28-30 August 2018

Aalborg, Denmark



## 22<sup>nd</sup> BALTIC SEA HYDROGRAPHIC COMMISSION CONFERENCE

19-21 September 2017 – Rostock, Germany

#### FINAL MINUTES OF THE CONFERENCE

## A. Opening formalities

#### A1. Opening of the Conference

Docs: BSHC22\_List\_of\_Participants.pdf; BSHC22\_List\_of\_Documents.pdf

22<sup>nd</sup> BSHC Conference Chair, Mr. Mindaugas Česnauskis (Lithuania), with great honor welcomed all delegates and thanked all members of BSHC for documents submitted and important issues raised. Also Chair especially welcomed Mrs. Jackie Sydenham from UKHO and Mr. George Elenbaas from US Navy which participating as observers and he thanked Mr. George Elenbaas for the presentation he will provide. On behalf of all members of the Conference Chair expressed special thanks to Vice-Chair Mr. Thomas Dehling and his team for yesterday's sight seeing tour and Ice breaking reception. Chair informed delegates, that IHO will be represented by newly appointed Secretary-General Dr. Mathias Jonas, who, due to his busy agenda, will join the Conference in the afternoon session. Chair also informed delegates, that on 8<sup>th</sup> of September he received an e-mail message from Russian Federation representatives', saying that Department of Navigation and Oceanography of the Ministry of Defence of the Russian Federation will not take part in the meeting of the Baltic Sea Hydrographic Commission this year. Chair passed the information from Russian Federation about readiness for cooperation and work through correspondence till next Conference. Also it was noted that all Member States, except Russian Federation, i.e. Denmark, Estonia, Finland, Germany, Latvia, associate member Lithuania, Poland, and Sweden are present in the Conference and therefore, according to the Article 5e of the Statutes of the BSHC, there is a constituted quorum and decisions can be taken.

It was noted that there are several delegates in this room who attend the Conference for the first time. Chair congratulated them all and, in order to know each other better, invited members of the Conference to shortly introduce themselves. After introduction of the participants Chair wished the Conference constructive deliberations, noted that Mr. Emilis Tertelis (Lithuania) will act as secretary of the Conference and declared the Conference opened and then passed the floor to hosts for welcome words.

## **A2.** Welcome from the host country

Docs: BSHC22\_Letter1.pdf; BSHC22\_Letter1a.pdf

Vice-Chair Mr. Thomas Dehling (Germany), acting National Hydrographer of Germany, welcomed the delegates of the Conference, wished good cooperation and expressed the will that the host has arranged the floor for successful Conference. Later Mr. Thomas Dehling gave administrative and housekeeping information.

## A3. Adoption of the Agenda

Docs: A3\_BSHC22\_Agenda.pdf



Vice-Chair *Mr. Thomas Dehling* (Germany) noticed that IHO Secretariat didn't update the Agenda on IHO website, but there were no big changes compared to last version. It was agreed to postpone the presentation of National Report of Denmark for later, because the head of Denmark delegation has not arrived yet. It was invited by the Chair, *Mr. Mindaugas Česnauskis*, after lunch to start with the Agenda item B2, because the IHO Secretary-General will join the Conference by then, then B1 and afterwards continue with the Agenda item E2, because it is quite an important issue. New Agenda item C8 "EfficienSea2 project status" was proposed and will be presented by Denmark. Chair invited for comments on proposed changes and, because there were no additional comments, announced the Agenda adopted.

## A4. Minutes and actions of the 21st Conference

Docs: A4\_BSHC22\_BSHC21 Final Minutes.docx; A4\_BSHC22\_Status\_of\_BSHC21Actions.pdf

First the Conference went on with the discussion on the Minutes of the 21<sup>st</sup> BSHC Conference. The Chair informed that there is a little unusual situation, because Final Minutes of the 21<sup>st</sup> BSHC Conference were received only recently from Russian Federation and opened the floor for comments. Finland (*Mr. Rainer Mustaniemi*) commented that current version of the Minutes of the 21<sup>st</sup> BSHC Conference is draft, because nobody commented it and suggested that MSs would provide comments to the Minutes later after the Conference. Vice-Chair commented that it is difficult to call them Draft Minutes, because soon it is time for the next Minutes and suggested that MSs could provide comments as Addendum. It was also mentioned that if we would not agree, there is a threat that we may not have any result at all. Sweden (*Mr. Magnus Wallhagen*) expressed agreement with Finland and Germany and commented that they have comments regarding CD issues. It was mentioned that at the moment in the present version of Minutes it is not quite clear the decisions of the CDWG. Finland (*Mr. Jyrki Mononen*) expressed agreement with Sweden and commented that CDWG issues need comments. The Chair thanked everybody for comments and concluded that Commission reached a decision to make an Addendum to the Final Minutes of the 21<sup>st</sup> BSHC Conference:

**Action № 1**: to **make** an Addendum with comments from MS to the Final Minutes of the BSHC21 Conference provided by RF.

Later the status of the Actions of the 21st BSHC Conference was reviewed:

Action № 1: in progress (permanent action);

Action № 2: in progress (later Sweden will give comments during presentation of Agenda item C.3);

Actions  $N_{2}$  3 – 8: in progress (permanent actions);

Action № 9: done;

Action № 10: done (will discuss in more details during Agenda item B.5);

Actions Nes 11 – 12: done (Chair informed that Finland was selected as BSHC representative to the IHO Council);

Action № 13: in progress (Germany submitted the updated version which will be discussed during Agenda item E.2);

Action № 14: in progress (MWG Chair *Mr. Seppo H. Mäkinen* will report during his presentation of the MWG Report);

Action № 15: in progress (Chair *Mr. Mindaugas Česnauskis* noticed that the day before the Conference, BSHC has received suggestion from Russian Federation to replace "when" to "how" and this issue will be discussed during CDWG presentation C.2);

Action № 16: in progress;

Action № 17: done (BS-NSMSDIWG Chair *Mr. Jens Peter Weiss Hartmann* informed that according to IRCC recommendations MSs should include short status on MSDI in

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their National Report). **Decision № 1**: MSs should include short status on MSDI in their National Reports;

Action № 18: in progress (BS-NSMSDIWG Chair *Mr. Jens Peter Weiss Hartmann* informed that they changed to new ESRI system for this service and that there were no comments received, and invited to visit and provide comments. For more information on this issue please refer to the Agenda item B3.1);

Action № 19: done;

Action Nes 20 – 21: done (for more information please see BSICCWG Report D.2);

Action Nes 22 – 23: in progress (for more information please see BSICCWG Report D.2);

Action  $\mathbb{N}_{2}$  24: in progress (new Statutes will be uploaded when revisions will be implemented).

It was noted by Estonia (*Mr. Taivo Kivimäe*) that Actions' List is the most important document and if there are many items "in progress" it means they will automatically be transferred to the next Actions' List, therefore the status is not quite clear and suggested to put a link or a footnote regarding the actions that are "in progress". Vice-Chair *Mr. Thomas Dehling* (Germany) noticed that there is always room for improvement and, in order to be clear, they could be improved. Sweden (*Mr. Magnus Wallhagen*) suggested to include a specified date for the actions on the Actions' List. The Chair thanked everybody for comments and concluded that this finishes Agenda item "A. Opening formalities".

