



28 July 2014

Baltic Sea Hydrographic Commission – 19-th conference

Final minutes

10-12 June 2014 Riga, Latvia

A. Opening formalities

A1. Opening of Conference

Docs: [BSHC19 List of Participants](#)
[BSHC19 List of Documents](#)

The BSHC Chair Mr Taivo Kivimäe welcomed all participants, especially the Director of the IHB, Mr Mustafa Iptes, and the observer from UKHO, Ms Kerrie Howard. Chair also thanked the host on the guided tour in old town and the nice Icebreaking party in hotel.

There were some changes in list of participants : Mr Jarmo Mäkinen, Mr Morten Møller and Mr Oleg Ossipov were missing, Mr Armands Murans from Latvia added.

Mr Peeter Väling was approved as secretary of the Conference.

There were changes also to List of Documents due to some late additions.

A2. Welcome from the host country

Docs: [A2_BSHC19 Program](#)

The BSHC Vice-Chair, Mr Janis Krastins welcomed all delegates on behalf of the host, Latvian Maritime Administration.

He gave information about practical issues and about small changes in agenda.

All participants introduced themselves.

A3. Adoption of the Agenda

Docs: [A3_BSHC19 Draft Agenda](#)

There were some changes in Draft Agenda.

3 items were added: Report about LIDAR Bathymetry seminar by Germany, presentation about S-100 by Germany and report about status of articles to IHR by Finland.

Also technical tour time was changed.

Agenda was approved with amendments.

A4. Minutes and actions from the BSHC 18th Conference

Docs: [A4_BSHC18 Final Minutes](#)
[A5_Status of BSHC18 Actions](#)

There were no comments to the Minutes of BSHC19.

Actions from BSHC18 were considered done or ongoing.

B. IHO Work Program 1 – Corporate Affairs

[Estonian Maritime Administration](#)

Valge 4 str.
11413, Tallinn

Tel. +372 6 205 600
Fax +372 6 205 606

hnt@vta.ee
forename.surname@vta.ee

www.vta.ee



28 July 2014

B1. Information about activities of the IHB and forthcoming EIHC5

Docs: [B1_BSHC19 IHB report to BSHC19](#)

IHB Director, Mr Mustafa Iptes, gave the IHB Report. He passed greetings from other IHB

Directors and expressed as the IHB view that BSHC is an important Commission and an excellent example of regional co-operation. He also noted that the HSSC Chair and CBSC Chair are present. The topics about IHO membership, IHO GIS Database, Capacity Building Program, World Hydrographic Day celebrations were reported.

He noted that IHO has 82 members and the dream is 100.

(On 12.06 came the message about Malta to start IHO membership process).

He also noted that Russia (only one from BSHC) has not yet ratified the amended IHO convention.

Mr Leonid Shalnov noted that relevant documents have been sent to Russian Government and should be soon ratified and sent to Government of Monaco.

(On 12.06 came the message that the documents have been ratified by Russian Government and Government of Monaco has received them).

Mr Iptes also reported some highlights about forthcoming 5EIHC and presented Conference CL 10 with draft program and agenda. He expressed that deadline of registration of delegates is 30.06.2014.

He informed that *Dr. Mathias Jonas* has been appointed as the president of the 5EIHC.

In addition to the main program the Conference will have 4 special sessions :

Theme 1: The place of hydrographic data in a geospatial world

Theme 2: E-navigation - its impact on the IHO and Member States

Theme 3: New and emerging technologies (including crowd-sourced bathymetry)

Theme 4: Capacity Building

Special issue of IHR about the activities of BSHC will be published just before the Conference.

Decision :

Commission decided that *BSHC to prepare presentation to EIHC5 about BSBD and HELCOM resurvey site as examples of cooperation within the BSHC by End of Aug. 2014 (Action 1).*

Point of contact about that will be *IHB Director Gilles Bessero*

There was discussion about S-23 update status and it was noted that this is political and regional dispute and should be solved by the relevant states. No one else can do that.

