

**14<sup>TH</sup> MEETING OF THE IHO INTER-REGIONAL COORDINATING COMMITTEE  
IHO-IRCC14  
VTC (HYBRID MEETING, 6-8 JUNE 2022)**

**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. One of the main changes resulting from the entry into force of the revised IHO Convention is that, for States wishing to join the IHO that are already Member States of the United Nations, there is no requirement to seek the approval of existing Member States of the IHO. Since the last IRCC13 meeting, Kenya, Iraq, Angola and Albania (cfr. IHO CL 18/2022) acceded to the IHO Convention and the IHO membership now stands at 98. Unfortunately, Serbia, Syria and Vanuatu remain suspended from Member States rights.
2. The IHO Secretariat, in cooperation with the Department of External Relations of the Government of Monaco, stands ready to assist those non-IHO Member States with the application process for membership of the IHO, as currently underway towards several non-IHO Member States in several hydrographic regions, and stands ready to pay High Level Visits to those States not yet IHO Member States. All RHCs are kindly invited to encourage and propose to the IHO Secretariat High Level Visits to those States not yet IHO Member States.

### **Outcomes of the 5<sup>th</sup> Meeting and preparation of the 6<sup>th</sup> Meeting of the IHO Council**

3. Among the items to be discussed were the proposals from HSSC, IRCC and the Secretariat for delivery of the Strategic Performance Indicators (SPIs) assigned to each of those bodies for the implementation of the IHO Strategic Plan, as well as the Roadmap for the S-100 Implementation Decade (2021-2030) for the development of digital products and services. Following bilateral talks between the Chair and Council Members, the Chair informed the Council that Member States stressed the need for IHO to support basic Capacity Building while also supporting the migration to S-100. The role of the RENCs had been a subject of discussion, and RENC representatives had therefore been invited by the Chair to attend the session as observers.
4. C5 noted the report and commended the IRCC, the RHCs, and IRCC Sub-Committees for their achievements as well as the outcome of the IRCC October 2021 Workshop on the IHO Strategic Plan. The Council, acknowledging the need for further recommendations on the realization of the Strategic Plan in RHCs by Member States and invited the IRCC to provide these recommendations to the RHCs as a matter of priority. A 2nd IRCC Workshop on the IHO Strategic Plan was conducted on 28th April 2022 in accordance with the IHO CL 12/2022.
5. The sixth meeting of the IHO Council is scheduled to take place in Monaco, from 18 to 20 October 2022. The preparation of this meeting has already started (see CCL 01/2022). It can be noted that in accordance with the Rules of Procedures of the Council, the deadline for submission of proposals by IHO Member States is 18 July 2022, while a revised provisional agenda together with supporting documents and timetable is already available to Member States (see CCL 02/2022).

## Preparation of the Third IHO Assembly

6. The third session of the IHO Assembly (A-3) will take place in the Auditorium Rainier III in Monaco from Tuesday 25 April to Friday 28 April 2023. The meeting of the Finance Committee and the meeting of the Heads of Delegations will take place on Monday afternoon, 24 April 2023 at the Auditorium Rainier III in Monaco. The Opening Ceremony for the Assembly will take place on Tuesday morning, 25 April 2023. During that Ceremony, it is intended to celebrate the 120th Anniversary of the creation of GEBCO, as well as to invite those new Member States that have joined the Organization since the Second Session of the IHO Assembly to present their flag. An Industry and a Member States exhibition will take place in the same period of A-3 at the Auditorium Rainier III in Monaco, and the IHO Member States are invited to consider sending a ship to the Port of Monaco during A-3.

7. The Assembly is the principal decision-making organ of the IHO (Article V of the Convention on the IHO), and it is essential that all IHO Member States are represented not only to review the past activities of the Organization, but also to adopt an effective and realistic IHO Work Programme and Budget for the next three years, and then to formulate and adopt appropriate Resolutions. All the details on the preparation and conduct of A-3 are available on the following IHO webpage <https://iho.int/en/3rd-session-of-the-assembly-2023> where the Assembly Circular Letters (ACLs) are available.

## IHO Outreach

8. Considering the impact of digital outreach, in 2021, the IHO website had a total of 562,207 page views. The LinkedIn page had 4544 followers in December 2021, and saw a record 35,253 views from all its posts in June 2021, reaching total post impressions of 228,481 in 2021. The upwards trend continued on Facebook with a post on a missing GEBCO chart sheet getting 2.7K impressions in April 2021. On Twitter, the record for the year was a total of 22.9K impressions on posts in June 2021.