**Decision № 2**: to put a footnote for the actions "in progress" with explanation in the List of Actions.

#### B. IHO work program 1 - Corporate Affairs

## B5. Navarea 1 Baltic Sea Sub-area MSI Report

Docs: BSHC22 B5 MSI SE.pdf

Sweden (Mr. Magnus Wallhagen) presented the Report on MSI activities in the Baltic Sea Region. It was mentioned that GMDSS modernization is a current issue at IMO. The draft GMDSS modernization plan shows that NAVTEX, most likely, in the future will be replaced or complemented by the more modern system NAVDAT. In this respect NAVDAT is discussed as a candidate for sending MSI to ships in coastal waters such as the Baltic Sea region. NAVDAT has many advantages compared to NAVTEX. However, evaluations by Japan has shown that the range of NAVDAT is much shorter than of NAVTEX. It could be expected the range to be reduced to half, or even less, while expensive changes to the infrastructure and organization would be required to implement it. This fact makes it important for Baltico and the Baltic Sea nations to engage in the GMDSS modernization work. Later the Baltico, which is the MSI activities coodinator for the Baltic Sea Region, meetings order was reviewed and informed that it meets every second year around the Baltic Sea. The next meeting is scheduled in April 2018 in Russian Federation, but no detailed information provided by the hosts so far, so participants expect a formal invitation with details shortly. It was noted, that in case it would not be possible to arrange the meeting in Russian Federation, it was assured by Finland (Mr. Seppo H. Mäkinen), that it would be possible to arrange the meeting in Finland. During the presentation it was also mentioned that new NAVTEX equipment in and near Tallinn was put in operation and that SMA plans to renew all NAVTEX transmitters in the years 2019 – 2020. Also it was noted that Baltico (SMA) participates in the S-124 Correspondence Group, which aims to develop a specification which will make it possible to display Nav Warnings in ECDIS and other bridge systems. It was mentioned that Denmark uses S-124 draft model based system NIORD for MSI and T&P-notices. Regarding Action № 10 from the BSHC21 List of Actions, it was informed that Sweden (Baltico), as MSI activities coordinator in the Baltic Sea, has a portal that displays MSI information and this





portal has a link from BSHC webpage. It was noted that Sweden does not have any resources at the moment to build a new portal or create new GIS solution, and this may only be considered in the further future.

After the presentation the Chair stated that Commission took note of the Report.

## **B3.** National Reports

#### B3.2. National Report of Estonia

Docs: BSHC22\_National\_Report\_Estonia.docx

Mr. Taivo Kivimäe presented National Report (please see NR) and highlighted that new head of Cartographic Department Mr. Olavi Heinlo was appointed, that Estonia is a member of IHO and is involved in the work of its WGs. Also noted that probably it would be good if WG Reports that are written by specialists could include a summary in more common wording to be usable to further communication of our work. Mr. Olavi Heinlo noted that in the National Report there is corrected Nav Warnings link and in the Baltico portal and MSI Report is an old incorrect link. Sweden (Mr. Magnus Wallhagen) responded that they will inform the person responsible (Mr. Svante Håkansson).

## Action № 2: to correct Estonian Navigational Warnings website link in the Baltico portal and MSI Report.

Finland (Mr. Rainer Mustaniemi) asked whether ports register includes information about leisure crafts' visiting statistics in ports of Estonia and Estonia (Mr. Taivo Kivimäe) informed that for the time being it does not. Mr. Peeter Väling also informed that since Jan 2018 Estonia is moving to the new height system and then they will produce new editions of ENCs and paper charts. Mr. Olavi Heinlo informed that they are looking forward to visit neighbors in Finland in order to get the best experience in moving smoothly to new height system. Finland (Mr. Jyrki Mononen) on behalf of the CDWG thanked Estonia for the involvement in the work and expressed a hope that Estonia will have a person to continue to participate in the CDWG.

The Chair thanked Estonia for the Report and stated that Commission took note of the Report.

## B3.3. National Report of Finland

#### Docs: B3.3\_BSHC22\_National\_Report\_of\_Finland.pdf

Mr. Rainer Mustaniemi presented National Report (please see NR) and highlighted that there are some reorganization plans of the Finish HO in the Ministry that will take place in 2019 and that at the moment personnel is busy with this issue writing papers of explanation. It was noted that there are plans that some services will be carried out by partially state owned companies and that Finland will inform the Commission about the developments of reorganization next time. When presenting hydrographic survey issues it was highlighted that HELCOM Cat I and II surveys have been completed, that there are opened procurements for three survey tasks, that LiDAR test surveys during 2016 and 2017 are ongoing and that LiDAR is intended to be used with and to support MBES surveys in future projects. When presenting nautical charts issues it was highlighted that 17 new ENCs and 38 new editions were produced in parallel with 1 new INT and 2 new national paper charts. When presenting areas of development it was highlighted that there are ongoing projects for renewal of bathymetric data management system MERTA and for a new chart data management and production system AHTI, that NtMs Online search service for nautical charts updating produced Jan 2017, and that preparation is on course for the implementation of a new vertical chart reference system N2000 (BSCD2000). It was mentioned that implementation of a new vertical chart reference system N2000 (BSCD2000) will start next





year and that Finland hope to receive some good practice recommendations from Sweden and Estonia regarding the ways and methods how to communicate this process to mariners. After the presentation Estonia (*Mr. Peeter Väling*) asked about the LiDAR test results and Finland (*Mr. Seppo H. Mäkinen*) informed that tests down to 6 meters of water depth to replace SBES surveys in shallow water are ongoing and that there are no results yet, and that Finland will report to the Commission when there will be results and clear picture.

The Chair thanked Finland for the Report and stated that Commission took note of the Report.