B2. Outcome of IRCC6 meeting

Docs: [B2_BSHC19 IHB IRCC6 outcomes](#)

IHB Director, Mr Mustafa Iptes, gave the overview of the IRCC6 in Paris 19-21 May 2014.

Most important themes were revision of IRCC Terms of Reference (TOR) and Rules of Procedure (RoP), Capacity Building activities and new CB strategy, WENDWG activities and WENC/RENC issues, new S-5 and S-8 standards, new ToR and RoP of the GEBCO Guiding Committee and IHO Performance Monitoring System.



28 July 2014

He noted also New Zealand Risk Assessment Methodology and MACHC proposed best practices and benefits of using hydrographic data collected by private companies for navigation purposes.

Mr Iptes said that *Dr Parry S. L. Oei* Hydrographer of Singapore has been elected as IRCC Vice-chair, also IRCC7 will take place in Mexico 1-3 of June 2015.

Estonia raised the question of the IHO CL about distributing ENC-s via RENC-s which was adopted as an Action in IRCC6 but was not mentioned in IHB report.

Mr Iptes noted that the CL will be circulated soon and will discuss this later under WEND issues.

Estonia also announced that chair of the IRCC Mr Tom Karsten is going to visit Estonia.

B3. National report of Denmark

Docs: [B3_BSHC19.National Report Denmark](#)

[B3_BSHC19.National Report Denmark \(presentation\)](#)

Cdr Lars Hansen explained the organization of Danish Geodata Agency. There is no Hydrographic Office (HO) as such in Denmark any more – the Agency has taken over its role. Some changes in organization could be expected from August 2014 again.

Denmark has started to use new survey ship in Greenland area for Multibeam Survey – this is actually a coast guard ship. Denmark will give more focus to arctic region.

Mr. Jens Peter Hartmann raised the question about usage of paper charts as there is significant drop in sales of the paper charts.

BSHC forwarded this question as action to BSICCWG.

Decision:

Commission decided that *BSICCWG should study about future production and dissemination of paper charts* by BSHC20 (Action 2).

Denmark has not yet implemented the use of 15 m contour on charts and will not celebrate the WHD.

B4. National report of Estonia

Docs: [B4_BSHC19.National Report of Estonia](#)

Mr Taivo Kivimäe informed about the negotiations with Estonian Ministry of Defense about freeing all hydrographic data to the public using HIS.

This is ongoing issue.

He also admitted that new survey ships Jakob Prei one gearbox made by Servogear Norway was broken in sept 2013 after only 2000 work hours. Repairing costs were around 100 000 EUR.

Estonia has not yet decided the use of 15 m contour.

WHD is celebrated each year – this year in Tartu on board of survey ship EVA-301.

Mr Iptes called all MS to provide materials about celebrating WHD to IHB website.



28 July 2014

B5. National report of Finland

Docs: [B5_BSHC19.National Report of Finland \(pdf and presentation\)](#)

Mr Rainer Mustaniemi clarified their organization. There are 2 departments under Traffic and Information division of FTA - Information and Traffic Services. These together can be dealt as Hydrographic Office.

Finland has decided to include 15 m contour and depth areas 0-3,3-6,6-10,10-15,15-20 to large scale chart products.

There is in development stage new digital chart service for government NonECDIS users. More about that will be reported on BSHC20.

WHD will be celebrated as some activities in this week - no actions on the same day.

B6. National report of Germany

Docs: [B6_BSHC19. National Report of Germany](#)

Dr. Mathias Jonas mentioned about the plan to build new survey ship powered by LNG.

The project should be ready by autumn 2014 and ship itself by 2018. From 2015 on Germany covers only domestic waters with paper charts with the exception of INT Chart 98.

Special efforts are given in development Ping to Chart work-flow, which consists despite of bathymetry database and terrain model also possibilities to produce parts of NtM and List of Lights from Hydrographic Production Database and Print on Demand possibilities.

WHD has been celebrated as a public event in May executed by four marine related institutes.

B7. National report of Latvia

Docs: [B7_BSHC19. National Report of Latvia](#)

Mr Janis Krastins informed about purchase of new survey boat.

