

14TH MEETING OF THE BASWG
CONSTANTA, ROMANIA
03-04 MAY 2018

Report of the IHO Secretariat

Submitted by:	IHO Secretariat
Executive Summary:	This paper provides a summary report of matters of interest related to the work of the IHO Secretariat.

Status of Membership of the IHO

1. Malta, Vanuatu and the Seychelles has been 86th, 87th and 88th member of the IHO during the report period. The IHO Secretariat continues its campaign to recruit new member States to the IHO.

Suspended Member States

2. In 1 January 2018 the Dominican Republic, which had been suspended since 1983, was reinstated as Member State. Serbia and Congo remain suspended. IHO Secretariat is working with these states to expedite their return to full membership as soon as possible, as is the case for a number of other Member States who have fallen behind on payments of their annual subscription.

Regional Applications for Membership of the IHO

3. Bulgaria which is the only non-IHO Member State of the Black and Azov Seas region need to be encouraged to become IHO member.

4. The IHO Secretariat, in cooperation with the Department of External Relations of the Government of Monaco, stands ready to assist, through diplomatic or other channels, for membership of the IHO of non-member State (Bulgaria) in the Black and Azov Seas region.

IHO GIS and Databases

5. Work has continued on the development of the IHO GIS which is composed of two main parts: a country information database and a regional information database.

6. The country information database has been progressively upgraded to include additional administrative information and facilitate the maintenance of the Yearbook (IHO Publication P-5) and related lists posted on the IHO website.

7. An Esri-based GIS solution is being implemented to develop further the regional information database. This will enable access to various layers of information through the IHO website and through various sophisticated cloud-based on-line GIS options. The IHO ENC Catalogue has been transferred to this new environment and the transfer of the GIS coverage for Antarctica will follow next.

8. **C-55 Database.** Work has continued on developing a GIS database application to support C-55 - *Status of Hydrographic Surveying and Charting Worldwide* and the work

of the IHO. In addition to the current composite indicators (percentage of areas adequately surveyed / requiring re-survey / not surveyed), the inclusion of CATZOC polygons would provide an initial geo-referenced quality layer as discussed at IRCC-4.

INT Chart and ENC Production Coordination – Region F

9. France, as Chair of the International Charting Committee Working Group (ICCWG) for Region F, has continued to provide regular updates to S-11 Part B - Catalogue of INT Charts. The BASWG members, through the Chair of its International Charting Coordination Committee are requested to provide up to date information in order that S-11 Part B for Region F can be kept up to date.

10. The elimination of overlapping ENC data that are navigationally significant is one of the main objective of the WEND Principles. A new IHO Resolution addressing this issue was adopted by IHO Member States (See. IHO CL 19/2018 – *Adoption of new IHO resolution on the elimination of overlapping ENC data*).

11. All Black and Azov Seas region Member States are also invited to provide the IHO Secretariat with regular updates to C-55 on at least an annual basis. The IHO Secretariat would be grateful for delegates to forward up-dated information to the Secretariat at info@iho.int or via mail.

Capacity Building Programme

12. The level of activity of the IHO Capacity Building (CB) Programme relatively decreased in 2017. Expenditure in the IHO 2017 CB Work Programme (625 952 Euros) was 18% smaller than the budget for the previous year. Ongoing financial support is provided by the Nippon Foundation of Japan, the Republic of Korea and by a contribution from the IHO budget with in-kind support from Member States and from industry. The IHO Secretariat is continuing its campaign to find additional donor States and funding organizations. In 2017, 80% of the budgeted work program was executed and paid for. The BASWG members benefited from various activities under the IHO CB Work Programme for 2016 and 2017.

13. One student from Romania was selected for Category A Hydrography Master Programme held at the USM in 2015-2016 and one student from Georgia was selected for Category B CHART Project training which will be held at the UKHO in 2016.

14. 12. BASWG member States are encouraged to nominate suitable candidates for long term CB courses which are follows:

- The IHO - Nippon Foundation CHART (Cartography, Hydrography and Related Training) Project that provides CAT B training in Marine Cartography and Data Assessment at the UKHO, and is funded by the Nippon Foundation.

- CAT A Hydrography Master Program at the USM, in the USA funded by the ROK.

- New CAT B Hydrographic Survey Program at the KHOA, in Busan, ROK funded by the ROK.

