

## 21<sup>ST</sup> CONFERENCE OF THE BALTIC SEA HYDROGRAPHIC COMMISSION

**Klaipeda, Lithuania, 27-29 September 2016**

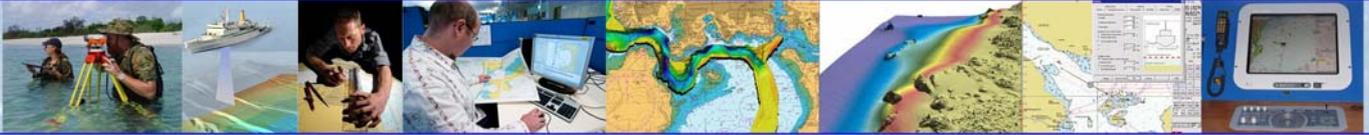
The 21<sup>st</sup> Conference of the Baltic Sea Hydrographic Commission (BSHC21) was held in Klaipeda, Lithuania, from 27 to 29 September, under the Chairmanship of Mr. Leonid Shalnov (Russian Federation). All full members of the Commission (Denmark, Estonia, Finland, Germany, Latvia, Poland, Sweden and the Russian Federation) and associate member Lithuania were represented at the Conference. The United Kingdom and the United States of America were also represented at the Conference as Observers. The IHO Secretariat was represented by Director Mustafa IPTES.

BSHC21 covered a wide range of regional topics including developments in each of the Member States, the latest status of hydrographic surveying and nautical charting including INT Charts, ENC production and BSHC cooperative projects. The members of the BSHC reported on their national hydrographic, cartographic and Maritime Safety Information activities since the 20<sup>th</sup> meeting. They also presented new developments with regard to surveying, chart production and maritime traffic management. Director Iptes reported on the IHO Work Programme and the Organization's activities during the previous year. He also provided the Commission with general information on the next IHO Assembly and the revised structure of the IHO.

The Commission reviewed on-going regional initiatives in particular the activities of the Monitoring Re-survey Working Group (MWG), Baltic Sea Bathymetric Database Working Group (BSBDWG), Baltic Sea Marine Spatial Data Information Working Group (BSMSDIWG) and the Chart Datum Working Group (CDWG). The Commission considered the outcome of the 8<sup>th</sup> meeting of the Inter-Regional Coordination Committee (IRCC) and the 6<sup>th</sup> meeting of World Wide ENC Database Working Group (WEND-WG).

The Member States reviewed the Statutes of the BSHC and agreed on amendments proposed by Sweden related to the preparation of BSHC conferences. Considering that the IHO Council will be established at the 1<sup>st</sup> Assembly of the IHO in 2017, the members of the BSHC discussed the possible options for designating the Member(s) that will occupy the seat(s) on the IHO Council allocated to the Commission and agreed on the relevant procedures.

At the end of the meeting, Mr Mindaugas Cesnauskis, (Lithuania) was elected as the new Chair of the BSHC. Considering that Lithuania is not a member of the IHO, it was agreed by the Commission that Mathias Jones (Germany), as Vice Chair, will deal with IHO related issues on behalf of the Chair. It was also agreed that the next meeting of the BSHC will be hosted in Rostock by Germany in September 2017. All available documents of the meeting are posted on the BSHC page of the IHO website.



*The Participants of the 21<sup>st</sup> Conference of the Baltic Sea Hydrographic Commission.*



## 29<sup>TH</sup> MEETING OF THE IHO-IOC GEBCO SUB-COMMITTEE ON UNDERSEA FEATURE NAMES Boulder, Colorado, USA, 19-23 September