Reorganization of Hydrographic DB is ongoing, using CARIS BathyDB.

Mr Mikus Ranka added that Print on Demand is fully operational.

Latvia does not print paper charts in old way any more.

Developments are ongoing for Ping to Chart work-flow.

All nautical publications are available only in digital form (since 10.06.2014)

Latvia has implemented use of 15m contour on charts.

WHD is celebrated every year but not in 21-st of June. There are public events planned including visits of survey ships.

B8. National report of Lithuania – Lithuania

Docs: [B8_BSHC19. National Report of Lithuania](#)

No representative of Lithuania was present, the document was however reviewed.

There was discussion about Lithuanian IHO membership.

Estonian Maritime Administration

Valge 4 str.
11413, Tallinn

Tel. +372 6 205 600
Fax +372 6 205 606

hnt@vta.ee
forename.surname@vta.ee

www.vta.ee



28 July 2014

Mr Iptes mentioned that he visited Lithuanian Ministry of Transportation last year and discussed this issue but IHO membership is not yet Lithuanian priority.

B9. National report of Poland

Docs: [B9_BSHC19.National Report of Poland](#)
[B9_BSHC19 National Report of Poland -SUPPLEMENT \(presentation\)](#)

Mr Dariusz Grabiec introduced their new catamaran survey boats which could be used up to sea-state 3.

WHD will be celebrated on 28.06 with conference and visits to survey ships.

B10. National report of Russian Federation

Docs: [B10_BSHC19. National Report of Russia](#)

Mr Leonid Shalnov admitted that Russia has new Hydrographer – Captain Sergei Travin.

Russia uses only Print on Demand system for paper chart production.

WHD will be celebrated as conference.

B11. National report of Sweden

Docs: [B11_BSHC19. National Report of Sweden](#)

Mr Patrik Wiberg informed that 45% of Swedish waters have been covered with new surveys. Ntm are issued only in digital format, updated weekly.

Some new projects have been started: identification of environmentally hazardous wrecks and study of surveying shallow waters.

In cooperation with Norrköping Visualization Center a film "Under Ytan" has been made.

Estonia raised a question about the service to provide chart images to mobile phones and PDA-s.

It was clarified that they are just raster images.

B12. IHO-EU Network – Sweden

Sweden provided an overview about IHO-EU Network.

Mr Magnus Wallhagen represents BSHC in this group.

Main activities of IHO-EU Network are currently Joint European Coastal Mapping Program (JECMaP) and EMODNET phase 3.

Conference endorsed France as chair of the IHO-EU Network

Decision:

Commission decided that Sweden will lead and prepare a coordinated BSHC effort for possible participation in the upcoming EMODNET phase 3 call for proposal. The formation of a consortium will be examined with other possible partners by Nov. 2014 (Action 3).



28 July 2014

C. IHO Work Program 2 – Hydrographic Services and Standards

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

Docs: [C1_BSHC19.MWG Report.FIN](#)
[C1_BSHC19.MWG Report FIN \(presentation\)](#)

Mr Juha Korhonen gave the overview of MWG work and HELCOM Ministerial meeting in Oct. 2013. There will be renewing of the HELCOM resurvey site. The work will be lead by Sweden. Pilot version should be ready by the end of February 2015.

Next MWG meeting will occur after that.

Mr Juha Korhonen thanked SMA for the HELCOM resurvey site maintenance.

Decision:

Commission approved MWG work program for 2014-2016 and endorsed new chairman Seppo Mäkinen.

Commission also thanked *Mr Juha Korhonen* for his long and fruitful work for leading the group.

C2. Report of Chart Datum Working Group (CDWG)

Docs: [C2_BSHC19_CDWG Report.FIN](#)
[C2_BSHC19.CDWG_Report.FI \(presentation\)](#)

Mr Seppo Mäkinen gave overview of the CDWG activities.

CDWG have updated TOR, WP, Road-map and Time-line to transition to common chart datum.