Crowdsourced Bathymetry

13. In accordance with Decision 8 of the EIHC5, IRCC7 established the Crowdsourced Bathymetry Working Group (CSBWG) to provide guidelines on the collection and use of crowdsourced bathymetry (see IHO CL 42/2015). The CSBWG has developed the draft IHO publication B-12 – *IHO Guideline on Crowdsourced Bathymetry*, which has completed extensive stakeholder and IHO member State consultation. Edition 1.0.0 will be presented to IRCC10 for endorsement, prior to submission to IHO Council-2 and IHO member States for approval. It is considered that the publication will have a formal publication date of 1 January 2019. Work has commenced on the draft of Edition 2.0.0, taking into account a number of topics, for which additional time and investigation were identified as being required; additionally as a result of Decision C 1/31 to enlarging the scope of the tasking of the CSBWG, the CSBWG drafted revised ToRs for submission to IRCC10.

14. The web-based interface portal to the IHO Data Center for Digital Bathymetry, hosted by the USA in Boulder, Colorado, as part of its commitment to the system of World Data Centres, is being upgraded to be compatible with the crowdsourced bathymetry concept. This will enable an IHO-led CSB infrastructure to be established and promoted in the IMO and across the wider maritime community.

GEBCO Project

15. The General Bathymetric Chart of the Oceans (GEBCO) Project is a joint programme that is executed under the governance of the IHO and the IOC and directed by a Guiding Committee. GEBCO is the only long-term international project with a mandate to map the ocean floor. Through the work of its organs (Technical Sub-Committee on Ocean Mapping (TSCOM), a Sub-Committee on Undersea Feature Names (SCUFN), a Sub-Committee on Regional Undersea Mapping (SCRUM)), GEBCO produces and makes available a range of bathymetric data sets and products, including gridded bathymetric data sets, the GEBCO Digital Atlas, the GEBCO world map, the GEBCO Gazetteer of Undersea Feature Names. GEBCO maintains a comprehensive website at <http://www.gebco.net>. NIOHC member States are encouraged to support GEBCO activities and also nominate suitable candidates to the GEBCO Training Programme leading to a Graduate Certificate in Ocean Bathymetry at the University of New Hampshire, USA.

Seabed 2030 Project

16. Seabed 2030 is a new global project within the IHO-IOC GEBCO framework with the focused goal of producing the definitive, high-resolution bathymetric map of the entire World Ocean by the year 2030. The Nippon Foundation will contribute US\$ 18.5 million for the first ten years of the project. The aspiration is for Seabed 2030 to compile all available and newly collected bathymetric data into a high quality, high resolution digital model of the ocean floor and to promote international efforts to collect new data. The project seeks to encourage the data collectors and data managers of governmental, academic and private interests to work together to improve the quality of publicly-available grids of the ocean floor. This project is focused on the goal of compiling a high-resolution, openly available, Digital Bathymetric

Model (DBM). This DBM should efficiently provide bathymetric information at an improved resolution to end users. The Seabed 2030 project has potential to create partnerships and cooperation between interested parties, significantly improving our understanding of the sea floor and empower sustainable ocean management in the coming century. NIOHC member States are also encouraged to support the Seabed-2030 Project.

IHO Outreach

23. World Hydrography Day.

Taking into account the discussions at the IHO Council meeting held in Monaco in October 2017, the theme of the World Hydrography Day for 2018, as announced by IHO CL 03/2018, is:

“Bathymetry – the foundation for sustainable seas, oceans and waterways

24. BASWG Member States have been invited to forward as soon as possible to the IHO Secretariat any material that is created in support of national WHD-2017 celebrations for posting on the IHO website. This will enable the widest possible dissemination of publicity and support material for the event.

25. International Hydrographic Review (IHR). The IHR provides an ideal opportunity for Regional Hydrographic Commissions and Member States to publicise technical and other achievements in the region. An editorial board comprising a representative from each region has been established. Papers for consideration for publication in the IHR should be forwarded directly to the editor (ihreview@iho.int, copy to ian.halls1@defence.au.gov). The deadlines are:

- End of January for the May Edition;
- End of July for the November Edition.

26. **Action Requested of BASWG Member States**

- a. **Note** this report.
- b. **Continue to provide** updates to S-11, through France as Chair of the International Charting Coordination Committee for Region F.
- c. **Review** entries in IHO Publications C-55 and P-5 (Yearbook) at least annually.
- d. **Consider** submitting papers for publication in the IH Review.
- e. **Invest** in the preparation of candidates for Capacity Building trainings.
- e. **Take any other actions** as considered appropriate.