## **B3.4.** National Report of Germany

Docs: BSHC22\_B34\_DE\_National\_Report\_Germany.pdf

Vice-Chair Mr. Thomas Dehling presented National Report (please see NR) and in the beginning mentioned that Dr. Mathias Jonas has left the BSH as he was elected as Secretary-General of IHO and now he is on a 6 years appointment, and that Mr. Thomas Dehling is currently acting as a National Hydrographer. When presenting hydrographic survey issues it was highlighted that Germany has very frequent resurvey schedule depending on the area and that Germany does some surveys in Danish waters and Denmark does the same in German waters near the borders, because it is more efficient, and afterwards the data are exchanged. It was mentioned that Germany is going to replace current survey vessel ATAIR with a new one build by the shipyard "Fassmer" near Bremen with some parts done by another subcontracted yard near Kiel, and that it is planned to be commissioned in 2020. It was noted that she will be approximately 74 meters in length and that this vessel is larger than existing one and will have additional research tasks, and that she will be the largest vessel in the fleet. It was highlighted that she will be environmentally friendly, because powered by LNG and 10% gas oil and that she could operate for 2 weeks. Discussion started and Sweden (Mr. Magnus Wallhagen) was interested to know the draft of the new survey vessel and Mr. Thomas Dehling informed that it is approximately 4.5 meters. Denmark (Mr. Lars Hansen) asked whether it will be easy to get LNG in every port and Mr. Thomas Dehling informed that not in every port, but in Bremerhaven and with a possibility in Rostock and also noted that it will improve in the future. Later the information on charting issues was presented and it was highlighted that out of 48 German INT charts updated, 22 were for the Baltic Sea, that for national paper charts for domestic waters an A0 sized chart portfolio of 60 charts were produced according to international standards, that for regional shipping BSH in 2017 published first 28 A1 sized charts for the North Sea in German language from HPD and in this series special windpark charts in in German-English are included, that 4 Small Craft Charts Series and a general planning chart were issued for the German part of the Baltic Sea, and that for national paper charts for foreign waters a chart INT 120 (DE 98) for the whole Baltic Sea and 3 INT charts for Antarctic waters were produced or updated. Later the information was given regarding the development, together with some private companies, of a database-supported nautical surface automatic derivation product called "ENC Bathymetry Plotter", which is essential pre-condition for the upcoming BSH service to provide bENC for Pilots. After the presentation Sweden (Mr. Magnus Wallhagen) was interested to know who is the customer for the special purpose charts and Germany (Mr. Stefan Grammann) informed that charts are the same, but the scale is different for special charts (e. g. customers of windmills' park).

The Chair thanked Germany for the Report and stated that Commission took note of the Report.

## B3.5. National Report of Latvia

Docs: BSHC22\_National\_Report\_of\_Latvia.doc

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Mr. Bruno Spels presented National Report (please see NR) and when presenting hydrographic surveys, the overview of survey vessel and boats was given and it was highlighted that there were not so many good weather conditions for surveys with a 19 meters survey vessel. When presenting charting issues, it was mentioned that all paper charts are updated by the monthly NtMs and then immediately are available for the Print on Demand system that is operated by the Cartographic Department, that out of 22 paper charts, 19 charts are INT charts, that there are 23 ENCs in total updated on a monthly basis by NtMs with a possible maintenance and new editions in-between, that T&P NtMs are included in ENCs, that Latvia has an ENC distribution agreement with PRIMAR and other agreements with some private companies regarding the ENC derivation products, and that new edition of leisure craft charts folio, which is not updated by NtMs, is planned to be published in 2018. After the presentation Germany (Mr. Thomas Dehling) asked whether Latvia can inform about the location on CB regarding training in Cat B and Latvia (Mr. Bruno Spels) informed that it will be in USA.

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The Chair thanked Latvia for the Report and stated that Commission took note of the Report.

## B3.6. National Report of Lithuania

Docs: B3.6 BSHC22 National Report Lithuania upd170821.pdf

Mr. Mindaugas Česnauskis presented National Report (please see NR) by giving overview about hydrographic surveys, charts' production, nautical publications' updating, involvement and participation in regional FAMOS Odin project. Afterwards Mr. Justas Rašomavičius informed on reorganization issues of Lithuanian Maritime Safety Administration by noting that it is nothing new, because Finland and Denmark has already had or having reorganization and that Lithuania is a small country and can not afford many institutions, that in the future new institution will be responsible for 3 spheres (roads, waters and railways), that it is hoped to reach a finalization in the next coming weeks or months and invited to cooperate as usually, because all functions will remain in the new institution. After the presentation discussion started and Sweden (Mr. Magnus Wallhagen) expressed regret by noting that it is unfortunate to have Lithuania as an Associated Member of the Commission and asked if there are plans to become an IHO member and Lithuania (Mr. Justas Rašomavičius) informed that it is not clear at the moment, but this issue is on the table and is discussed and hopefully there will be some solution. Later Germany (Mr. Thomas Dehling) expressed appreciation to Lithuania for good cooperation and noted that it is good to have their representatives in the Commission and expressed a hope to further have good cooperation. Afterwards Estonia (Mr. Peeter Väling) asked about the situation regarding hydrographic tasks, whether they will remain or something is changing and Lithuania (Mr. Justas Rašomavičius) informed that the tasks are being scrutinized and surveying is one of them, to which trying to find the best solution for making surveys and if there will be any actions Lithuania will inform accordingly next time.

The Chair thanked for active discussion and stated that Commission took note of the Report.

## B3.7. National Report of Poland

Docs: BSHC22\_B37\_PL\_National\_Report\_of\_Poland.docx

Mr. Andrzej Kowalski presented National Report (please see NR) by giving overview about hydrographic surveys, charts' production, nautical publications, MSI activities and World Hydrography Day celebration, which was successfully celebrated on 21 June in Kołobrzeg and was very popular among local community and holiday makers. When presenting charting issues, it was highlighted that there are 61 ENCs in total, which are updated on a weekly basis and, during the year 2017, 1 new ENC, 14 new editions and 194 updates were released, that for INT

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charts, 4 INT charts were updated/released, that for national paper charts, 8 national paper charts were updated/released, that for Small Craft Charts Series, there were 3 series produced in cooperation with the BSH and updated via the internet. When presenting nautical publications, it was highlighted that there were produced 2 new publications ("Symbols, abbreviations, terms used on charts published by HOPN – 551" and "IALA system – 553") and 2 new editions were released ("List of Lights – 522" and "Chart Catalogue – 552"). Finally it was informed that BSICCWG5 meeting will be hosted by the Hydrographic Office of the Polish Navy and will take place in Gdansk, in hotel "Hanza" from  $21^{st}$  to  $22^{nd}$  of November 2017.

The Chair thanked Poland for the Report and stated that Commission took note of the Report.

## B3.8. National Report of Russian Federation

Docs: B3.8\_BSHC22\_National\_Report\_Russian Federation.pdf

The Chair informed that Russian Federation provided National Report, which is on the IHO website and, in case there are questions, MSs are advised to address Russian Federation by correspondence.

## B3.9. National Report of Sweden

Docs: BSHC22 B3-9 National Report of Sweden.pdf

Mr. Patrik Wiberg presented National Report (please see NR) and highlighted that new Director – General (Mrs. Katarina Norén) of Swedish Maritime Administration was appointed, that the organizational structure of Swedish Hydrographic Office was changed due to a finalized project and staff reduced from 120 to 117 persons. When presenting hydrographic survey issues it was highlighted that 56% of all Swedish waters now fulfills the FSIS-44 Standard, that an effective and pragmatic cooperation approach have been used between Sweden and Denmark when e. g. Sweden surveyed a Danish area north of Bornholm and Denmark surveyed two equivalent areas in Kattegat, that surveys are also done by external resources, i. e. private companies. Following an information, Estonia (Mr. Peeter Väling) was interested to know how many surveys are done by external resources and Sweden (Mr. Patrik Wiberg) informed that approximately 4500 km<sup>2</sup> by own and 2200 km<sup>2</sup> by external resources. When continuing to present National Report, later it was mentioned that new Chart production system CARIS HPD was put in production in 2016 and that Sweden plans to be ready and finished with cartographic rebuilding in 2018, that during ADAPT (Assure Depth of fairways for Archipelago Public Transportation) surveying new dangers, that had to be put on chart immediately, were discovered, and that was because old surveys were lead line surveys. Afterwards Finland (Mr. Jyrki Mononen) asked does Sweden have any plans on financing surveys in shallow waters or any studies regarding how to make surveys profitably in shallow waters and Sweden (Mr. Magnus Wallhagen) informed that they still have major challenges when surveying commercial shipping areas, that further plans will be reviewed and adjusted after 2020, that they still have to develop a solution for shallow water areas used by pleasure crafts, and also expressed the opinion that it is not quite right to put all financial burden regarding surveying on SMA and that SMA are going to address the Ministry, because quite big resources are needed.