9. There were also several actions to raise awareness about the IHO's work to a broader audience. The Secretariat has increased its presence on social media through articles and news about its working groups, committees and subcommittees, as well as the participation in regional and global initiatives that refer to Hydrography, especially in the framework of the UN Ocean Decade. In this regard, it is much more than simple coincidence that the United Nation's Ocean Decade commences the same year that the IHO enters its second hundred years of existence. The Ocean Decade provides a unifying framework for scientists and stakeholders from diverse sectors to develop the scientific knowledge and the partnerships needed to accelerate and harness advances in ocean science. Being a longstanding partner of ocean scientists, it was clear from the beginning of the Strategy revision that the IHO would be among the stakeholders to proactively contribute to this initiative. In fact, the Secretariat organized an online conference as part of the UN Ocean Decade Laboratories "A Predicted Ocean" which highlight how the S-100 Universal Data Model can be used by all ocean disciplines, thereby increasing the use of data and our knowledge of the ocean, and it will take part at the 2022 UN Ocean Conference, planned in Lisbon on 27 June to 1 July 2022, with a proper event.

### World Hydrography Day

10. As announced with IHO CL 01/2022, the theme for WHD 2022 is as follows:

***"Hydrography - contributing to the United Nations Ocean Decade"***

The theme is designed to highlight the relevant contribution of hydrography as a discipline of

applied sciences to the United Nations Decade of Ocean Science for Sustainable Development (2021 – 2030). The deliberations at the 5th Council meeting confirmed that several hydrographic offices have already engaged nationally in supporting the United Nations Ocean Decade and in the efforts to reverse the cycle of decline in ocean health. The theme offers the opportunity to emphasize the competencies of hydrographers in the gathering and management of marine data and their strengths in technical collaboration on a global scale. The goal is to highlight how hydrography as an applied science supports the sustainable use of the oceans. This can include how up-to-date surveys and data can be used for initiatives for the protection of the marine environment, coastal zone management, marine protected areas, marine spatial data infrastructures, renewable energies, and all other components of the blue economy.

11. WHD provides opportunities to publicise the work and services carried out by national hydrographic offices, industry partners, expert contributors, and the scientific community. Organizations and IHO Member States are invited to forward to the Secretariat any materials they create in support of their WHD celebrations to post on the IHO online communication outlets. This can include pictures, videos, or even articles.

#### International Hydrographic Review (IHR)

12. Twice a year, the IHR provides an opportunity for Member States to publicize technical and other achievements in their region. An editorial board comprising a representative from each region has been established. As it was announced through IHO CL 03/2022, since 5 January 2022 the IHR has a new editor Dr Patrick Westfeld from Germany.

13. Papers for consideration for publication in the IHR should be forwarded directly to the editor ([ihreview@iho.int](mailto:ihreview@iho.int), copy to [ihr.editor@iho.int.com](mailto:ihr.editor@iho.int.com)). The deadlines are:

- end of January for the May Edition
- end of July for the November Edition

14. In order to modernize the image of the International Hydrographic Review, its website (<https://ihr.iho.int/>) was completely revamped. It now includes a new section with articles and notes, allowing readers to view and share individual articles more easily. The IHO Secretariat has also worked with the University of New Brunswick (UNB), Canada, in a project to develop a digital repository of the complete library of the IHR. As a result, volumes from the entire collections are available online at: <https://journals.lib.unb.ca/index.php/ihr>.

15. Next year, the Review will celebrate its 100<sup>th</sup> Anniversary.

#### **Capacity Building Programme**

16. The level of activity of the IHO Capacity Building (CB) Programme was clearly affected in 2020 and 2021 by the COVID 19 Pandemic. Expenditure in the IHO 2021 CB Work Programme (CBWP) was 15,627.22 Euros, a value that cannot be compared with the previous years. Decision 5 of the CBSC19 intersessional meeting approved that the 2021CBWP funded activities not executed in 2021 can be moved to the 2022CBWP. At CBSC20 Intersessional meeting, the 2022CBWP activities were prioritized, and now available at the following link: <https://iho.int/en/capacity-building-and-technical-cooperation>.

17. The budget assigned to 2022 has benefited not only from funds not used in CBWP2021, but also from additional resources made available by the Republic of Korea for capacity building activities from the Regional Commissions (the so-called non-earmarked activities).

On this regard, the Secretariat has reaffirmed the strong engagement to explore all possible ways to increment the Budget allocated to CB from 2023 onward.