Decision:

Commission approved TOR, WP 2014-2016 V6, Road-map and Time-line with some changes in wording of TOR.

Commission approved name "Baltic Sea Chart Datum 2000" for the common vertical reference as proposal.

Commission noted that the name should be changed as "proposed" in TOR and Road-map.

Commission set up to CDWG the task to clarify the use of the common name of Baltic harmonized Chart Datum by BSHC20 (Action 4).

Decision:

Commission decided to sign MoU between BOOS and BSHC as a letter.



28 July 2014

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

Docs: [C3_BSHC19_BSBDWG Report_SE](#)

[C3_BSHC19.BSBD presentation 2014 SE \(presentation\)](#)

Mr Hans Öiås presented the status and future plans of BSBD.

There has been 3650 downloads by May. 2014, users have given strong positive feedback of the database but many would like to get higher resolution data.

Downloads are not only from Baltic region (85% are).

The road ahead : BSBD hopes to get data from Russia (at least from S-57 cells) and Lithuania, data from Norway will be included in next model, better data are needed from Poland (unmodelled data), Sweden and Finland (territorial waters). Also 3D view will be applied to portal.

Overview of the cooperation with GEBCO and EMODNET was also given.

Russia noted that they will discuss at home about the data delivery issue.

Decision:

Commission consented the work of the portal using WG members as reference group.

Commission endorsed the cooperation with GEBCO and EMODNET

Commission invited MS to distribute high resolution (large scale – 1:50000) coastline to Sweden in order to enhance presentation in the BSBD portal by Dec. 2014 (Action 5).

C4. Report of Baltic Sea Marine Spatial Data Infrastructure Working Group (BSMSDIWG)

Docs: [C4a_BSHC19.BSMSDI WG Status Report.DK](#)

[C4b_BSHC19.BSMSDI WG Status Report.Annex1.DK](#)

[C4c_BSHC19.BSMSDI WG Status Report.Annex2.DK](#)

[C4_BSHC19.BSMSDI WG report DK \(presentation\)](#)

Mr Jens Peter Hartman gave a presentation about the MSDI activities in Baltic region.

The new draft WP of the WG was presented.

He noted that the main role of MSDI is to assist HO's of the region to interface to European initiatives as INSPIRE, Galileo, Copernicus, EMODNET, SeaDataNet.

The role of MSDI in Marine Spatial Planning (MSP) was also emphasized.

In Denmark around 70 different datasets are needed for MSP, most covered by INSPIRE annexes. MSDI establishment should greatly help in MSP.

Mr Hartman presented Basic MSDI model, examples of catalog/metadata services in Danish Geodata Agency (DGA) and the works/plans about MSDI in Denmark..

Decision:

Commission approved the new draft WP of BSMSDIWG.

C5. Status report Harmonization of Depth Information in ENC's

Docs: [C5_BSHC19. Depth Harmonization Report.SE](#)



28 July 2014

Mr Ralf Lindgren gave an report about Swedish-Finnish project of improving the harmonization of depth information in ENC-s and paper charts.

They have defined 9 mismatch categories.

This lead to 3 groups of actions : chart data update, already planned actions which do not need any more activity and new guidelines regarding sounding density and contour generalization.

Work is ongoing, more detailed report will be provided on BSHC20.

The guidelines will be published by the end of year 2014 and will be publicly available.

C6. e-Navigation – BSHC harmonization needed?

Docs: C6_BSHC19.e-Navigation.FIN

C6_BSHC19.e-Navigation.FIN (presentation)

Mr Rainer Mustaniemi started with introduction to IMO Maritime Services (MSP).

There are 16 services defined – typically HO's are responsible of 3 of them: Maritime Safety Information Services (MSP5), Nautical Chart Service (MSP11) and Nautical Publications Service (MSP12). Finland has planned a time-line for development of their chart production system accordingly and also to move on to S-101 based ENC-s.

Also S-102 usage scenario was presented – however this is hard to achieve if security issues persist.

Finland also stressed in need of harmonization of actions in order to develop S-100 based hydrographic products.

