Draft MINUTES

31th NORTH SEA HYDROGRAPHIC COMMISSION MEETING

Amsterdam, the Netherlands

25-27 June 2014

A1. Opening remarks

The Director of the Norwegian Hydrographic Service (NHS) and Chair of NSHC, Evert Flier, welcomed all the delegates to the 31th NSHC Conference. The attendance of Director Gilles Bessero (IHB), Pauline Weatherall (GEBCO) and representatives from the industry was very much appreciated.

The Chair thanked the host for the invitation and invited him to welcome the meeting. The host and Vice-Chair Peter Kortenoeven, the Netherlands, gave a historical brief about the location of the meeting. Everyone was invited to a reception/ice-breaker on a canal boat at the end of day one of the meeting. Gilles Bessero also addressed the meeting. He underlined the high importance of this Commission and the ongoing discussions with the EU. The theme of this year World Hydrographic Day: *"Hydrography- much more than just nautical charts"* was especially true for the activities within NSHC.

An apology for absence was received in advance of the meeting from the Hydrographers of Sweden and Denmark. The presence of Italy at the first part of the meeting was acknowledged.

A2. Administrative arrangements

NL informed about the practical arrangements for the conference. A non-host dinner was planned to take place after the canal tour.

A3. Agenda and timetable approval

The final version of the Agenda was introduced. The Chair underlined that the agenda was very ambitious, but that the proposed time schedule had taken consideration of allowing thorough discussions on the most important agenda items. The proposed Agenda was approved by the NSHC members without any changes.

A4. Report of the activities and results since last meeting

According to the Statutes the Chair is expected to give a report of the activities and results during the interval since the last conference. The Chair highlighted the cooperation with EU bodies and the strong attention to the *Blue Economy* or *Blue Growth* concept. The activities related to existing and announced EU projects involving NSHC members and brought momentum to the MSDI development within Europe. The use of hydrographic data for other purposes than navigation brought new challenges to the HOs.

A5. Assignment of NSHC active conclusions to relevant agenda items

In the document *NSHC31-A5* all relevant conclusions were linked to an agenda item. At the NSHC29 the existing List of Conclusions was examined thoroughly and several conclusions were given the status of *"Effected"* or *"Obsolete"*. Some of these were later on (minutes of NSHC30) given status as "Active" without any explanation. The following conclusions were discussed under the agenda item A5:

Concl. 16: IMO issues are well taken care of by IHB. The conclusion is considered to be effected.

Concl. 34: Obsolete according to NSHC29.

Concl. 44: Effected according to NSHC29.

Concl. 46: Effected according to NSHC29.

Concl. 76: (see also Concl. 95). This Conclusion to be kept active as the NSHC30 decided that the Copyright and Pricing Matters WG should be prepared to discuss financial subjects related to EU Directives.

Concl. 77: Classified as Active. DE to discuss with FR of the continuation of this Conclusion. *Concl.* 79: Effected

Concl. 81: Obsolete (after the formal establishment of IHO-EU Network WG)

Concl. 91: Effected

Concl. 93: Effected

Concl. 94: Effected

Concl. 95: (see also Concl. 76). To be kept Active

B1. Status of the ratification of the protocol of amendments to the International Hydrographic Organization (IHO)

The Russian Federation has recently signed the Protocol. Totally 41 Member States have ratified and 7 more are needed to carrying the new Convention into effect. It is quite unlikely to have sufficient ratifications in time for the upcoming Extraordinary IHO Conference (EIHC5).

B2. IHO and European Union (EU)

Reference is made to the MoU, see document NSHC31-B2-IHB_EU_MoU_official.

B 2.1. EU Marine and Maritime Policies Working Group (EU2MPWG).

FR gave a presentation summarizing the report from the EU2MPWG, see document *NSHC31-B2.1 Report of the EU Marine and Maritime Policies Working Group EU2MWG*. The report requested the Conference to close the EUM2PWG, considering its activities are transferred to IHO-EU Network WG. The following decision was taken: The Chair of the EU2MPWG to organize a last meeting for winding up the activities and facilitating the transferring of duties to the IHO-EU Network WG. See Conclusion 103

B 2.2. Status and membership for the IHO-EU Network Working Group.

The following information on members representing the different RHC was available: **BSHC**: Sweden, **EAtHC**: France, **MBSHC**: Greece, **NHC**: Norway and **NSHC**: Germany. **ARHC**: DK has indicated willingness to represent the ARHC. The final decision concerning the representation is to be taken at an extraordinary ARHC meeting during the EIHC5.

The election of Chair to take place at the last EU2MPWG meeting, see paragraph B2.1.