The Chair thanked Sweden for the Report and stated that Commission took note of the Report.

## B3.1. National Report of Denmark

Docs: BSHC22 National Report Denmark.pdf





Mrs. Elizabeth Hagemann presented National Report (please see NR) and gave information on structure of DGA, relocation to Aalborg in Nov 2016 and mentioned that this is a challenging task and the office feels like newly established, because lost many staff, some people commuting from Copenhagen. It was mentioned that HO – Denmark is responsible for ENCs and paper charts' production for Danish and Faroese waters, for nautical publications, for sales of charts and other maritime products, for coordination of international work of the DGA within the maritime area and for administration of MSDI. While presenting current status of the HO – Denmark, it was highlighted that focus is on weekly updates of ENCs and publication of chart corrections, that paper charts' production has diminished by about one third in 2016 and is expected to continue to decrease by about one more third in 2017, and that development projects have been postponed or delayed. Later it was informed that DGA has launched a new web version of the Mariners' Routeing Guide Baltic Sea, that it is based on chart INT 1200 produced by BSH and that it is routinely updated by NtMs. It was noted, that there were no comments received on draft version and that some problems of draft version related to working on tablets and smartphones were corrected. Afterwards the information was given on upcoming projects for the HO – Denmark and among other things it was noted that MSDI is up and running. The presentation continued with the overview of the structure, responsibilities and upcoming projects of the HO – Arctic, and it was highlighted that hydrographic surveys, processing and management of bathymetric data as well as ENCs and paper charts' production for Greenlandic waters are responsibilities of the HO – Arctic. When presenting hydrographic surveys, the information was given by Mr. Lars Hansen that Denmark has some additional survey program next to HELCOM survey program. After the presentation, discussion ensued and Sweden (Mr. Magnus Wallhagen) expressed regrets that did not provide comments on MRG and proposed to make an action to check the MRG and comment it by the end of December. Then Finland (Mr. Rainer Mustaniemi) noted that it have been found that it is a little difficult and challenging task to go through all waters. And Denmark (Mrs. Elizabeth Hagemann) responded by saying that they have informed colleagues that Denmark has such web information. Then Finland (Mr. Rainer Mustaniemi) raised a question about how the information in MRG should be updated and evaluated in the future. Germany (Mr. Thomas Dehling) noted that there is a separation between the chart INT 1200 and GIS solution of it and if somebody finds something that has to be addressed, then it can be addressed to Germany and Denmark both. Then Sweden (Mr. Magnus Wallhagen) wondered who the point of contact in Denmark is. And Denmark (Mrs. Elizabeth Hagemann) responded by saying that there is an indication on POC in MRG. Then Sweden (Mr. Magnus Wallhagen) proposed to include the survey of MRG task on the BSICCWG working program list. And the Chair of BSICCWG (Mr. Jarmo Mäkinen) responded that it is possible, but kindly asked to clarify what exactly the Commission wants the WG to do. Then Germany (Mr. Thomas Dehling) supported the point of BSICCWG Chair and noted that it is out of scope of the WG and that it is done by the staff of BSH. Also Germany (Mr. Stefan Grammann) noted that it is a nautical publication and if anybody see that there are issues and see a need to address, then they are welcome to address Germany. Then Sweden (Mr. Magnus Wallhagen) indicated that it should be made very clear whom to address regarding this issue and proposed to put it in the Actions' List. And Finland (Mr. Rainer Mustaniemi) noted that information related to Finish waters in the MRG can not be updated for now. Then Germany (Mr. Stefan Grammann) suggested to clarify the contact point whom to address in Germany regarding inaccuracies in content. And Estonia (Mr. Olavi Heinlo) noted that if it is not waiting for approval, but it is already public, then there could be both links in INT 1200 and GIS solution of it.

The Chair thanked Denmark for the Report and everybody for active discussion and comments and stated that Commission took note of the Report.

**Action № 3**: to **provide** point of contact for reporting to Germany inaccuracies in content in chart INT 1200.



- **Action № 4**: to **provide** point of contact for reporting to Denmark inaccuracies or problems in presentation in "Mariners' Routeing Guide Baltic Sea" web version.
- Action № 5: to put a link to "Mariners' Routeing Guide Baltic Sea" web version on BSHC webpage.
- **Action № 6**: to **check** web version of the Mariners' Routeing Guide Baltic Sea and comment by the end of 2017.

#### B2. Information about the activities of the IHO and outcomes of the IRCC9 meeting

Docs: Report of the IHO Secretariat to BSHC22.docx; BSHC22\_B2\_IHB-Report\_SG.pptx

Secretary-General of IHO, Dr. Mathias Jonas, started his presentation (please see EN) by informing that he is in the role of Secretary-General for 3 weeks and noted that he looks forward to continue the excellent collaboration between the Secretariat and BSHC. He continued with information about the practical consequences on approval of amendments to the IHO Convention. When presenting information on membership of IHO, the SG mentioned that the plan is to become a 100 members' Organization by the year 2021 when IHO will celebrate its 100 years anniversary. Then the SG shared a note of the IHO Secretariat that hydrographic community should invest in technology, GIS solutions and databases in order to do more tasks by digital means. When discussing INT chart and ENC production coordination, the SG noted that BSHC gives an excellent example for best practice to treat this subject within a region by mutual consent. When reviewing capacity building issues, it was noted, that Capacity Building program is additionally funded by Japan and South Korea, and that CBSC operates on a high level and has to rely on the support from other Member States. When reviewing Crowd – Sourced Bathymetry, he noted, that this issue enjoyed explicit support by former SG and he himself in legacy of this commitment. According to his view crowd sourcing will not particularly facilitate nautical charting but could become an important contributor to the GEBCO project. Reminding on GEBCO as have been the real start of international cooperation in hydrography, it was highlighted, that there is now, thanks to the Seabed 2030 project the aspiration to reach 100 m grid bathymetry resolution of seafloor of all seas and oceans. Later the information was given on the United Nations Sustainable Development Goal No. 14, which is "life below water", and it was highlighted, that the hydrographic community should not stop to stand for our convictions and continue the activity on the subject, and overcome political tensions if there are any. Also it was noted, that the SG, in consultation with the IHO Directors, proposes a theme for WHD 2018: "Bathymetry - the foundation for sustainable seas, oceans and waterways" and that this proposal will be considered at IHO Council meeting. After the presentation on information about the IHO activities, the SG invited to note this Report and endorse the actions proposed by the Report.