18. In terms of courses managed at IHO Secretariat level, 2 candidates were selected for 2022/2023 Master of Science Programme in Hydrographic Science at the University of Southern Mississippi (USA) sponsored by the Republic of Korea, whilst 14 candidates were selected to participate at 13<sup>th</sup> and 14<sup>th</sup> GEOMAC courses in Cartography Cat B (see IHO CL 19/2022) sponsored by Nippon Foundation. The selection of 10 candidates for 2022 Cat B Hydrographic Survey Programme sponsored by the Republic of Korea was announced with IHO CL 15/2022. For 2023/2024, the Master of Science Programme in Hydrographic Science at the University of Southern Mississippi (USA) sponsored by the Republic of Korea will be announced in August 2022.

#### Empowering Women in Hydrography (EWH)

19. The 2nd Session of the IHO Assembly (A-2) approved the adoption of a new work item of Empowering Women in Hydrography (EWH) to the Work Programme of the IHO CBSC (A-2 Decision 35), and tasked the Secretariat to secure funding through allocation of IHO budget resources available and negotiation of suitable cooperation agreements with interested Member States.

20. CANADA and IHO signed the Agreement in reference B, now available at the following link: <https://iho.int/en/mou-agreements>. The Agreement secures the funds for the the period 2021-2024, and finally describes a series of activities and initiatives which will enable more women to participate equitably in the field of hydrography and to assume more leadership roles within the hydrographic community. The project includes outreach, contact and learning, including internships, at-sea experiences and train-on-the-job activities (see IHO CLs 47/2021, 07/2022 and 09/2022). A specific webpage (<https://iho.int/en/basic-cb-sc-ewh>) has been set up under the Capacity Building Sub-Committee (CBSC) for this project. The first year of the EWH project has been completed successfully, with the provision of a workshop on “*Gender balance & Empowering Leaders*” to draw the attention on the importance of reducing gender imbalance in hydrography and more in general in STEM, the hire of an EWH project Assistant to support the implementation of the project’s activities, 1 internship on Outreach, 3 internships related with the review process of submitted programmes to the International Board on Standards of Competence for Hydrographic Surveyors and Nautical Cartographers (IBSC), the submission for EWH project to become an UN Ocean Decade Action, and then – as activity around the world offered by the IHO Member States - three opportunities for an at-sea experience on a NOAA hydrographic ship.

#### IHO e-learning Center

21. Following the improvement made by the e-learning Project Team to advance in the implementation of the center, the IHO e-learning center established at KHOA is now accessible at the following link: <https://elearning.iho.int>, or via the IHO web-site. Member States who have experience in developing and providing e-Learning contents should consider actively sharing contents, resources, and experience with the e-Learning PT. The center is expected to become fully operational by the end of 2022.

#### **Crowdsourced Bathymetry**

22. Following the last CSBWG12 hybrid meeting held in February 2022 at the IHO, The Crowdsourced Bathymetry Working Group (CSBWG) revised the IHO publication B-12 which provides guidance on the collection and use of Crowdsourced Bathymetry (CSB), and

identified ways to facilitate the data gathering activities. The new edition of publication B-12 is ready for the IRCC endorsement and the IHO Secretariat stands ready to issue a specific IHO CL for searching the IHO Member States approval. Besides, a new Agreement template on the “*Terms of the Provision of Crowdsourced Bathymetry Data*” from the Trusted Nodes to the IHO, was prepared by the CSBWG and will be part of the new edition of B-12 publication. The document represents the way for submitting crowdsourced bathymetry data for long-term preservation and stewardship, as a joint effort between the Trusted Nodes and the IHO to accurately document the agreement and the expectations between the two entities. The new Agreement template will be used to sign a historic Agreement between the IHO and International Seabed Authority (ISA) for “*Submitting marine geophysical data for long-term preservation and stewardship in IHO DCDB archive*”. It is expected that the initial contribution covers the ISA backlog of approximately 15 years of data recording and, going forward, the ISA estimates an annual contribution of approximately 750 GB each year. Future geophysical data collected by ISA contractors will be submitted by ISA to DCDB using the guidelines laid out in such Agreement.

23. The Circular Letters (IHO CL 21/2020 and IRCC CL 1/2020) to request MS to indicate their positions on the provision of CSB data are receiving new positive replies, in addition to the 30 already available at the link: [https://iho.int/uploads/user/Inter-Regional%20Coordination/CSBWG/MISC/B-12\\_2020\\_EN\\_Acceptance\\_of\\_CSB\\_Data\\_in\\_NWJ\\_v3.0.pdf](https://iho.int/uploads/user/Inter-Regional%20Coordination/CSBWG/MISC/B-12_2020_EN_Acceptance_of_CSB_Data_in_NWJ_v3.0.pdf), thanks also to the continuous engagement of the CSB-GEBCO-Seabed 2030 Regional Coordinators with IHO Member States, to advocate for open data access and CSB activities. In fact, there continues to be concern over the apparent lack of dedicated resources available within national HOs to process data available via DCDB. The importance of liaison with other IHO bodies, as well as appropriate engagement with industry to progress the work items, continues to be a key enabler for the project.

