

**9<sup>th</sup> MEETING OF THE IHO INTER-REGIONAL COORDINATING COMMITTEE  
IHO-IRCC9  
Paramaribo, Suriname, 12-14 June 2017**

**BALTIC SEA HYDROGRAPHIC COMMISSION**

**BSHC report to IRCC9**

**1. Chair:**

Patrik Wiberg (Sweden): until Sept 20, 2012  
Jukka Varonen (Finland): Sept 20, 2012 until Sept 18, 2013  
Taivo Kivimäe (Estonia): Sept 18, 2013 until June 12, 2014  
Janis Krastins (Latvia): June 12, 2014 until Sept 18, 2015  
Sergei Travin (Russia): Sept 18, 2015 until Sept 29, 2016  
Mindaugas Cesnauskis (Lithuania): Sept 29, 2016 until present.

**Vice-chair:**

Jukka Varonen (Finland): until Sept 20, 2012  
Taivo Kivimäe (Estonia): Sept 20, 2012 until Sept 18, 2013  
Janis Krastins (Latvia): Sept 18, 2013 until June 12, 2014  
Sergei Travin (Russia): June 12, 2014 until Sept 18, 2015  
Mindaugas Cesnauskis (Lithuania): Sept 18, 2015 until Sept 29, 2016  
Mathias Jonas: Sept 29, 2016 until present.

**2. Membership:**

Members: Denmark, Estonia, Finland, Germany, Latvia, Poland, Russian Federation, Sweden.  
Associate Member: Lithuania.

**3. Meetings:**

17<sup>th</sup> meeting: Helsinki (Finland), 18-20 Sept 2012  
18<sup>th</sup> meeting: Tallinn (Estonia), 16-18 Sept 2013  
19<sup>th</sup> meeting: Riga (Latvia), 10-12 June 2014  
20<sup>th</sup> meeting: Saint Petersburg (Russian Federation), 16-18 Sept 2015  
21<sup>th</sup> meeting: Klaipeda (Lithuania), 27-29 Sept 2016

#### 4. Current BSHC Working Groups:

##### **Re-survey Monitoring and coordination**

BSHC developed and operates a standing scheme of re-surveys for the region. Schedule and execution of surveys are provided in an updated web based interface maintained and operated by Sweden. Surveys are being regularly coordinated between neighbouring countries. The BSHC re-survey monitoring working group liaises with the respective NSHC working group. Further developments of the common re-survey database as metadata repository are ongoing. Member States update the information for their waters of jurisdiction independently. Intention is to form a BSHC task-group to look at updating of S-44, Edition 5.

Link to BSHC RE-Survey Database: <https://helcomresurvey.sjofartsverket.se/>

##### **Harmonized Chart Datum in the Baltic**

BSHC developed the Baltic Sea Chart Datum 2000 as a joint height reference. It is based on the European Vertical Reference Frame (EVRF). A first specification of such a harmonized chart datum was completed in 2016. The specification reflects the specific needs of surface navigation and hydrography in addition to EVRF conventions. The Chart Datum working group is monitoring and gives guidance for the implementation of the harmonized chart datum. BSHC members have widely committed to implement it. In some countries implementation has already started.

##### **Baltic Sea INT-Chart coordination**

The working group processes ENC and paper chart issues fully in parallel and to the same extent. The facilitation of the INT Chart Web Catalogue and continuous updating of S-11 Part B, have become inherent part of the chart publishing process in all member states. Monitoring of Baltic Sea ENC scheme and the identification of potential gaps and overlaps has been added to the standing agenda items of the Baltic Sea INT-Chart coordination working group. BSHC member states agreed about the unlimited internal use of the small scale ENC covering the whole Baltic as provided by Germany as the responsible producer.

##### **Marine Spatial Data Infrastructure (MSDI)**

MSDI delivers the instruments for the enhanced scope of hydrographic information users. MSDI can create the framework for future provision of this information beyond the classic field of surface navigation. BSHC and NSHC see the importance to deal with these opportunities from a regional approach. The respective WGs in both RHCs have been merged in 2016 to the NSHC and BSHC Baltic Sea North Sea Marine Spatial Data Infrastructure Working Group (BSNSMSDIWG). It will report to both commissions and cooperate with the respective IHO MSDI working groups.

