

13^a Reunión - Buenos Aires, Argentina 13th Meeting - Buenos Aires, Argentina 25 y 26 de Abril del 2019 25 - 26 April 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. 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. In the reporting period Bulgaria acceded to the IHO Convention and became the 89th Member States of the IHO. Unfortunately, there are still three Member States remaining suspended, Democratic Republic of the Congo, Serbia and Syria, being in arrears in its contributions now for two consecutive years.

Regional Applications for Membership of the IHO

2. The non-IHO Member States of the SWAtHC region, Bolivia and Paraguay are still to submit their instrument of accession. The IHO Secretariat, in cooperation with the Department of External Relations of the Government of Monaco, stands ready to assist these non-Member States, through diplomatic or other channels.

Preparation of the Second IHO Assembly

3. The second IHO Assembly (A-2) is scheduled to take place from 21 to 24 April 2020. The announcement and draft agenda of the A-2 will be issued in April 2019. The IHO Work Programme and budget for the next 3 year (2021-2023) will be prepared for approval of the Assembly.

INT Chart and ENC Production Coordination - Region C1

- 4. LCDR Rafael Vieira, Region C1 Coordinator is responsible to provide regular updates to S-11 Part B Catalogue of INT Charts. The status of the INT chart scheme for region C1 is contained in Edition 3.0.2 February 2017 of S-11 Part B. According to the S-11 Part B Web Catalogue, there are 51 INT charts (and/or plans) in the scheme, of which 36 have been published (71%). SWAtHC members are invited to check their individual entries and provide updated information as appropriate. Adoption of Ed. 3.1.0 of IHO Publication S-11 Part A requires new arrangements for the monitoring of INT charts (CL 11/2018 refers).
- 5. The report of the SWAtHC ENC Scheme was received by the WENDWG9 meeting held in February 2019. The SWAtHC was represented by Brazil at the last WENDWG9 meeting.
- 6. Early January 2018, the IHO Secretariat informed the Chart Coordinators that the project INToGIS Phase II was underway, thanks to the outstanding support provided by KHOA (Republic of Korea). For more information, see Doc. HSSC9-11A-INF1. INToGIS Phase II aims to provide a very useful scheming tool, putting together ENC and INT charts, new base maps and some useful tools for a more efficient and consistent INT chart and ENC scheming (AIS data base, overlap checker, etc.). As agreed at the last WENDWG meeting, some Chart Coordinators are now experimenting INToGIS II before it is commissioned and made available to all, hopefully early next year.
- 7. All SWAtHC Member States are invited to provide the IHO Secretariat with regular updates to C-55 on at least an annual basis (see paragraph 27).

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COMISION HIDROGRAFICA DEL ATLANTICO SUDOCCIDENTAL SOUTH-WEST ATLANTIC HYDROGRAPHIC COMMISSION

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8. **Recommendations**. SWAtHC to consider:

- a) the results of the 9th WENDWG meeting held in February 2019, and
- b) the maintenance of ENC Schemes when the INToGIS Phase II is commissioned.

Capacity Building Programme

- 9. 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. 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 Secretariat is continuing its campaign to find additional donor States and funding organizations. In 2018, 81% of the budgeted work program was executed and paid for.
- 10. According to the IHO Secretariat records, Capt Luiz Claudio Fonseca (Brazil) is the SWAtHC CB Coordinator for planning and implementing the regional CB activities
- 11. The SWAtHC MS have benefited from CB activities under the 2018 IHO CB Work Programme (CBWP): MSI Training Course (Niteroi, Brazil 16-18 October), Port and Shallow Water Survey Course (Buenos Aires, Argentina 24-28 September). Additionally, MS participated in activities at the MACHC and SEPRHC.
- 12. Mr Matias COCCARO (Uruguay) attended the Hydrographic Survey Programme (FIG-IHO-ICA Category "B") sponsored by the Republic of Korea at KHOA (12 July 30 November).
- 13. A call for applications was issued in CL 18/2019 for Category "B" Marine Geospatial Information Capacity Building Programme sponsored by the Republic of Korea (29 July 13 December 2019). Member States are invited to provide their nominations by 20 May 2019.
- 14. A call for applications was issued in CL 19/2019 for the Training for Trainers Programme in Basic Hydrography, sponsored by the Republic of Korea (8-19 July 2019). Hydrographic Offices are invited to provide their nominations by 21 May 2019.
- 15. **Recommendation.** SWAtHC members are invited to continue being active for CB activities for short technical courses and long-term education programs.