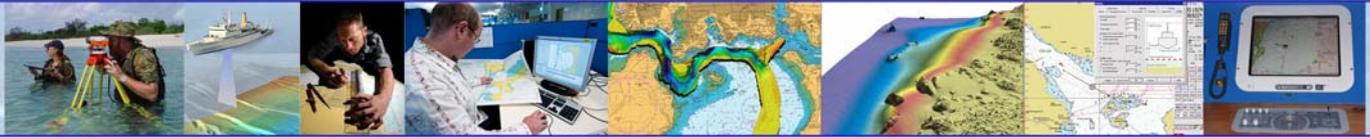
The 29<sup>th</sup> meeting of the IHO-IOC GEBCO Sub-Committee on Undersea Feature Names (SCUFN) was hosted at the National Center for Environmental Information (NCEI) of the National Oceanic and Atmospheric Administration (NOAA), in Boulder, Colorado, USA, from 19 to 23 September. SCUFN is tasked with selecting the names of undersea features to appear in the products of the IHO-IOC General Bathymetric Chart of the Oceans (GEBCO) project and on international nautical charts. These names, widely used in scientific publications also, are made available in the GEBCO Gazetteer of Undersea Features Names ([www.gebco.net](http://www.gebco.net) → Data and products → Undersea feature names → view and download). The meeting, chaired by Dr Hans Werner Schenke (IOC representative) from the Alfred Wegener Institute for Polar and Marine Research (AWI – Germany), was attended by 25 participants, including 10 of the 12 SCUFN members (five IOC and five IHO representatives), together with 14 observers including Mr Shin Tani (Chair of the GEBCO Guiding Committee) and Mr Osamu Miyaki (IOC Secretariat). Assistant Director Yves Guillam (SCUFN Secretary) represented the IHO Secretariat.

The meeting was opened by the Chair of SCUFN who welcomed all the participants and introduced the two new SCUFN Members: Ms Roberta Ivaldi (Italy, IHO representative) and Ms Ksenia Dobrolyubova (Russian Federation, IOC representative). He also paid tribute to Mr Norman Cherkis who informed the members in August that he wished to step down from his position in SCUFN. In accordance with the SCUFN Terms of Reference, the Secretary informed the meeting of several further anticipated changes to the membership due to occur in 2018 and presented the timeline for the IHO and IOC Secretariats to prepare calls for nominations to fill vacancies.



*Participants of the SCUFN-29 meeting*

The Sub Committee considered proposals for 133 undersea feature names, submitted by various bodies and supporting organizations from the following countries: Brazil (7), China (50), Denmark (1), Dominican Republic (2), France (1), Japan (23), Republic of Korea (2), Malaysia



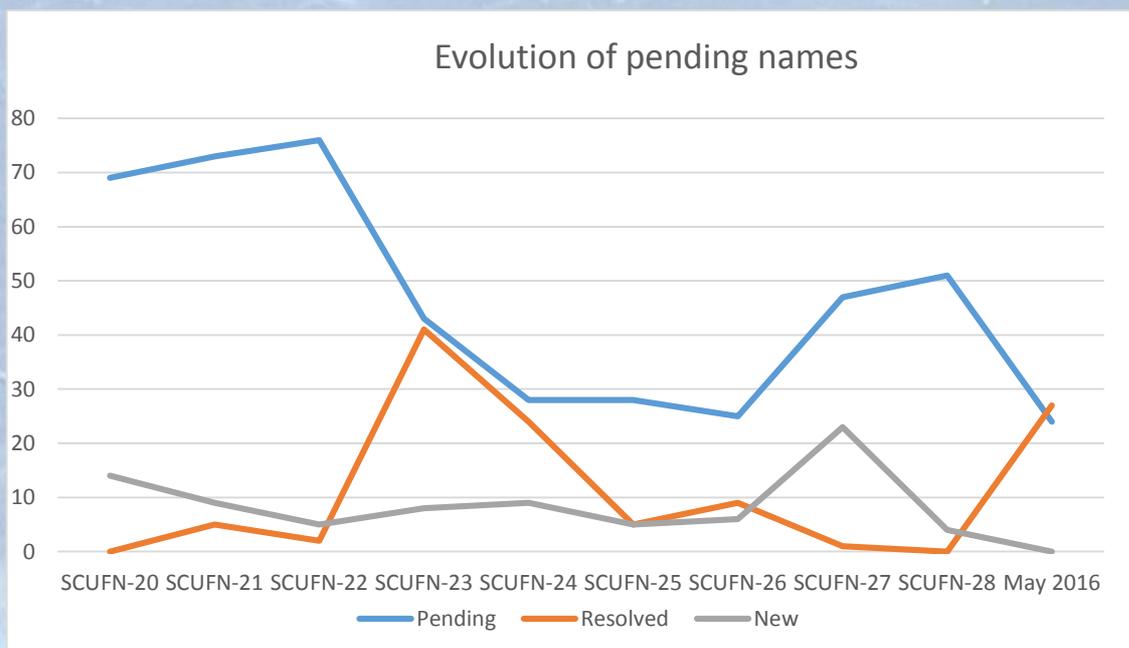
(4), New Zealand (31), Russian Federation (1), UK (3) and USA (8). The Sub Committee decided to follow the experimental fast-track procedure in its review of the proposals made by Canada (12) and New Zealand (84) related to names that already appear on nautical charts. It was agreed that for the time being SCUFN could not consider in a systematic manner the other 139 names that had been proposed by Canada for international recognition by SCUFN because they relate to features located in its territorial sea. This outstanding task will be addressed later, subject to the establishment by the IHO Hydrographic Services and Standards Committee (HSSC) of an S-100 Undersea Feature Names Project Team for which draft Terms of Reference were endorsed at the meeting, thanks to input provided by Canada.