C6.1 S-100 concept and relation to e-navigation

Docs: C6.1_BSHC19.S-100 status report.GER (presentation)

Dr. Mathias Jonas noted that there are still a lot of problems with full understanding of S-100 implementation consequences.

S-100 is successor of S-57 but its goal is much wider: to broaden hydrographic data use – like a mainstream GIS.

The main benefits of S-100 are usage of ISO standards, it does not depend on proprietary software, file formats are well-known xml/gml and it supports very various types of geodata.

There are many data product specifications defined under S-100, only some of them are in stage of being tested soon (S-101 (ENC), S-102 (Bathymetric surface), S-121 (Maritime limits and boundaries)).

Good S-100 concept example is already running JCOMM S-411 Sea Ice Portal (<http://www.bsis-ice.de/IcePortal/>).

S-101 product specification will be finished by the end of year 2014 and testing phase starts at 2015 – first by creating data converters from S-57 to S-101.

Then S-101 compatible data viewers, production software and ECDIS devices should follow.

Hopefully S-101 will be released for regular data production and use in ECDIS by the end of year 2018. Numerous new S-101 features are not backwards compatible with S-57 which means that in case of use of these features (e.g. geometry: curves and complex attributes) at least some time HO's should have to do parallel work to issue S-57 and S-101 compliant ENCs for the same area.

S-100 should be used in future as common maritime data structure on which the e-navigation will be based. However the implementation of e-navigation strategy is somewhat unclear.



28 July 2014

The status of e-navigation will be discussed in 5EIHC.

C7. The FAMOS project

Docs: [C7a_BSHC19.Project FAMOS.1.SE](#)
[C7b_BSHC19.FAMOS base information. Appendix_SE](#)
[C7_BSHC19.FAMOS_presentation](#)

Mr Ralf Lindgren introduced project FAMOS (Finalizing the Baltic Motorways of the Sea). The aim of the project is to speed up surveys and chart production for HELCOM Cat I and CAT II areas and applies to get co-financed by EU Connecting Europe Facility (CEF) program. FAMOS comprises of 4 activities : Hydrographic survey, Harmonizing vertical datum , Equipment purchase to increase survey efficiency and Increasing data work-flow efficiency (Ping to Chart). Estimated co-financing is 30% for activities like surveying and 50% for studies (possibly activity 2-4). The project is under preparation, CEF calls should be opened in Sept. 2014, final project proposal should be ready in Jan. 2015 and hopefully project will be approved by EU in Oct. 2015. The first regular payment can be expected in 2017.

C8. National study of cost efficient surveying technics in coastal/shallow waters

Docs: [C8_BSHC19.Study Shallow Waters.SE](#)
[C8_BSHC19.Surveying Technics in shallow waters.SE \(presentation\)](#)

Mr Hans Öiås informed about the SMA project to find cost-effective tools and methods for surveying shallow waters (0 – 10m). Project should last 2 years, there are 4 different shallow areas defined for study. Different interferometric sonars mounted on small boats will be used. Also the LIDAR usage will be evaluated but with already existing data both from Sweden and internationally.

C9. LIDAR Bathymetry seminar

Docs: [C9_BSHC19.Bathymetry LIDAR Seminar DE](#)

Mr Thomas Dehling gave an overview of the seminar which took place in 27.-28. May, Hannover. The seminar was successful, the latest LIDAR technology was presented and experiences with them discussed. LIDAR technology is very promising in surveying shallow waters, but there are still many problems with it. Most important of them are lack of experience and inefficiency of data processing, lack of common data formats, problems with object detection, performance issues under bad water clarity or with too smooth water surface etc. As Germany is continuing the LIDAR tests some more information will be available on BSHC20.



28 July 2014

D. IHO Work Program 3 – Inter Regional Coordination and Support

D1. Report of BSHC WEND-WG representative

Docs: [D1_BSHC19.WENDWG Report.FIN](#)
[D1_BSHC19.WENDWG Issues.FI \(presentation\)](#)

Mr Juha Korhonen as the BSHC WEND-WG representative reported on WEND-WG issues. He admitted that minutes from WENDWG meetings delay a lot which creates problems for fruitful work later on.