##### **IHO-EU Network WG (IENWG)**

Magnus Wallhagen (Sweden) acted as representative from BSHC. BSHC member states have been active in participating in the IHO-EU network working group since its inception in 2012 with substantial cooperation and progress on one of the European Commission's flagship maritime projects European Marine Observation and Data Network (EMODNET) and its coastal mapping project. Latvia, Sweden and Germany contribute as consortium members to EMODNET derivations, namely the EU projects Coastal Mapping and High Resolution Seabed Mapping.

## **5. Status of IRCC actions (relevant for the BSHC):**

All relevant IRCC8 action items devoted to the BSHC chair have been processed accordingly by means of the established BSHC working groups or written communication in order to contribute to the allocation process of the BSHC council seat.

## **6. Agenda Items:**

### **Baltic Sea Bathymetric Database**

Sweden operates a cross border bathymetry database and a geo portal ([data.bshc.pro](http://data.bshc.pro)) on behalf of the Commission. BSHC Member States are providing gridded mesoresolution depth information. Data density differs between the Member States and has a minimum resolution of 500 m. The website is fairly widely used. It is possible to either download data or to use the WMS service provision. The options for the re-use of the data are not fully harmonised and depend from the specific national legal regulations. Sweden plans to release a new version of the grid as far as newer and better data is available from numerous countries.

The BSHC bathymetry database is recognized by GEBCO as a Regional Mapping Project. At the same time BSBD uses the GEBCO dataset for areas where no data has been provided by national HO of the region. BSBD is used in the EMODnet phase 2 model and it is planned to assist in deliveries to EMODnet “High Resolution Seabed Mapping” (phase III).

### **WENDWG**

BSHC is regularly represented in the WEND Working Group by Finland. The representative shall report to the Commission, including; review of the progress on the work items of WEND, resolving overlaps, ENC distribution and harmonisation, ENC coverage status. BSHC receives the annual report and gives further guidance to the BSHC WENDWG representative.

### **BSHC Internet Domain**

BSHC developed an internet domain ([www.bshc.pro](http://www.bshc.pro)). It is operated by Sweden. The content is under ongoing development. Major facts about the members and activities of the Commission are already presented. URL links provided for GIS applications matching with the scope of the Commission and to IHO web pages.

### **Capacity Building**

Activities in CB are mainly dealt internally within BSHC. CBSC is chaired by Germany and Germany provides the CB Coordinator for the BSHC.

## **7. BSHC cooperation with stakeholders (organizations, industry, etc.):**

### **FAMOS**

Several BSHC Member States (DE, DK, EE, FI, LV, LT, SE) and Working Groups are involved in the project FAMOS coordinated by Sweden. The project focuses on surveying areas relevant for commercial shipping in the Baltic Sea according to the BSHC-HELCOM re-survey scheme.

Furthermore, it serves as a platform for implementing the common Baltic Sea chart datum as proposed by the BSHC Chart Datum Working Group and agreed upon within BSHC.

The project receives EU co-financing from the CEF Transport programme.

The first phase of the project, FAMOS Freja, was successfully executed from 2014 to 2016. The second phase of the project, FAMOS Odin, is ongoing for the time 2016-2018.

#### **8. Difficulties encountered and challenges yet to be addressed :**

Lithuania as BSHC member state is not a member of IHO. Since Lithuania is currently holding BSHC chair, IHO related activities are therefore effectively processed by the vice chair (Germany).

#### **9. Achievements and lessons learned Conclusions:**

The cooperation within the BSHC is very productive. Several projects have led to joint databases and results provided in the web. The outreach of the hydrographic work in the region and beyond has improved even further.

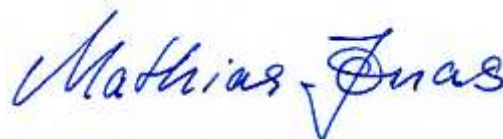
Member states have continued to contribute extensively to the work of the IHO and have been active participants of working groups.

There has been substantial cooperation between commission member states and other European States and the EU on information sharing and shared projects.

#### **10. Actions required of IRCC:**

The IRCC is invited to:

Take note of the report of the Baltic Sea Hydrographic Commission.



Dr Mathias Jonas

BSHC Vice Chair