Crowdsourced Bathymetry

- 16. The Crowdsourced Bathymetry Working Group (CSBWG) was established to provide guidelines on the collection and use of crowdsourced bathymetry. 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 endorsed by the IHO Council (C-2) with the caveat that "This document provides technical guidelines only that in no way supersede or override national or international laws and regulations". Work has commenced on the draft of Edition 2.0.0. Additionally, IRCC10 endorsed the enlargement of the scope of the tasking of the CSBWG, reflected in its ToRs.
- 17. 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 Centers, 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.
- 18. **Recommendation.** SWAtHC members are invited to identify further potential sources of bathymetric measurements and survey data providers to contribute to the DCDB data holdings.



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GEBCO support through Seabed 2030

- 19. 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's 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.
- 20. Seabed 2030 has established a network of four regional centers. Each center 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 center 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.
- 21. **Recommendation**. SWAtHC members are invited to consider continuing engagement with Seabed 2030 project representatives to discuss options for deepened cooperation and support.

IHO GIS and Databases

- 22. 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.
- 23. The country information database has been progressively upgraded to include additional administrative information and facilitate the maintenance of the IHO Yearbook (IHO Publication P-5) and related lists posted on the IHO website. Countries in the SWAtHC Region are invited to review their entry in the Yearbook on an annual basis and provide the IHO Secretariat with the appropriate updates or report no change.
- 24. An Esri-based GIS solution was implemented to develop further the regional information database. This will enable access to various layers of information through the IHO website and through cloud-based online GIS options. The IHO ENC Catalogue and the IHO GIS for Antarctica have been transferred to this new environment.
- 25. Work has continued on developing a GIS database application to support C-55 Status of Hydrographic Surveying and Charting Worldwide. Useful options for visualizing the data in the IHO C-55 GIS are being investigated.
- 26. CBSC16 established a C-55 Review Project Team (C-55RPT) to evaluate the current limitations to input data related to hydrographic survey status in C-55 as they are presently derived in a subjective manner by States; to seek comments and suggestions from Member States; and to develop a proposal to address the above limitations.
- 27. The IHO Secretariat developed an online form to allow Member States to input data to the Yearbook and to C-55. The same system will be used to receive votes via circular letters. IHO CL 20/2019 provides the necessary information:

https://www.iho.int/mtg_docs/circular_letters/english/2019/CL20_2019_EN_v1.pdf



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28. **Recommendation**. Countries in the SWAtHC Region are invited to review their entry in the IHO Yearbook and C-55 and to provide the IHO Secretariat with the appropriate updates or to report no change.

IHO Outreach

World Hydrography Day:

29. The theme for World Hydrography Day 2018 was *Bathymetry - The foundation for sustainable seas, oceans and waterways*. Events and reports in connection with World Hydrography Day 2018 are available in IHO website:

https://www.iho.int/mtg_docs/WHD/2018/WHD_2018.html

30. Taking into account the discussions at the first 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

- 31. As part of the report on the proposed Work Programme 2019 at the 2nd Council, the Secretary-General introduced the priorities 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.
- 32. 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.

International Hydrographic Review (IHR)

- 33. 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. Capt Nickolás Roscher is member of IHR Board representing SWAtHC.
- 34. Papers for consideration for publication in the IHR should be forwarded directly to the editor (ihreview@iho.int, copy to ian.halls1@defence.gov.au). The deadlines are:
 - end of January for the May Edition
 - end of July for the November Edition
- 35. 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

- 36. The Secretariat also works on a digital revamp of the *International Hydrographic Review* (*IHR*). First consultations were held with the 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.



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- 37. Further and more detailed information was presented at and endorsed by the second IHO Council meeting in London in October (Decision C2/46 refers).
- 38. **Recommendations**. SWAtHC Members are invited to submit papers and notes for publication in the IHR.

IHO Centenary Celebrations (IHO-100)

- 39. 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, that was held in London in 1919. 2021 will be the centenary of the establishment of the International Hydrographic Bureau (IHB) in 1921 in Monaco as precursor of the modern IHO.
- 40. 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 is 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.
- 41. 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 13 April 2019,
 - to organize an international Symposium on *A Historical Approach for Measurements and Protection of Oceans and World Waters*, 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, and
 - to prepare, publish and distribute an IHO Prestige Book on 100 Years of International Cooperation in Hydrography.
- 42. 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.

43. Action Requested of SWAtHC:

- a) Note this report,
- b) Consider the recommendations on Charting as presented in Paragraph 8,
- c) Consider the recommendations on Capacity Building in Paragraph 15.
- d) Consider the recommendations on Crowdsourced Bathymetry in Paragraph 18,
- e) Consider the recommendations on Seabed 2030 collaboration in Paragraph 21,
- f) Review entries related to IHO C-55 and P-5 (Yearbook) at least annually, Paragraph 28,



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- g) Consider submitting papers for publication in the International Hydrographic Review Paragraph38, and
- h) Take any other actions as considered appropriate.