B 2.3. Joint European Coastal Mapping Program (JECMaP)

Yves-Henri Renhas (FR), gave a presentation, underlining the benefits of having a joint program. A Call for Tender for the Design Study is expected to be launched in the last half of July 2014. Renhas presented a tentative time frame for responding to the tender. According to information from DG Mare the budget for the Design study is expected to be \leq 1.3 mill. The funding is given as a bulk sum without any reporting to DG Mare on the spending and sharing between partners.

The discussion following the presentation demonstrated great interest among the MS to respond to the Call for Tender. MS should be ready to give input from the different basins surrounding Europe. DE is prepared to represent NSHC. FR was tasked to find a date for the first meeting for preparing the response to the Call for Tender. The first half of September seems to be a likely period.

The following decision was taken: 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, see also Conclusion 104.

SE gave a presentation of a national project in progress that is expected to have several similarities with the JECMaP. The strengths and weaknesses of the different surveying technologies were highlighted, see also document *NSHC31-B2.3.1* Study project "Surveying of the Swedish coastal zone".

B 2.4. EMODnet bathymetry project. Call for Tender in early 2015

Yves-Henri Renhas gave a presentation. EMODnet is seen as a flagship project for "Marine Knowledge 2020". IHO strongly supported the EMODnet during the inaugural meeting of the permanent secretariat in Oostende in February. The bathymetric lot of EMODnet is at present taken care of by a Consortium led by Maris, NL. Today 8 HOs are members or associate members of the Consortium. The contract for the present phase of the project will end in 2016. A Call for Tender for phase 3 is expected to be launched early 2015.

The discussion following the presentation underlined the importance of EMODnet for realization of the Marine Spatial Data Infrastructure (MSDI) of Europe. The release of high

resolution bathymetric data might be a challenge for several MS as data policies differ from nation to nation. It was also mentioned that several other SDI activities within Europe need the support from HOs. The HOs could use the EMODnet as a platform of making data available in a harmonized way and be in charge of the bathymetric data management within Europe in a long perspective.

With the strong interest among the HOs to be part of the future work of EMODnet it was proposed to establish a Consortium to handle the Call for Tender. A full text of the initiative is given in Conclusion 105.

B 2.5. Progress on national implementation of PSI

FR gave a brief of the document NSHC31-B2.5 Implementation of PSI.

DK has already passed a new law related to the PSI (Public Sector Information). It is still possible to claim payment for data delivery. An analysis of the consequences of free access to bathymetric data will be prepared. Both SE and UK are in the process of preparing new legislation. DE has no longer the option to claim revenues, with the exception for ENCs. This is also the case in NO.

B 3. The fifth Extraordinary International Hydrographic Conference. Program and involvement.

Reference was given to the available Conference Circular Letters. A couple of reports from Working Groups were not delivered within the deadline. A session with invited speakers, covering two half days, is a new approach for the Conference to obtain a closer interaction with stakeholders.

C1. Review of relevant NSHC active conclusions in accordance with A5.

NSHC Concl. 15: Fishery charts are no longer a widespread product and the conclusion is considered to be obsolete.

C2. Report from the North Sea Tidal WG

NO gave a summary of the report, see document NSHC31-C2 Report from the North Sea Tidal WG.

The activity related to establishing a common North Sea vertical reference surface related to the ellipsoid was accentuated. Two options on the way forward were mentioned in the report. NL stated that it is still a long way to go before solving the problem. The Blast project gave a good contribution and hopefully the upcoming DG Mare projects, see B2.3 and B2.4, might bring some substantial progress. IHB expressed its concern that some WG are experiencing lack of resources. FR mentioned the possibility of cooperation with the academia, but this also require funding.

C3. Airborne and satellite bathymetry

Several documents were available and all presented. FR has developed a consistent expertise in airborne bathymetry during the last decade. DE has over the last couple of years performed systematically tests of equipment from different suppliers. A general experience is the lack of detections of smaller objects. This places a limitation on the use of the techniques in areas critical for navigation, implying the use of MBES in addition. In general the optical techniques have improved in recent years and LiDAR data may be very useful to many other areas than navigation. NO has recently performed a pilot project with high resolution LiDAR covering both sea and land. The results and a report will be available during the autumn 2014. A general problem is the limited numbers of contractors, restricting the availability of systems at the most relevant periods of the year. FR has benefitted from use of LiDAR in oversea areas where no or limited information is available in advance. Order 1B has been reached and hopefully panned tests with high resolution systems can reach order 1A under favourable conditions.

FR has submitted a proposal to EIHC5. Multilateral funding to be raised if the extensive unsurveyed areas for some parts of the world are to be covered.

DE hosted a LiDAR seminar in May 2014. All presentations are available at http://www.bshc.pro/meetings/lidar2014/

C4. Crowd-sourced bathymetry

The Chair introduced the subject. FR stated that crowd-sourcing was quite common earlier, when no or few dedicated survey ships were available. We had to use the best available data. Improved positioning solutions in the last couple of decades have increased the reliability of information collected by non-professionals. HOs have to decide on how to use the data from other sources. They have also to keep in mind that they should also assist in supplying data for non-navigational purposes. The key issue is to be capable of evaluating the quality data from different sources. With a quality indicator in place the data might be used for various purposes.