The usage of RENC-s and WENC and ENC overlapping issues were discussed.

Commission noted that mostly the overlapping issues are not real issues, but mostly just statistics – they are not significant for navigation.

Decision:

Commission nominated Mr Jarmo Mäkinen as new BSHC representative to WEND-WG.

D2. Report of Baltic Sea INT Chart Coordinating Working Group (BSICCWG)

Docs: [D2_BSHC19.BSICCWG Report.FIN](#)
[D2_BSHC19.BSICCWG Report.FI \(presentation\)](#)

Mr Juha Korhonen presented the BSICCWG report

All actions from BSHC18 are done.

BSICCWG has unanimously approved the Baltic sea sub-area boundaries and names.

Mr Korhonen noted that recently came request from BALTICO sub-area coordinator to postpone the final approval of the names.

However as the names are to be used only on charts he suggested to consider this still as completed issue.

Decision:

Commission fully agreed with the proposed sub-area names.

BSICCWG has also prepared draft guidelines of using sub-area names on charts, chart catalogs and S-11, also in IHO GIS DB.

It was noted that development of IHO S-11 Database is urgently needed.

There was also discussion about using 5-digits INT numbers and it was noted that this decision has been done by CSPCWG as the footnote to S-4.

Decision:

Commission agreed with recommendation to use of 15m contour on charts.

Miscellaneous:

Mr Mustafa Iptes announced that Malta has started IHO membership process and Russia has approved amendments to IHO convention.



28 July 2014

D3. D3.BSHC19 Status of C 55

Mr Mustafa Iptes gave an overview of the status of C-55.

He noted that C-55 has new web page in IHO site and encouraged all to continue updating this information.

Also he announced about plans to make updating possible to MS themselves – this should be available in 2 years.

D4. BSHC Internet Domain

Docs: [D4_BSHC19.BSHC Web Site.SE](#)

Mr Ralf Lindgren introduced the developments of the BSHC web site.

There were some discussions about the information in the web site.

Decision: Commission decided to task the BSHC WG chairs to forward information about WG for inclusion in the BSHC web site to Sweden on a regular base (Action 6).

D5. Status of IHR articles.

Docs: [D5_Status of articles to IHR.FI](#)

Mr Juha Korhonen reported the status of proposed articles and notes to the forthcoming IHR issue.

There are 4 articles and 10 notes proposed, draft versions of most of them have been received.

He reminded that the deadline for articles is mid June 2014 and for notes end of June 2014.

Mr Mustafa Iptes noted that IHR editorial expects to receive all material by august and that this release of IHR will be first regional publication ever

The publication will be ready just before 5EIHC.

E. Any other business

MoU between BOOS and BSHC was signed by the chair.

F. Election of new Chair and Vice-Chair

The BSHC19 appointed Mr Janis Krastins, Latvia, as Chair and Captain Sergei Travin, Russia, as Vice-Chair of BSHC for the next period.

G. Place and date of next Conference

Decision:

It was decided that the BSHC20 will be held in Russia in St. Petersburg, on Sept. 2015.

Exact dates will be confirmed later.



28 July 2014

H. Review of BSHC19 List of actions

The secretary reviewed the actions from BSHC19, they were discussed and approved. There were 2 actions added to the list:

All MS should forward their possible proposals to next IRCC meeting to the BSHC Chair by Dec. 2014 (Action 7).

All to consider providing input to CBSC or to inform CBSC about on-going or planned capacity building initiatives permanently (Action 8).

The Secretary promised to forward Draft Minutes and Draft List of Actions to all participants at the beginning of week 25.

All should forward their comments and corrections to the Draft Minutes and List of Actions to Mr Peeter Väling (peeter.valing@vta.ee) by 1 July 2014 (Action 9).

The Chair of the BSHC19 Conference should distribute Final Minutes and List of Actions by 1 July 2014 (Action 10).