While a large number of the names proposed to the Sub Committee were accepted, decisions on some others were postponed for further consideration for various reasons, including the increasing number of submissions now being received and the lack of time available during the meeting.

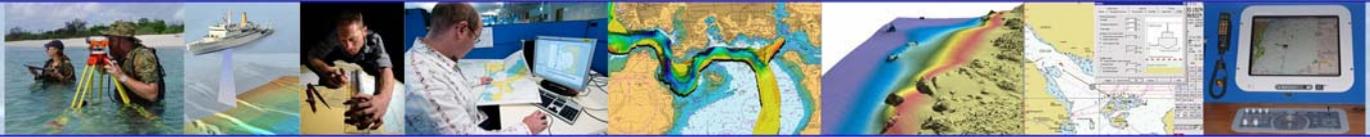
In addition to consideration of the naming proposals, the Sub Committee considered several “corporate” issues, including:

- The maintenance and improvement of the GEBCO Gazetteer interface,
- The ways and means to improve the efficiency and quality of SCUFN activities (inter connexion of the web services that already exist: the IHO SCUFN webpage, the internal SCUFN submission and review web services developed by the Republic of Korea, and the GEBCO Gazetteer itself maintained by NOAA),
- The future of SCUFN (membership, scope, new Edition of B-6 – *Standardization of Undersea Feature Names (Guidelines, Proposal Form Terminology)* – including the integration of a fast-track procedure for existing names which are already charted, the capitalization of best practices, the relations between naming authorities in common areas of interest, etc.),
- The increasing resources needed to incorporate SCUFN naming decisions into the GEBCO Gazetteer and the fact that this can only be achieved by contracting out some work during the inter-sessional period.

As a consequence of a contract awarded in 2015, the SCUFN Members were pleased to note a decrease in the total number of *pending* names (proposals and related actions) between 2015 and 2016.



The next meeting of the Sub Committee (SCUFN-30) is scheduled to take place in Genoa, Italy from 2 to 6 October 2017.



## 4<sup>TH</sup> S-100 TEST STRATEGY MEETING

Rostock, Germany, 13 – 16 September

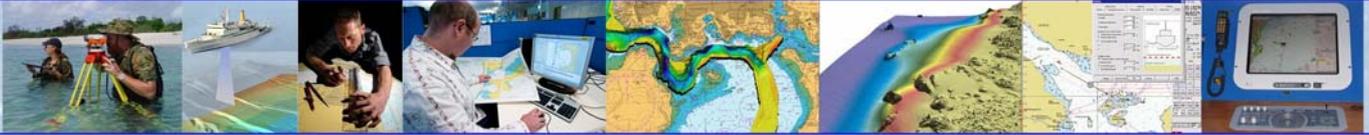
The 4<sup>th</sup> S-100 Test Strategy Meeting took place at the offices of the Federal Maritime and Hydrographic Agency of Germany (Bundeamt für Seeschifffahrt und Hydrographie) from 13 to 16 September. The meeting was attended by representatives from IHO Member States (Germany, Republic of Korea United Kingdom, USA - National Oceanic and Atmospheric Administration (NOAA), Naval Oceanographic Office (NAVO) and Space and Naval Warfare Systems Command (SPAWAR)), and expert contributors from Furuno, ESRI, the Korea Research Institute of Ships and Ocean Engineering (KRISO), IIC Technologies, SevenCs, Teledyne Caris and Transas. The meeting was chaired by Ms Julia Powell (USA – Chair of the S-100 Working Group) and the IHB was represented by Assistant Director Anthony Pharaoh and Mr Yong Baek (seconded officer from the Republic of Korea and S-100WG Vice Chair).