The Blast project developed a scheme for reporting. Improved reporting from experienced mariners should be achievable.

. DK requests bathymetric data, on a routine basis, from research vessels operating in Greenland waters. The data is used for planning purposes and verification of the general depths in areas with sparse information

The Chair invited Members to consider further the issue and welcome this item as a permanent agenda item.

C5. BarentsWatch

NO gave a presentation about the ongoing cooperation in the marine areas of the Norwegian waters. The Norwegian Mapping Authority is involved in the programme. The outcome very much contributes to a functional MSDI for the BarentsWatch area.

C6. Update on national MSDI activities

The Chair and the Vice-Chair of the IHO MSDIWG had prepared comprehensive documents for the actual subjects covering C6 and C7. The main issues were emphasized in Power Point presentations. UK presented a quite relevant report on Data centricity. The proposals at the end of the document encouraged the HOs to be more involved in different geospatial initiatives. The IHB invited Members to take this paper into account when responding to the IHO Circular Letter on the re-organization of HSSC.

The NSHC could benefit by building on the experience gained within BSHC with respect to Marine Spatial Planning (MSP) and Marine Spatial Data Infrastructure (MSDI). A proposal to create a MSDI Working Group within NSHC was discussed. DE put forward an idea of joining the existing BSHC MSDIWG. The idea got support and it was decided to approach BSHC, see **Conclusion 106**. The discussion emphasized that MSDI is much more the data distribution. The policy part and the interaction and cooperation with other players were underlined. Also the cross-border integration and land-sea integration are important issues.

The Chair informed about the initiative from IRCC6 to move the IHO MSDIWG from HSSC to IRCC.

C7. Progress on national implementation of INSPIRE

NL gave a presentation and focused on the outcome of the recent Inspire meeting held in Ålborg, DK

The document *NSHC31-C7 INSPIRE* addressed several questions to the NSHC31. It was decided that each individual nation should answer these questions, see Conclusion 107.

C8. S-100 Product Specification for Navigational Warnings

FR highlighted the main issues of the report *NSHC31-C8.1.* S-100 Product Specification in a Power point presentation. Navigational Warnings need to be addressed in the e-navigation perspective to improve the services.

D1. Review of relevant NSHC active conclusions in accordance with A5 Conclusions 98, 99 and 100 are considered effected.

D2. Review of Inter Regional Coordination Committee (IRCC6) Actions and Decisions with relevance for NSHC

Only draft versions of the IRCC6 Actions and Decisions were available. Several of the Actions are permanent and the Chair of NSHC needs to be aware of the obligations imposed on the Regional HC. The Actions relevant for the upcoming EIHC5 were pointed out. Crowd-sourced Bathymetry and Satellite Derived Bathymetry are to be discussed.

The Chair underlined the Decisions from IRCC6 related to supporting the work of GEBCO.

D3. Capacity Building Sub-Committee. Revised strategy.

The Chair of the Capacity Building Sub-Committee (Thomas Dehling, DE) briefed on the changes in the revised strategy. The strategy will be discussed and hopefully endorsed at the EIHC5. Even though the NSHC will not benefit from the funds available in capacity building, the MS were encouraged to participate in CB work. Both FR and UK are already heavily involved in training courses etc. NO continues as a CB Coordinator for the NSHC.

D4. World-wide Electronic Navigational Chart Database (WEND) and Regional ENC Coordination Centers (RENCs) cooperation issues

All MSs of NSHC are member of one of the RENCs. The positive development with more nations becoming members and increased harmonization between the RENCs were underlined. Great results have been achieved during the last 15 years. On the other hand more needs to be done and the EIHC5 will be an important opportunity to discuss further development, especially for regions with few nations joining or cooperating with a RENC. Most likely more RENCs will develop in the future and the complementary operation of RENCs will continue to be important.

The industry stakeholders were actively contributing to the discussion on availability of ENCs. Jeppesen pointed out the difference experienced between aviation and the marine areas. In aviation everything is available to everyone without any restrictions. Industry players have difficulties in serving the customers with ENCs in a satisfactory manner. Availability of ENCs is the big issue for the service providers both in relation to navigation and for other services like WMS. The IHO community was encouraged to look closer into the IMO regulations with respect to availability.

NO gave a presentation on the latest development in Primar related to WMS and S-102. Many non-navigational users would benefit from having access to ENCs. NO encouraged MS to make their ENCs available for WMS applications. DE welcomed a development utilizing ENCs for other purposes but underlined that other parts of the world might have a different opinion on this issue.