The Chair thanked IHO Secretary-General for the Report and stated that Commission noted the Report and endorses the proposed actions:

- **Action № 7**: provide continuous updates to S-11 Part B for INT Region E through the INToGIS tool and implement the procedure depicted in IHO CL 64/2015 for the review and monitoring of INT charts and **define** Approved ENC Schemes.
- Action № 8: to check entry in the Yearbook and in C-55 and to report any updates or report no change to the IHO Secretariat.
- **Action № 9**: to **inform** Members of the Council of their views on any of the agenda items to be discussed at the meeting and **take** active note of the deliberations and decisions to be made by the Council.

Afterwards the SG gave overview of the outcomes of the IRCC9 meeting and it was highlighted that it is important to have hydrographic capabilities particularly in disaster areas, where there is a need to restore shipping capabilities, that some countries have such capacities and help to restore



shipping, and it was stressed that it would be good to know in advance how the hydrographic community could react to disaster before the event happens. During discussion Denmark (*Mr. Lars Hansen*) asked about financing of disaster response, whether the countries finance this activity by themselves and SG informed that some countries have long standing interest in some region and finance this activity by themselves and that no special funds are addressed to this activity. And Germany (*Mr. Thomas Dehling*) also added that it is possible to use general CB funds, but they are very limited. After the presentation on the outcomes of the IRCC9 meeting, the IHO Secretary-General invited to note the Report.

The Chair thanked IHO Secretary-General for the Report and stated that, in the absence of additional questions, Commission took note of the Report.

#### **B1.** Information on Council issues of the IHO

Finland (*Mr. Rainer Mustaniemi*) gave overview of the Council issues of the IHO. It was mentioned that it is good to have discussion around this issue and noted that Council delivered a questionnaire about the future work of the Council and that this is needed in order to have clarity before the meeting of the Council. It was noted that information is available on IHO web page and that Agenda already includes some Agenda items proposed by the Committees. Later the appreciation was expressed for everybody's support and noted that in case anybody has ideas or comments, they are welcomed to share it. Also it was noted that the Council is active not only in the meetings, but also during the time between meetings for everybody' ideas and opinions.

The Chair thanked Finland for the information provided and stated that Commission noted the information.

#### E2. Amendments of the BSHC Statutes

Docs: BSHC22\_E2\_Statutes\_DE.pdf; BSHC22-E2\_Annex\_1\_draft\_Statutes-BSHC.docx; BSHC22\_E2\_draft\_Statutes-BSHC-consolidated.pdf; E2\_BSHC-22\_Statutes.pptx

Vice-Chair Mr. Thomas Dehling (Germany) started presentation (please see ENs) by informing that, by Decision taken at 21st BSHC Conference, the Vice-Chair was tasked to amend the Statutes with the annex regarding Council selection procedures and while doing that it became apparent that more changes are needed due to IHO Convention change and made a proposal to add additional needed changes to the Statutes and to have it signed during the next Conference. Later the proposed changes were reviewed (please see ENs) and while reviewing clause d of Article 5, IHO Secretary-General, Dr. Mathias Jonas, advised to address SG of the IHO instead of IHO Secretariat, because the SG runs the Secretariat. While reviewing Article 6 it was noted that main changes are regarding gender conformance and earlier Decisions of 21st BSHC Conference. During discussion Denmark (Mr. Jens Peter Weiss Hartmann) invited to consider clause c of Article 6 regarding putting restrictive burden on provision of documents and made and example by saying that if the meeting is in August, then documents should be delivered in the middle of July. But Sweden (Mr. Magnus Wallhagen) noted that in such a case if documents were provided too shortly, there would be no time for the Ministries or higher officials to get acquainted with them. And Vice-Chair Mr. Thomas Dehling (Germany) explained that it is good if the documents are submitted earlier, because then there is time to prepare. Later while reviewing Article 15 it was noted that this amendment reflects Action No. 13 of the 21st BSHC Conference and that it allows changing Council selection procedures without amending the Statutes. After the presentation Vice-Chair invited to take note of the information, to task the Chair to finalize the Statutes before the 23<sup>rd</sup> BSHC Conference and invited MSs to provide comments by the end of 2017.



The Chair thanked Vice-Chair for the presentation and stated that Commission took note of the information provided and endorses the proposed actions:

Action № 10: all MS to provide input and comments to the Chair regarding changes to BSHC Statutes.

**Action № 11**: Chair to **finalize** the draft of BSHC Statutes for signing by the MS before the 23<sup>rd</sup> BSHC Conference.

Action № 12: Sweden to post updated BSHC Statutes on the BSHC web site after the 23<sup>rd</sup> BSHC Conference.

## **B4. Status Report from the IHO – EU Network WG (IENWG)**

Docs: BSHC22 B4 IHO-EU Network SE.pdf

Sweden (Mr. Magnus Wallhagen) gave overview of the Report (please see EN). It was noted that if somebody wishes to participate in the IENWG meetings, they are welcomed and that EMODnet is the marine side from the EU Commission. After the presentation Estonia (Mr. Taivo Kivimäe) thanked for the well done presentation and asked why BSBD is useful for EMODnet and Sweden (Mr. Magnus Wallhagen) explained that for the Baltic Sea Region, BSBD is the hub for storing the bathymetry data, and that when anyone sees bathymetric data in EMODnet, they must be sure that it is their data.

The Chair thanked Sweden for the presentation and stated that Commission took note of the Report.

#### C. IHO work program 2 – Hydrographic Services and Standards

## C1. Report of Re-Survey Monitoring Working Group (MWG)

Docs: BSHC22\_C\_1\_MWG\_Report\_FI\_updated\_170808.doc; BSHC22\_C1\_re\_survey\_progress\_170920.pdf

Finland (Mr. Seppo H. Mäkinen) presented the MWG Report (please see ENs) and it was noted that MWG reports to many different bodies, that re-survey database is maintained at SMA, that timetable for re-surveys of Cat I and Cat II areas are as is agreed by the BSHC. The awareness was raised regarding scheme of re-survey areas on the South East (SE) Baltic Sea. It was noted, that Lithuania and Poland have improved re-survey schemes and made surveys on their areas, but Russian Federation has areas of commercial traffic according to AIS data, which are not covered by schemes, and these areas wished to be improved. Discussion ensued after the presentation and Sweden (Mr. Magnus Wallhagen) expressed support for the working group and noted that it would be useful to recheck how Cat I and Cat II areas are defined in order not to understand these areas differently and raised a question if there is a need to clarify the definition of Cat I and Cat II areas. And Finland (Mr. Seppo H. Mäkinen) replied that it is defined in the HELCOM Declaration and the duty is on MSs to define these areas. Then Sweden (Mr. Magnus Wallhagen) provided an idea that probably there could be some recommendations on how to classify the areas bearing in mind some criteria like e. g. amount of traffic per month or so. And Germany (Mr. Thomas Dehling) agreed that areas were defined by HELCOM Declaration, but the question remains where they are going exactly and how wide they are, so it is really crucial to look at the AIS information in order to know where the traffic is going. Then Finland (Mr. Seppo H. Mäkinen) noted that this issue will continue to be discussed in the MWG work.