*Participants to the 4<sup>th</sup> Test Strategy Meeting*

The main item of discussion focused on the draft version of the S-100 Interoperability Catalogue, which has been jointly developed by IIC Technologies and C-Map, under contract to the US-NOAA. The catalogue is the main component of an S-100 Interoperability Specification which will describe how different S-100 based products interoperate within a single system such as an ECDIS.

The Chair of the Nautical Information Provision Working Group (NIPWG), Mr Jens SCHRÖDER-FÜRSTENBERG provided a report on the product specifications being developed by the NIPWG and highlighted some potential interoperability issues.



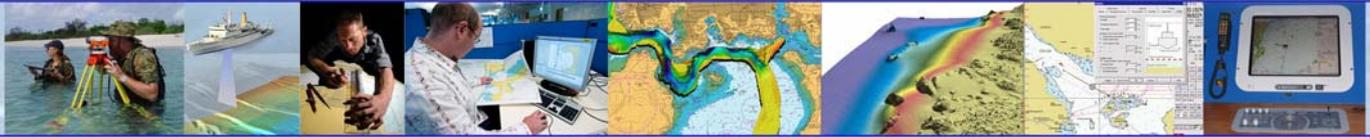
An update was provided on the S-412 Weather Overlay product specification currently under development by the Joint Technical Commission for Oceanography and Marine Meteorology (JCOMM) of the World Meteorological Organization (WMO) and the Intergovernmental Oceanographic Commission (IOC).

The meeting discussed issues relating to S-100 portrayal and the language used for encoding conditional symbolization procedures.

There were presentations and discussion on the S-100 test bed projects under development. These included items such as the S-101 data viewers being developed by the Korea Hydrographic and Oceanographic Agency and the US-SPAWAR, the S-57 to S-101 data converter application developed by ESRI and various S-10x test datasets.

All the meeting documents are available in the IHO website ([www.iho.int](http://www.iho.int) > Committees & WG > HSSC > S-100WG).

The next S-100 Test Strategy Meeting is scheduled to take place in the USA or Canada in September 2017.



## 8<sup>TH</sup> MEETING OF THE IHO WORLD-WIDE NAVIGATIONAL WARNING SERVICE SUB-COMMITTEE

Ålesund, Norway, 12-16 September

The 8<sup>th</sup> meeting of the World-Wide Navigational Warning Service (WWNWS) Sub-Committee (WWNWS8) was hosted by the Norwegian Coastal Administration (NCA) and was held at the Quality Waterfront Hotel, Ålesund, Norway, from 12 to 16 September under the chairmanship of Mr Peter Doherty of the United States of America. Mr Arve Dimmen, Director of Maritime Safety at the NCA, welcomed the meeting which was attended by 38 delegates from 18 IHO Member States, the Secretariat of the International Maritime Organization (IMO), the Secretariat of the World Meteorological Organization (WMO), the Secretariat of the International Mobile Satellite Organization (IMSO), the Chairs of IMO NAVTEX and International SafetyNET Coordinating Panels, Inmarsat, Iridium and the IHB. The delegates included representatives of 16 NAVAREA Coordinators, one Sub-Area Coordinator and three National Coordinators.



*Welcoming address by Mr Arve Dimmen,  
Director of Maritime Safety, Norwegian Coastal*

The Sub-Committee received Maritime Safety Information (MSI) self-assessment reports from all 21 NAVAREAs and from the Baltic Sea Sub-Area, as well as reports from the Secretariats of the IMO, WMO and IMSO. The outcomes from the 14<sup>th</sup> meeting of the Document Review Working Group (8-10 March 2016) were discussed; in particular the proposed editorial amendments to the IMO resolutions A.705(17) – *Promulgation of Maritime Safety Information*, A.706(17) – *World-Wide Navigational Warning Service* – and A.1051(27) – *IMO/WMO World-Wide Met-Ocean Information and Warning Service*.

