

**11TH MEETING OF THE IHO-INTER REGIONAL COORDINATION COMMITTEE
IHO IRCC11**

GENOA, ITALY, 3-5 JUNE 2019

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. Guyana has been 90th 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. Democratic Republic of the Congo, Serbia and Syria was suspended from Member States rights, being in arrears in its contributions now for two consecutive years. 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.

Diplomatic Engagement

3. The Secretary-General and Directors are continuing their programme of visits to brief high officials of non-Member States on the global status of hydrography and the relevance of the IHO to non-Member States. This is being done through targeted in-country visits and briefings and through visits to diplomatic delegations in Paris, London and New York when convenient.

4. The Secretary-General and Directors, in consultation with individual Member State representatives, brief relevant diplomatic missions in order to raise the profile of the respective national hydrographic service and the importance of hydrography.

5. The Secretary-General and Directors also provide briefings to the Department of External Relations and Cooperation of the Government of Monaco to enable Monaco's diplomatic service to better assist the IHO in maximising levels of awareness of hydrography and the IHO at the highest diplomatic levels, particularly in the UN and through the diplomatic services.

IHO GIS Data Base - Progress Report

See document IRCC11-11.

Preparation of the Second IHO Assembly

6. The second session of the IHO Assembly (A-2) is scheduled to take place from 21 to 24 April 2020 in Monaco. The announcement and draft agenda of the A-2 (See ACL 01) and some additional ACLs have already been issued. The IHO Work Programme and budget for the next 3 year (2021-2023) will be prepared for approval of the Assembly. The Red Book for the A-2 will be issued in February 2020.

Outcomes of the 2nd Meeting of the IHO Council

7. The main outcomes of the 2nd meeting of the IHO Council were reported in IHO CL 51/2018. Also, please see document IRCC11-08A.

8. The third meeting of the IHO Council is scheduled to take place in Monaco, from 15 to 17 October 2019. The preparation of this meeting has already started (See CCL 01/2019). 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 15 July 2019, while comments on proposals to be included in the Red Book for the Council will be expected by 6 August 2019.

IHO Outreach

World Hydrography Day.

9. The theme for World Hydrography Day 2018 was "Bathymetry - "The foundation for sustainable seas, oceans and waterways". A number of WHD events were held by many of the IHO Member States and the events reported to the IHO Secretariat were displayed on IHO website.

10. Taking into account the discussions at the second IHO Council meeting held in London in October 2018, the theme of the World Hydrography Day for 2019, as announced by IHO CL 01/2019, is:

"Hydrographic information driving Marine knowledge"

11. As part of the report on the proposed Work Programme 2019 at the 2nd Council, the Secretary-General introduced the priorities, which he had defined with the associated issues and risks, for Work Programme 1 (Corporate Affairs). One of the priorities was to plan and start a complete overhaul of the IHO website including incorporation of GIS-services.

12. Taking into account that IHO communication strategy is lacking the provision of social media, the Secretariat accepted the temporary secondment of the social media expert through NOAA (USA) to assist the future set up and maintenance of such a component.

13. 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. However, some of the members of the editorial board need to be updated due to change of the roles of the board members. Chairs of the RHCs are requested to confirm and update their representatives. It is considered by the Secretariat that there is a need for improvement of the IHR which is presented at document IRCC11-09C. Papers for consideration for publication in the IHR should be forwarded directly to the Editor. Unfortunately, the IHO Secretariat has recently been informed that Mr Ian HALLS, the Editor of IHR passed away on 28 May 2019. For the interim period, papers for the IHR could be forwarded to (ihreview@iho.int, copy to alberto.neves@iho.int). The deadlines are:

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

14. The IHO Secretariat 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 (1923 to 2018) are available online at: <https://journals.lib.unb.ca/index.php/ihr>.

15. The Secretariat also works on a digital revamp of the International Hydrographic Review (IHR). First consultations were held with the former Editor of the IHR, Mr Ian Halls. The following principal changes are proposed jointly:

- Design and building new separate website www.ihr.iho.int using the new corporate design.
- Design the International Hydrographic Review as online publication and printable version (PoD).
- Facilitate technical options to create customized topical compilations from the digital repository of IHR articles for pdf-download and print.

16. Further and more detailed information was presented at and endorsed by the second IHO Council meeting in London in October (Decision C2/46 refers).

IHO Centenary Celebrations (IHO-100)

17. The years 2019 and 2021 will be important in the history of the International Hydrographic Organization. 2019 will mark the centenary of the 1st International Hydrographic Conference, which was held in London in 1919 and 2021 will be the centenary of the establishment of the International Hydrographic Bureau (IHB) in 1921 in Monaco as precursor of the modern IHO.

