airborne and satellite bathymetry.	Member States	-	Continuous During the 32 nd Conference various papers on SDB were presented and presentations were given.
1/2014 (Concl. 104)	Joint European Coastal Mapping Program	The European Commission decided that: - The EU2MPWG to ask the IHO-EU Network WG to coordinate the response to the Call for Tender and keep the MS of NSHC informed about the progress.	Member States	-	Closed. Call for tender is now open and called High Resolution Seabed Mapping (HRSM). The response is through a mutual consortium managed by FR/SHOM.
2/2014 (Concl. 105)	The European Marine Observation and Data Network (EMODnet)	The European Commission expects: -that the IHO-EU-Network-WG will succeed to designate a Member State of one of the most active European RHCs as [Co-]leader of the Consortium to coordinate its establishment in cooperation with the commercial project management provider and to draft the response to the tender assisted by the regional coordinators if this necessity arises.	Member States	-	Completed. The response to the call for tender is coordinated through a mutual consortium managed by FR/SHOM.

No/year Agenda item	Subject	Action	Who	When	Status
3/2014 (Concl. 107)	INSPIRE	Members are invited to give a national status report on implementation along the lines of the following questions: <ul style="list-style-type: none"> • What do Members consider INSPIRE data? • Are web services available? • Are online metadata available already? • Other remarks 	Member States	-	Closed. INSPIRE is a national responsibility with no specific role for the NSHC. Relevant subjects can still be dealt with in MSDIWG for technical matters, or IENWG for policy issues .
4/2014 (Concl. 110)	Presentations	[Updated text after 32 nd NSHC]. Submit reports, papers and presentations to the Chair at least two weeks in advance of a Conference in order to make them timely available for all participants.	Participants to NSHC	-	Continuous. Remains a lesson identified during the 32 nd NSHC conference.
5/2014 (Concl. 111)	Merging of the DSSS WG and the Resurvey WG	The Commission recommends a merging of the Dover Strait Survey Strategy WG and the Resurvey WG and task NL to lead the process.	Chair RWG	-	Closed. Over taken by action 8/2016.
6/2014 (Concl. 112)	Risk assessment	Undertake a risk assessment analysis for the North Sea area, including the Dover Strait.	Chair RWG	law. RWG action list	Open. Risk assessment is for the time being continued on the levels of data exchange and mutual assessment of each other's policies using relevant datasets. There will be no North Sea wide Risk assessment, but the RWG will reconsider this for the DSSS area due to its specific characteristics.
7/2014 (Concl. 113)	NSHC Website	Accept the offer from DE and create a website for NSHC, based on the available solution from BSHC.	Member States	-	Completed. Website is hosted by BSH. It now needs to be populated further with information.
8/2014 (Concl. 115)	Contact person for the MSDI WG	Each Member State to inform the Chair/Vice-Chair of the IHO MSDIWG of a national contact person for MSDI matters.	Member States	At earliest opportunity	Open. List not yet complete

Amendments to the ToR of the BSNSMSDIWG

During the last 32nd NSHC conference the BS-NSMSDIWG report and the new ToR's of the BS-NSMSDIWG were discussed. The Conference took note of the report and endorsed the work plan. With regards to the ToR the Conference decided on the following textual amendments **in bold** to reflect better the Bi-Regional nature of the BS-NSMSDIWG and its' peculiarities.

“The Working Group should:

- Identify and analyse the current status of individual MS MSDI implementation.
- Consider MSDI policies within the related international project e.g. e-navigation, ICZM, INSPIRE, MSP, EU Integrated Maritime Strategy, the Marine Strategy Framework and EU Strategy for the Baltic Sea **and/or North Sea** Region.
- Analyse how maritime authorities can contribute their spatial information and the necessary updates, so information can easily be collated with other information to a current overall picture for the region.
- Focus on how BSHC **and/or NSHC** in the future can benefit from a regional approach.
- Monitor the development of SDI that could be relevant for the Baltic Sea **and/or North Sea**.
- To present a yearly report to the BSHC **and the NSHC either at their meeting or through correspondence**. This report should include a description on the current status, recommendations on how to proceed with the MSDI implementation and if deemed necessary an action plan with specified time schedule for future BSHC and-NSHCMSDI actions. “

NSHC Decision list after 32nd Conference

The table below gives an overview of the extant (still relevant) NSHC Decisions after the 32rd NSHC Conference

No/year Agenda item	Subject	Decision
1/2016 A.4	Selection of Members for the IHO Council	<ul style="list-style-type: none"> Use the wording “Member states selected by the NSHC” instead of “ representative of the NSHC”. In carrying out their role as a Member State selected by the NSHC for the Council, the selected Member States shall take into account the views of the Commission.
2/2016 A.4	Preparation for the IHO Council	<ul style="list-style-type: none"> A standing agenda item is to cover IHO Council matters during the NSHC conference. In years without an ordinary NSHC Conference, the Chair organises a ‘video teleconference’ to address especially IHO Council matters.
3/2016 A.5	Way forward of NSHC conclusions	<ul style="list-style-type: none"> The primary aim is guide to current and future activities, in other word to focus the managerial attentions of the NSHC. Maintain separate lists with action items and (relevant) decisions instead of a single list of conclusions. Apply a new set of definitions for the action items (see minutes agenda item A.4).
4/2016 A.5	Maintenance of NSHC action items	<ul style="list-style-type: none"> The lists of new and updated actions and decisions to be part of the Conference minutes Retain only ‘active’ action items (open and continuous) for the next conference’s list.
5/2016 B.4.1	EU tender EMODnet 3	Member States to inform each other if they don’t wish to be part of the merged EMODnet 2 and Coastal mapping consortia.
6/2016 C.2	Future of the NSBD	Further development of the NSDB is paused until the outcome of EU tender for EMODnet 3 is known.
7/2016 C.2	Population of NSHC website	All WG's of NSHC are to disseminate information on the website (unless sensitivity of subject does not allow it, as assessed by the WG).
8/2016 D.1	Chair RWG	UK is accepted as next Chair of the RWG.
9/2016 E.1	Report BSNSNSDIWG	A single yearly report to both NSHC and BSHC meets the requirement of the NSHC.
10/2016 E.4	LAT for INSPIRE	The work on LAT-definition for INSPIRE is to go via the IENWG.
11/2016 F.5	Future of the NSEHWG	Disband the NSEHWG.
12/2016 H.1	Editorial Board IHR	The Vice-Chair to participate as NSHC representative in the Editorial Board of the International Hydrographic Review (IHR).