The delegates received briefings on e-Navigation and a new e-Broadcast system from Australia, SONSAT (Security of Navigation, Stabilisation, Advice and Training, including the Admiralty Warning and Navigational Information Service (AWNIS)) from the United Kingdom and developments in the provision of mobile satellite Global Maritime Distress and Safety System



(GMDSS) services from Inmarsat and Iridium. The meeting also received a progress report on the development of the S-124 Product Specification on Navigational Warnings from the chair of the S-124 Correspondence Group.



**Capacity Building discussions on board  
MS Richard With**

The Sub-Committee embarked on the ferry *MS Richard With* to hold focused sessions covering various aspects of Capacity Building (CB). The sessions were led by the CB Regional Coordinator of the East Atlantic Hydrographic Commission (EAtHC), Mr Eric Langlois (France). The sessions considered progress reports on the delivery of MSI training courses, and discussed the processes for reporting the status of MSI provision at Regional Hydrographic Commission meetings and methods for identifying to the Capacity

Building Sub-Committee the regions and coastal States most in need of training and assistance.

The next meeting of WWNWS-SC will be held in Cape Town, South Africa, 28 August to 1 September 2017; details will be published on the WWNWS-SC page of the IHO website when available. It is planned that the meeting will be followed by a Capacity Building MSI Training Course for the Southern African and Islands Hydrographic Commission (SAIHC) region.

When finalized the report of WWNWS8 will be posted on the IHO website, where all the meeting documents are already available ([www.iho.int](http://www.iho.int) > Committees & WG > WWNWS-SC > WWNWS8)



## THESIS JURIES OF THE MASTERS OF SCIENCE (MSc) IN HYDROGRAPHY AND IN HYDROGRAPHIC ENGINEERING AND DATA PROCESSING

ENSTA Bretagne, Brest, France, 1-2 September

**ENSTA**  
Bretagne  
*Graduate and Post-graduate  
Engineering  
School and Research Institute*

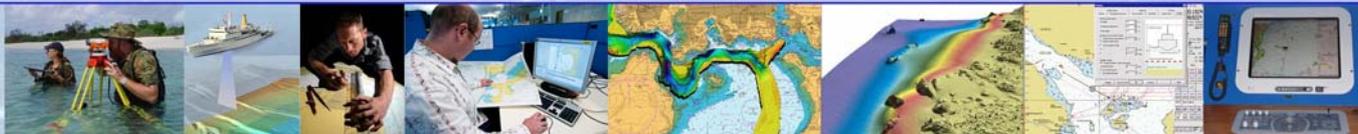


*LCDR Indragiri Yani Wardhono  
(Indonesia)  
and Assistant Director Yves Guillam,  
Secretariat of the IHO*

ENSTA Bretagne is the French Graduate School which offers a Category A curriculum in hydrography recognized by the FIG/IHO/ICA International Board on Standards of Competence for Hydrographic Surveyors and Nautical Cartographers. The School proposes four Master of Science (MSc) programmes, respectively in Hydrography, Hydrographic Engineering and Data Processing, Operational Oceanography, and Marine Geophysics, the latter being associated with a Research Master at the University of Brest, France.

At the invitation of Dr Nathalie Debes of the Hydrography Department at ENSTA Bretagne, Assistant Director Yves Guillam, Secretariat of the IHO, chaired five MSc thesis juries on hydrographic topics on 1-2 September.

The five students were from Cameroon (1), China (2), France (1) and Indonesia (1). Four of the theses covered the automatic definition of bathymetric optimal surface for shallow water surveys, inspection technologies for hydro dams and infrastructures, automatic and statistical comparisons of bathymetric surveys in lakes and dam reservoirs, technical specifications of a new Remotely Operated Underwater Vehicle (ROV) sonar developed for mine-hunting. The wide spectrum of the research topics investigated in these theses illustrated that hydrography is much more than nautical charting.