DK raised the question about what would happen to the WEND principles in a longer perspective. With the involvement of HOs in other activities than surface navigation we will need similar "Wend principles" to cover other areas.

Two conclusions were agreed upon during the discussions, see Conclusions 108 and 109.

D5. Region D International Charting and Coordination WG and North Sea Electronic Navigational Chart (ENC) Harmonization WG report

UK gave a presentation that complemented the NSHC31-D5 Region D WG and the North Sea ENC harmonization WG report. The changes and progress with the INT Charts of Region D since the previous NSHC meeting were presented. Several INT charts have been transferred to Region N.

Further work was required to agree on regional ENC schemes.

D6. Contribution from Industry/Stakeholders participants (max 20 minutes each included questions)

GEBCO and the industry stakeholders SevenCs, Jeppesen and Caris all gave informative and interesting presentations. All the presentations are available to NSHC members. SevenCs raised several questions which have great relevance to the next HSSC meeting.

NL proposed that all presentations for the future meetings should be made available in advance of the meeting, see Conclusion 110.

D7. National civilian hydrographic and charting program

D7.0 C55 inputs and development

C-55 development at the IHB is included in the wider project to establish an IHO GIS composed of a country database on one hand and a regional database on the other hand. The country database should contain all relevant information about the coastal States in the world - similar to the information contained in the IHO Yearbook.

The regional database should contain geospatial information about the coverage and location of charts, surveys and related information. It is expected to provide the principal resource for managing international chart coordination, ENC coverage, as well as the identification of survey or charting "hotspots". It is expected that there will be an upload capability in the future that will allow States to keep the relevant information up to date. The country database and a beta version of the regional database for Antarctica are now under evaluation (see IHO CL 23/2014 and 27/2014 respectively).

As work is progressing in parallel in some regions, for example in the BSHC and the MACHC regions, it could be necessary to revisit the concept and implement the regional dimension through a portal pointing to regional GIS. This Commission may wish to consider its requirements and how to best meet them.

The current digital C-55 has been reformatted to facilitate the maintenance and take into account the establishment of Region N.

DE noted that the region needs a tool more elaborate than C-55. It was agreed that the Re-survey WG should liaise with the IHB as appropriate.

D7.1 Survey Programme for Ireland

IE presented the report.

D7.2 Coastal and open sea surveying activities

NO presented the report.

D8. Dover Strait Survey Strategy WG and Resurvey WG

FR presented the report from the Dover Strait Survey Strategy WG (DSSWG) and NL presented the Re-survey WG report. In addition NL showed two maps related to the re-survey plan.

FR suggested a common risk assessment related to the four different strategies in the DSS (for each member nation) to secure the consistency.

A new version of the Terms of Reference and Rules of Procedures was approved.

A proposal of merging the two Working Groups was supported, see Conclusion 111. All actions items to be finalized before merging the WGs. The DSS needs to be disbanded by the the 4 countries before merging with the Re-survey WG. The Re-survey WG was tasked to conduct a risk assessment analysis, see Conclusion 112.

D9. Renewal of data acquisition platforms and data processing

NO gave a presentation about the new survey launches and the Pleco project, which comprise an extension of the data processing tools delivered by Caris.

D10. Information regarding a BSHC Internet domain

SE introduced the Baltic Sea web page www.bshc.pro

This web page contains more details than the IHO/BSHC page. The intention is to avoid duplication of information. IHB have no problem with an additional web page for the HCs. DE stated that it requires little work to transfer the solution for BSHC to a corresponding web page for NSHC. It was concluded to initiate the work with a web page, see Conclusion 113. With respect to keeping the web page updated DE requested a "push" solution instead of requesting information. The Chairs of WGs to keep information updated.

E. Any other business

NL proposed to continue with arranging the NSHC meetings lunch-to-lunch because it opens for the possibility of travel on the same date as the meeting starts/ends. NL also suggested to keep particular agenda items closed for others than members, see Conclusion 114.

BE noticed that old IHO reports and reviews are not available in a digital format. IHB informed that some activity related with creating a digital repository for the International Hydrographic Review is ongoing.

F. Election of new Chair

According to the procedure the Vice-Chair takes over as the next Chair. Peter Kortenoeven, NL was

elected. When Peter retires in the autumn 2014 his successor will take over as Chair.

G. Place and date of next Conference

IE to host the next Conference in June 2016 (dates tbd). Most likely the venue will be Dublin.

H. Approval of 31th NSHC list of actions

NO presented the draft list of Conclusions, which was approved after some amendments. An action item related to national contact point for the MSDIWG was added, see Conclusion 115. The final version of the Conclusions to be circulated for comments.

I. Closing remarks

NO thanked NL for an excellent arrangement.

Participants who will retire in the coming weeks were acknowledged.