The Chair thanked Finland for the presentation and stated that Commission took note of the Report and approves the proposed actions:

**Decision № 3**: approve the new task in ToR of MWG:





1.7 To support IHO working groups and other European projects in issues concerning IHO S-44 and survey status. Any official decisions shall be brought to be decided in BSHC conference.

Action № 13: to study and define Cat I & II areas in their waters based on the existing AIS-information on commercial shipping, paying particular attention in the SE Baltic.

**Action № 14:** to **study** the possibility to unify practical procedures in defining Cat I and Cat II areas.

## **C2. Report of Chart Datum Working Group (CDWG)**

Docs: BSHC22\_C2\_FI\_CDWG Report.pdf; BSHC22\_C.2\_CDWG Report Presentation.pptx

Finland (Mr. Jyrki Mononen) presented the CDWG Report (please see ENs) and, among other things, it was noted that CDWG proposes a BSCD2000 abbreviation for the "Baltic Sea Chart Datum 2000", that because Actions of the 21st BSHC Conference were not published at the time of the CDWG meeting, Action № 15 CDWG to clarify when it is appropriate to use the BSCD2000 abbreviation for the "Baltic Sea Chart Datum 2000" was not discussed at the meeting and proposed this Action to be returned to CDWG if the action is still relevant and CDWG to give an answer to 23<sup>rd</sup> BSHC Conference. During the discussion Germany (Mr. Thomas Dehling) noted that Russian Federation proposed to change a word "when" to "how" in the Action № 15 of the BSHC21. And Finland (Mr. Jyrki Mononen) informed that CDWG can take it into the WG and discuss this issue. Then Sweden (Mr. Magnus Wallhagen) noted that it is not understandable action and it is impossible to say when and how it should be used. To what Germany (Mr. Thomas Dehling) proposed that these BSCD2000 issues must be discussed and come up with the result to 23<sup>rd</sup> BSHC. Then Denmark (Mr. Jens Peter Weiss Hartmann) raised a question whether there were considered consequences for MSs of changing to new chart datum. To what Finland (Mr. Jyrki Mononen) replied that there are many different ways and every MS is responsible for implementing it and that CDWG will track the progress. Sweden (Mr. Thomas Hammarklint) added that it will be unique for each country and unique challenges will be faced. Then Finland (Mr. Jyrki Mononen) continued with the presentation and noted that sometimes there is a need for change and new ideas, therefore CDWG decided to support Mr. Thomas Hammarklint as a new Chair of the CDWG and after the presentation invited the Commission to note the Report and approve the proposed Actions. After the presentation Germany (Mr. Thomas Dehling) expressed acknowledgement to everybody for efforts and congratulated Mr. Thomas Hammarklint on the election as a new Chair of CDWG. And Sweden (Mr. Thomas Hammarklint) thanked for the trust and expressed hope that things will move forward.

The Chair thanked Finland for the presentation and stated that Commission took note of the Report and approves the proposed actions:

**Decision № 4**: to approve abbreviation BSCD2000.

**Decision № 5**: to approve Mr. Thomas Hammarklint as a new Chair of the CDWG.

**Decision № 6**: to approve CDWG Terms of References.

**Decision № 7**: to approve CDWG Work Programme 2017-2018.

**Action № 15:** to **summarize** the decisions made in BSHC Conferences regarding the vertical reference level Baltic Sea Chart Datum 2000:

- how the chart datum name should be shown in paper charts
- how the chart datum should be shown in S-57 ENCs, attribute VERDAT
- the abbreviation used for Baltic Sea Chart Datum 2000.

## C3. Report of Baltic Sea Bathymetric Database Working Group (BSBDWG)

Docs: BSHC22 C3 BSBDWG WG Report.pdf; C3\_BSHC22\_BSBDWG\_Report.pptx





Sweden (*Mr. Thomas Hammarklint*) presented the BSBDWG Report (please see ENs) and, among other things, it was noted that there is a hope to produce a higher resolution bathymetric model of the Baltic Sea. During the discussion Estonia (*Mr. Peeter Väling*) wondered what is higher resolution and Sweden (*Mr. Thomas Hammarklint*) explained that it is as better as possible, but hopefully 300 meters model. Denmark (*Mr. Jens Peter Weiss Hartmann*) informed that they have delivered 500 meters model and that it is not possible to deliver 300 meters model. Finland (*Mr. Rainer Mustaniemi*) informed that outside territorial sea there is no restrictions to publish data. In addition, Finland (*Mr. Seppo H. Mäkinen*) informed that it updates the data two times a year. After the presentation Sweden (*Mr. Thomas Hammarklint*) invited the Commission to note the Report and give consent for the work as stated in the Report.

The Chair thanked Sweden for the presentation and stated that Commission took note of the Report and approves the proposed actions:

**Action № 16:** MSs are invited to **distribute** good resolution (large scale – 1:50000) coastline to Sweden in order to enhance presentation in the BSBD portal and contact with SWE regarding procedure.

**Action № 17:** Sweden to **update** the BSBD 500 m model.

**Action № 18:** Russian Federation and Lithuania make effort to **provide** bathymetric data to BSBD portal.

# **C4.** Report of Baltic Sea North Sea Marine Spatial Data Information Working Group (BSNSMSDIWG)

Docs: BSHC22 BS-NSMSDIWG Report.pdf; BSHC22 MSDIWG report 2017.pptx

Denmark (*Mr. Jens Peter Weiss Hartmann*) gave overview of the Report (please see ENs) and, among other things, it was noted that MSDI landscape in Denmark turned up to be rather complicated, but when put on different levels, it becomes more clear and that it is good to exchange information on MSDI between different countries, because it helps to see wider view. Also it was highlighted that when talking about MSP, the talk is about data, i. e. input data and output data, and there is a need to make sure that the data supplied is high quality trusted data from the right authority. After the presentation Denmark (*Mr. Jens Peter Weiss Hartmann*) invited to note the Report.

The Chair thanked Denmark for the presentation and stated that Commission took note of the Report.