The fifth research project, sponsored and managed by ENSTA Bretagne and the French national Hydrographic Service (SHOM), sought to develop a mathematical methodology to be used both by hydrographers and cartographers for decision support processes when handling new survey data within an area already surveyed and/or charted. LCDR Indragiri Yani Wardhono from the Indonesian national Hydrographic Service (DISHIDROS) was awarded his MSc diploma for his research on this topic.



## TOWARDS COP22 – AFRICAN MINISTERIAL CONFERENCE ON OCEAN ECONOMIES AND CLIMATE CHANGE

**Mauritius, 1-2 September**



At the invitation of the World Bank, President Robert Ward represented the IHO at an African Ministerial Conference on Ocean Economies and Climate Change held on 1 and 2 September in Mauritius. The invitation came as a result of several meetings between IHB Director Mustafa Iptes and the World Bank, where Director Iptes was exploring opportunities for assistance from the Bank for hydrographic capacity building. During the discussions

Director Iptes highlighted the fundamental and underpinning role that hydrography, and in particular bathymetric data, plays in all aspects of human activity in, on and under the sea. As a result, the World Bank now better recognizes that hydrography should be considered as part of any wider programmes that it supports to develop the blue economy and invited the IHO to participate in the African Ministerial Conference.

The Conference, organised by the Government of Mauritius and the World Bank, brought together Ministers from 15 African countries together with leading experts from development partners, the private sector, scientists, and academia. The purpose of the Conference was to prepare to present an 'African Package' to the 22<sup>nd</sup> session of the Conference of the Parties (COP 22) to the UN Framework Convention on Climate Change (UNFCCC) in Marrakesh, Morocco in November 2016 and to help attract transformational investment packages for ocean-related development for Africa as part of the broader global ocean action agenda.

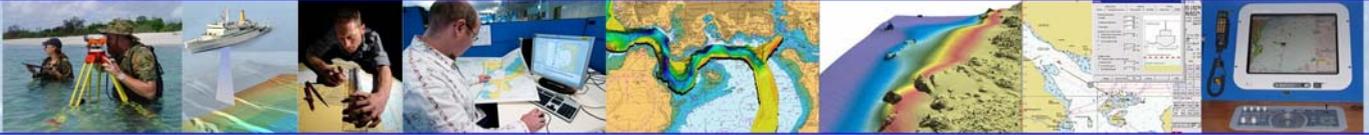
The Conference developed a communiqué that will be presented to COP22. Among its various calls for action, the communiqué highlights the need for investments and developments that are sustainable and environmentally sensitive and are backed up by appropriate environmental and scientific studies.

In that context, national Hydrographic Offices, as the principal custodians of the authoritative national bathymetric data base and the IHO through its Data Centre for Digital Bathymetry and its co-governance of the IHO - IOC General Bathymetric Chart of the Oceans (GEBCO) project, have important roles that they can play.

The Conference was informed that a growing number of countries, many of them IHO Member States, either have or are planning to implement Marine Spatial Plans. This adds further weight to the need for those Hydrographic Offices that are not already a key part of their national spatial data infrastructure to consider how they may be recognised and become more involved in supporting activities that go beyond charting and safety of navigation.



During a break in the Conference, key personnel from the Mauritius Hydrographic Unit met the President and discussed hydrographic progress in the country, including the recent establishment of an in-country inshore surveying capability, and the very successful capacity building efforts from both the IHO Capacity Building Programme and the continuing support from the Government of India through the Indian National Hydrographic Office which is deploying its ships nautical charts on behalf of the country.



## NEW HYDROGRAPHER OF NORWAY



Ms Birte Noer Borrevik took up the post as Director Hydrographic Service for the Norwegian Mapping Authority on 1 September.

Ms Borrevik graduated from the University of Stavanger in 1980 with a BSc in Petroleum Technology.

Her career has been built upon various technical and managerial positions in the Upstream Petroleum business, both in Norway and abroad prior to assuming the position of Director, NHS.

Her most recent appointments have been:

- Project General Manager BP Norway 2001-2003
- Project excellence function BP world wide 2003-2006
- VP Projects and Technology Norwegian Energy Company ASA 2006-2011
- HSE and Operations Manager Explora Petroleum AS 2011-2016