18. The IHO Secretariat has already undertaken the preparations for the centenary celebrations of the International Hydrographic Organization ranging from 2019 to 2021 as important milestones of the IHO. In this respect, it has been planned to organize workshops, exhibitions, outreach events and similar activities from 2019 to 2021, either independently or jointly with sister institutions and agencies. **The "peak-of-the-peak" will be World Hydrography Day (WHD) on 21 June 2021.** There will also be an opportunity to present IHO's achievements at the United Nations General Assembly in September 2021 and at the IMO Assembly in November 2021.

19. The main activities scheduled for the IHO centenary celebrations, coordinated by the IHO Secretariat are as follows (CL 32/2017 refers):

- To hold an exhibition on "*Historical Nautical Charts and Mediterranean*" which was displayed at the Monaco Yacht Club from 1 to 14 April 2019 (It was carried out),
- To organize an international Symposium on "*A Historical Approach for Measurements and Protection of Oceans and World Waters*" is scheduled to be held at the Oceanographic Museum of Monaco from 20 to 21 June 2019 (in conjunction with the World Hydrography Day), Call for Papers of this Symposium has already been circulated.
- To highlight the centenary celebrations as part of the media and press-campaign associated the Council meetings in 2019 and 2021.
- To organize a half day special session on IHO-100 at the 2nd Session of the IHO Assembly (A-2) in April 2020.
- To prepare, publish and distribute an IHO Prestige Book on "*100 Years of International Cooperation in Hydrography*".

20. The centenary events could also be linked with the United Nations Decade of Ocean Science for Sustainable Development (2021-2030) which has been coordinated by the IOC of UNESCO.

Capacity Building Programme

21. The level of activity of the IHO Capacity Building (CB) Programme increased in 2018. Expenditure in the IHO 2018 CB Work Programme (861 000 Euros) was 37% bigger than the budget for the previous year. In 2018, 81% of the budgeted work program was executed and paid for. 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. However, considering the growing demands for IHO Capacity Building activities, more funds and contributions are required. The IHO Secretariat is continuing its campaign to find additional donor States and funding organizations. Additional details available in document IRCC11-07C.

22. Member States through Regional Hydrographic Commissions 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 Category "B" training in Marine Cartography and Data Assessment at the UKHO, and is funded by the Nippon Foundation of Japan.
- Joint International Hydrographic Applied Science Program Category "A" Hydrographic Surveyor Master Program at the USM, USA funded by the ROK.
- New Category "B" Cartography Program at the KHOA, in Busan, ROK funded by the ROK.

Crowdsourced Bathymetry

23. 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. Member States and other interested parties were invited to nominate representatives to participate in the CSBWG (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 was presented to IRCC10 for endorsement and subsequently endorsed by the IHO C-2 with some caveats and subsequent changes required by C-2 (Action C2/23 refers) incorporated into Edition 2.0.0 for approval by IHO Member States under IHO CL 11/2019. Subsequently, Member States approved the adoption of Edition 2.0.0, B-12. A follow-up IHO CL is being prepared with the full details, including responses to the comments provided. Additional details available in document IRCC11-07G.

24. 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. The status report and some proposals regarding to improve the DCDB is available at document IRCC11-07J.

GEBCO Project

25. 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>. Regional Hydrographic Commissions 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. (Additional details available in document IRCC11-11).

Seabed 2030 Project

26. 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 (NF)-GEBCO Seabed 2030 project builds on more than 100 years of GEBCO history; the project has established regional connections to all corners of the World and benefits from the human network of ocean mapping capacity built over 15 years through The Nippon Foundation – University of New Hampshire (UNH) training project. Through Seabed 2030, GEBCO's role will be recognized and reinforced as the authoritative international initiative for mapping the World Ocean, from the coasts to the deepest trenches. The project will champion, develop and nurture the technical and human capacity to complete this task by 2030.

27. Seabed 2030 has established a network of 4 regional centres. Each centre focuses on discovering, gathering and assembling all available bathymetric data from their region to produce regional datasets and resulting products. The Atlantic and Indian Oceans are covered by the center located at the Lamont Doherty Earth Observatory (LDEO). A global centre will merge the regional datasets to generate the production of the annual GEBCO grid as well as other products. Within this structure, the IHO-DCDB will remain the central GEBCO repository for all raw bathymetric data and all Seabed 2030 project data will be data based there.

Regional Hydrographic Commissions are encouraged to support the Seabed-2030 Project.

Action Requested of IRCC

28. IRCC is invited to:

- **Note** this report,
- **Confirm and update** the RHC representatives of the IHR Editorial Board, and
- **Take any actions** as considered appropriate.