**Decision № 1**: MSs should include short status on MSDI in their National Reports.

## C5. Development and standardization of high resolution bathymetric products (a.o. bENC)

Docs: C5\_BSHC22\_bENC\_DE.pdf; C5\_bENC-Strategie-09-2017.pptx

Germany (*Mr. Stefan Grammann*) presented the Report (please see ENs) and highlighted the present requirements, current standards, reviewed ENC with high density bathymetry cases (usage band 5 and 6), mentioned that additional bathymetric layer (ABL) is the S57 layer for bathymetry and that the layer is designed for ECS (not type approved), and that there is no existing standard for this layer. Also the Pilot project in Rostock and the production method for such products were presented, followed by the bENC tiling scheme. After the presentation the Commission was invited to take note of the Report, discuss the general usefulness of an IHO S57/52 ABL standard and decide on further steps regarding this issue. Later Discussion ensued and Finland (*Mr. Jyrki Mononen*) thanked for interesting presentation and wondered couldn't such information make a chart quite messy and Germany (*Mr. Stefan Grammann*) explained that it is true, but that this

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product is made for Pilots and that they can manage and handle it with ease. Then Denmark (Mr. Jens Peter Weiss Hartmann) informed that they are dealing with same things e. g. Arctic ENC and asked whether ECDIS systems can read this data, this layer, this bENC and Germany (Mr. Stefan Grammann) explained that it can not, because there are changes needed. Then Denmark (Mr. Jens Peter Weiss Hartmann) wondered can other layers, e. g. AIO, AML, etc., be used on this product and Germany (Mr. Stefan Grammann) explained that for this ENC only special objects can be used and this standard is not the same as military standard, and that now it is more a German local standard, and that it is some additional data on top of the S-57 data. Later Sweden (Mr. Magnus Wallhagen) wondered how many ECSs can read this bENC product and Germany (Mr. Stefan Grammann) informed that it is two systems - 7Cs and SEAiq (for iPad). Then Sweden (Mr. Magnus Wallhagen) informed that there is an interest in such products from the market, that the need is much bigger than only for Pilots and wondered couldn't be there some conflict with the S-100 standard and Germany (Mr. Stefan Grammann) explained that there is no conflict with the S-100 standard, because this product is more for non – SOLAS market. Then Sweden (Mr. Magnus Wallhagen) gave an idea about wouldn't it be wise to make a standard that is usable for ECDIS systems and Germany (Mr. Stefan Grammann) explained that currently there is no such interest in the ECDIS systems' manufactures market. Then IHO Secretary-General, Dr. Mathias Jonas, entered discussion and noted that there is a general request for detailed bathymetry from industry but likewise from the customers. Since bENC is technically a spin – off of S-57 by the industry this poses the question if IHO as standardization body should engage on standardization of bENC or, alternatively, do concentrate on S-100 based products due to limited resources. SG highlighted that this could be question for the upcoming HSSC meeting whether to task the ENCWG on this issue. Then Sweden (Mr. Magnus Wallhagen) expressed support for the submission of proposal for the HSSC meeting, because BSHC has limited resources and noted that it would be good to do something intermediate before there is a S-100 product and offered Germany to write a proposal and Germany (Mr. Thomas Dehling) responded positively.

**BALTIC SEA** HYDROGRAPHIC

The Chair thanked Germany for the presentation and stated that Commission took note of the

Action № 19: Germany to write a proposal to HSSC meeting to discuss the need for a bENC standard before S-100 becomes available.

## **C6. FAMOS project status Report**

Docs: C6\_BSHC22\_FAMOS\_SE.pdf; C6 BSHC22 FAMOS\_SE.pptx

Sweden (Mr. Magnus Wallhagen) presented the Report (please see ENs), reviewed the situation and noted that data can be used for safer and efficient navigation by finding more efficient routes and safer passages and that FAMOS project makes efforts to go from 2D to 3D navigation. It was noted that the best geodesists around the Baltic are involved in this UKC discussion, that this team believes it is possible to achieve this with a good geoid model and, in order to produce geoid near the coast, gravity measurements are needed far away at the sea. Later it was noted that with this project society prepares for the future, because some day autonomous vessel will come and the data are needed to be prepared for the future. It was mentioned that FAMOS is about surveying CAT I and CAT II areas, that before FAMOS about 50% was surveyed to modern standards and that with FAMOS there is a vision to achieve about 100.000 km<sup>2</sup> area surveyed, and that already around 32.000 km<sup>2</sup> have been surveyed. It was noted that there were personnel changes in the coordinator's project team at SMA and that Mr. Andreas Andersson from 1 August 2017 is the new FAMOS project leader, while Mr. Benjamin Hell is still part time with the project. Also it was noted that there is a need to prepare for the next phase of the project, that this 3<sup>rd</sup> phase needs to be more user oriented and that surveying still important, but in parallel with



some additional tasks. After the presentation the IHO Secretary-General, *Dr. Mathias Jonas*, noted that it is a brilliant project, that Baltic Sea is a favorite for an autonomous ship particularly on short distances between islands and that it is possible that this will come. Then Germany (*Mr. Thomas Dehling*) expressed thanks for good presentation and efforts with this project. And Finland (*Mr. Seppo H. Mäkinen*) noted that BSHC makes efforts to pass this message in this sector to other areas.

The Chair thanked Sweden for the presentation and stated that Commission took note of the Report.

**Action № 20:** to **consider** the content of further development of FAMOS project phase 3 and forward their views to SMA.

## C7. Intelligent Marine Fairway – project, status report

Docs: BSHC22\_C7. Intelligent Marine Fairway.pptx

Finland (*Mr. Rainer Mustaniemi*) presented the Report (please see EN) and highlighted that in the FMA's Digitalisation Program there are 6 project areas where Intelligent Marine Fairway is one of them. Project consists studies about bathymetric surfaces, improved water level services, local services of sea conditions (currents, waves and ice) and tests of the services on pilot areas/fairways. Also it was noted that Finland aims to operate world's first autonomous ship system in 2025 and that catchword of the project is "One Sea – Autonomous Maritime Ecosystem". After the presentation Sweden (*Mr. Magnus Wallhagen*) expressed thanks for really interesting presentation and informed that Sweden plans a workshop with PRIMAR and Finland about S-102 product and that it could be interesting for other MSs and that more details on this probably will be provided during the next Conference. And Finland (*Mr. Rainer Mustaniemi*) agreed that it could be possible and invited to note the Report.

The Chair thanked Finland for the presentation and stated that Commission took note of the Report.

#### C8. EfficienSea2 project status

Denmark (*Mrs. Elizabeth Hagemann*) presented the Report and noted that it involves 32 partners from 12 countries, that the tasks is to convert S-57 ENC data to S-101 format and participate in further development of S-100 products. It was noted that it looks promising and it is a step towards e-Navigation, and that the project ends in April 2018. After the presentation the IHO Secretary-General, *Dr. Mathias Jonas*, informed that there is a prospect that the first edition of S-101 will be approved by HSSC10 in 2018.

The Chair thanked Denmark for the presentation and stated that Commission took note of the Report.

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

## D1. Report of BSHC representative to WENDWG

Docs: D1\_BSHC22\_WENDWG Report\_F1.pdf; BSHC22\_D.1\_WENDWG Report.pptx

Finland (*Mr. Jarmo Mäkinen*) presented the Report (please see ENs) and gave information overview of the IHO performance indicators, IHO ENC catalogue, RENC harmonization and distribution, full implementation of the WEND principles, AIO, ENC overlapping (the main topic of the WENDWG7 meeting). It was noted that WENDWG raised some concerns for the ENCs



that are not distributed through a RENC yet (black box) and that HOs, RHCs and ENC producers are advised to identify overlaps, which are navigationally significant and report back to IRCC. The Chair thanked Finland for the presentation and stated that Commission took note of the Report.