24. Thanks to the support of CSBWG and Nippon Foundation Seabed2030 project, the IHO Secretariat also promoted CSB through three sailing boats: the *Sir Ernst* and *La Louise*, who departed from Monaco and France for expeditions to the Antarctica in late 2021/early 2022, and committed to collect data for the IHO DCDB and generally contribute to increase our knowledge of the ocean and the Poles, and the *Jancris*, who departed from Cape Canaveral for an ocean crossing named “A sail for the blue” in May 2022. In addition to that, the IHO Secretariat with the support of GGC, CSBWG and Nippon Foundation GEBCO-Seabed2030 project, is negotiating a Letter of Cooperation with the Yacht Club of Monaco to engage the world of yachting (yachts and megayachts) in the CSB.

## **GEBCO programme**

25. In December 2021, the International Hydrographic Organisation (IHO), the Intergovernmental Oceanographic Commission (IOC) and GEBCO Chair/Vice Chair met to discuss on how much the ocean science and seabed mapping landscape is undergoing significant change, and that the work of GEBCO (including that of the Nippon Foundation GEBCO Seabed 20230 Project) has never been so relevant or visible. It was noted that GEBCO would need to evolve with this changing environment in order to remain relevant, and that its organisational structure has grown in recent years. Therefore, it was decided to review the GEBCO Governance and establish a Project Team accordingly, which has recently started working on the Governance review.

26. GGC38 also noted that one of the gaps was for a GEBCO Strategic Plan that clearly

sets out the connections between the strategic objectives of the parent Organizations, the future direction of GEBCO and the work of the subordinate bodies, initiatives and activities. So that, it was approved also the establishment of a Drafting Team for drafting a GEBCO Strategic Plan in line with the IHO Strategic Plan (2021-2026) and the IOC Medium Term Strategy (2022-2029).

27. With IHO CL 10/2022 – and with an IOC CL within the IOC community as well – the IHO advised Member States that nominations are being sought for the 19th course of the IHO-IOC-Nippon Foundation/GEBCO Training Program leading to a Graduate Certificate in Ocean Bathymetry at the University of New Hampshire (UNH), USA. The 19th course will begin in late August 2022 and students will undertake an intensive 12-month period of lectures, practical laboratory and on-the-water projects, secondments to relevant laboratories and cruises on research or survey ships. The course represents a strong investment in future generations of ocean scientists and hydrographers, In order to liaise with this successful existing program and to identify and connect with other ocean mapping programs, at GGC38 it was decided to establish a new Sub-Committee on Education and Training.

### **Nippon Foundation GEBCO-Seabed2030 project**

28. Nippon Foundation GEBCO-Seabed 2030 project was endorsed as an Action of UN Decade of Ocean Science for Sustainable Development. The complex network of this project was explained along with the data ingestion in the system and mapping coverage that now stands at 21.6% (December 2021). The project is focused on mapping the gaps with three different initiatives: the Ocean Frontier Mapping, Crowd Sourced Bathymetry and Technology Innovation. It is necessary to promote the need to map the entire seabed and to encourage organizations to make their data available.

29. Seabed 2030 signed Memorandum of Understanding in recognition of the organizations' work to advance the understanding of ocean bathymetry, and to complement the goals of the United Nations Decade of Ocean Science for Sustainable Development. Besides, new global survey calls for greater coordination of seabed mapping activities were launched in London, 15 October 2021 to give a major boost to efforts to map the entire seafloor by the end of the decade. The survey aimed to develop a more consolidated global view of seabed mapping needs in order to move towards an agreed list of strategically important priority areas for further action. It also achieved its secondary aim of finding new data that could immediately feed into the emerging global map. Seabed2030 project looks forward to forming new partnerships and strengthening existing ones, as working collaboratively can greatly help fill in the gaps, as in the case of FUGRO, that in 2021 delivered to Seabed 2030 more than 2 million km<sup>2</sup> of high-resolution in-transit bathymetry data, collected by Fugro vessels, which a data coverage roughly equivalent to the size of Mexico.

### **Action Requested of IRCC**

30. IRCC is invited to:

- **Note** this report,
- **Take any actions** as considered appropriate.