## **D2.** Report of Baltic Sea INT Chart Coordination Working Group (BSICCWG)

Docs: D.2\_BSHC22\_BSICCWG Report\_FI.pdf; BSHC22\_D.2\_BSICCWG Report.pptx

Finland (Mr. Jarmo Mäkinen) presented the Report (please see ENs) and gave overview on the status of Actions № 20-23 from 21st BSHC Conference, then it was mentioned that coordination and harmonization of ENC schemes through ICCWGs is considered to be beneficial and that if it was agreed to use INToGIS tool for updating of S-11, then it should be a part of the chart publishing process. Also it was mentioned that Germany plans to transfer production of two INT charts in the future possibly to Denmark (INT 1304, DE 64, 1:200 000) and Sweden (INT 1201, DE 40, 1:250 000) and that this issue will be discussed in the next BSICCWG5 meeting. Also it was noted, that there is a need to have ENC specialists present at the WG meetings in order to discuss Baltic Sea ENC Scheme productively. Then it was mentioned that there are still some small overlaps, most of them are not navigationally critical. But hope in the future to have no ENC overlaps. Germany (Mr. Stefan Grammann) commented that they have already discussed with Denmark that small overlap is not a problem in some particular area and informed IC – ENC about this issue and that overlap itself is not enough to be and might not be a problem, but maybe it is worth to look in details. Finland (Mr. Jarmo Mäkinen) responded that in the next BSICCWG5 meeting this issue will be discussed as well as ENC harmonization recommendations. After the presentation Sweden (Mr. Magnus Wallhagen) informed that taking over the production of INT chart from Germany might happen in the future, but not now, because busy with other issues, like e. g. discussing with Denmark routeing changes in Kattegat. Estonia (Mr. Olavi Heinlo) commented that it would be highly appreciated to have specialists in the BSICCWG meetings and made a remark regarding ENC harmonization recommendation № 3 noting that Estonia uses only one different scale, not two and that this scale is used widely by navigators, so it is a little difficulty.

The Chair thanked Finland for the presentation and stated that Commission took note of the Report.

#### **D4. IHO Capacity Building Sub-Committee Issues Review (CBSC)**

Docs: D4\_BSHC22\_CBSC.pptx

Germany (CBSC Chair and BSHC CB-Coordinator Thomas Dehling) presented the Report (please see EN) and highlighted that the funds available and the amount of CB provision has risen, that CBSC is highly dependent on donors and therefore CBSC is thankful for any support. After the presentation CBSC Chair invited to note the Report and invited MSs to investigate the possibilities of fund raising and engagement in CB via national organizations. After the presentation Finland (Mr. Jyrki Mononen) wondered if there is some cooperation in this field and CBSC Chair replied positively indicating that it is between FIG, IMO, IOC, WMO and IALA. The Chair thanked Germany for the presentation and stated that Commission took note of the Report.

# D3. Hydrographic Surveying and Nautical Charting Worldwide C - 55 Status in BSHC Member States Review



IHO Secretary-General, *Dr. Mathias Jonas*, provided overview and noted that MSs know the importance of this issue, that there are some issues in other parts of the world, but not in this region, and that there are plans for further development of the database and kindly invited to continue to update C-55.

The Chair thanked IHO Secretary-General for the review and stated that Commission noted the information.

#### **D5. BSHC Website**

Docs: BSHC22 D5 BSHC website.pdf

Sweden (*Mr. Magnus Wallhagen*) presented the Report (please see EN) by giving online overview of the website and noted that, when sending documents, MSs and WG Chairs are kindly invited to clearly indicate where and how they should be published and also invited to make sure that all information is updated and relevant. After the presentation Denmark (*Mr. Jens Peter Weiss Hartmann*) noted that probably it would be good to put a contact e-mail in the website above. Then IHO Secretary-General, *Dr. Mathias Jonas*, provided an idea whether Baltico may deserve a separate URL. And Sweden (*Mr. Magnus Wallhagen*) commented that it is dependant on fund resources and not available at the moment. Then Estonia (*Mr. Peeter Väling*) wondered what is the usage of BSHC website and Sweden (*Mr. Magnus Wallhagen*) informed that it is not monitored at the moment and suggested that this could be an action for the next Conference.

The Chair thanked Sweden for the presentation and stated that Commission took note of the Report and approves the following action:

**Action № 21:** Sweden to **investigate** the possibility to monitor BSHC website usage statistics and if possible to **include** in BSHC website Report.

#### E. Any other business

#### E1. COMNAVMETOCCOM's hydrographic survey capabilities

Docs: COMNAVMETOCCOM IHO capabilities.pptx; US\_NAV.ppt

USA (*NAVEUR/NAVAF/C6F Liaison Officer George Elenbaas*) presented the Report (please see EN) by providing information on structure, different tasks, survey vessels and equipment. It was noted that Naval Oceanographic Office (NAVOCEANO) carries out LIDAR surveys since 1996 in all parts of the world where the conditions allow and that it can detect 2 meters object in 40 meters of water depth. Also it was mentioned that NAVMETOCCOM provides training and that institution in Mississippi is associated with NAVY and in New Hampshire with NOAA. The Chair thanked USA for the presentation and stated that Commission noted the information.

## F. Election of new Chair and Vice-Chair

22<sup>nd</sup> BSHC Conference Chair, *Mr. Mindaugas Česnauskis* (Lithuania) informed that according to procedure current Vice-Chair becomes Chair of the next Conference and, with the consent of MSs and Vice-Chair, announced that Commission approves *Mr. Thomas Dehling* as Chair of the 23<sup>rd</sup> BSHC. Regarding election of Vice-Chair and place and date of the next Conference, BSHC22 Chair *Mr. Mindaugas Česnauskis*, informed that, according to the rotation principle and with the consent of Denmark, the next Conference is supposed to be in Denmark and passed the floor to Denmark.

#### G. Place and date of next Conference





The head of the Danish delegation *Mrs. Elizabeth Hagemann* informed that Vice-Chair of the 23<sup>rd</sup> BSHC will be the Director-General of DGA *Mrs. Pia Dahl Højgaard* and the date will be the last week of August, precisely 28-30 August 2018, because later time is busy and that the place will be Aalborg, Denmark. After the announcement, new Chair *Mr. Thomas Dehling* thanked everybody for trust as incoming Chair and supported the last week of August and invited to be strict according to the Statutes and provide documents early enough.

#### H. Review of BSHC22 List of Actions

The BSHC22 Chair reviewed the Draft List of Actions of the BSHC22 and with some discussion and amendments it was approved. It was agreed that the wording for the Action regarding chart datum issues will be provided in one week after the Conference by Finland and Sweden (resigning and incoming CDWG Chairs).

## I. Closing ceremony

The BSHC22 Chair expressed greatest thanks to all the participants for the input to the discussions and expressed special thanks to BSHC22 Vice-Chair *Mr. Thomas Dehling* for his support and help during the Conference and also to Germany as host for hospitality and excellent organization of the Conference. The IHO Secretary-General, *Dr. Mathias Jonas*, summarized that it is not a surprise that this is a well-working Commission with a good spirit of regional cooperation and noted that hydrographic data policies possibly changing in mid terms and this draws the lines for a future format of cooperation within RHCs in general. The BSHC22 Chair wished everybody safe trip home and declared the Conference closed at 12:30 on 21<sup>st</sup> September 2017.