

SOUTHERN AFRICAN AND ISLAND HYDROGRAPHIC COMMISSION

19ST MEETING - MAURITIUS, 28-31 AUGUST 2023

Report of the IHO Secretariat

Submitted by:	IHO Secretariat
Executive Summary:	This paper reports on activities of the IHO Secretariat that may impact the work of the Southern African and Islands Hydrographic Commission.

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 SAIHC18 Albania acceded to IHO Convention and the IHO membership now stands at 98. Unfortunately, Serbia and Syria remain suspended from Member States rights.

2. The non-IHO Member States of the SAIHC region are Comoros, Madagascar, Malawi, Namibia and Tanzania. Countries who are Member States of the IMO are encouraged to become IHO members and the IHO respectfully repeats its invitation to those non-IHO Member States to accede to the IHO Convention. 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 recently done towards several non-IHO Member States in other hydrographic regions, and stands ready to pay High Level Visits to those States in the SAIHC region not yet IHO Member States.

3. Recommendations:

3.1 SAIHC is invited to encourage and propose to the IHO Secretariat High Level Visits to those States not yet IHO Member States.

Outcomes of the 6th Meeting of the IHO Council

4. The Council considered the proposed IHO Work Programme and Budget for 2023 and the three-year Work Programme and Budget for the period 2024–2026. It would also identify priorities for the Council over the next three years. The Council endorsed the recommendation by HSSC by which Goal 1 and its Targets in the IHO Strategic Plan should have the highest priority in the 2023–2026 Work Programme. The Council noted the outcome of the 9th session of the IMO NCSR on the revision of MSC.1/Circ.1503/Rev1 – ECDIS Guidance for Good Practice and Revision of MSC.232(82) – ECDIS Performance Standard (IHO CL 31/2022 refers) and took note of the associated commitments made towards the IMO and the IEC in particular (transition period for S-100 ECDIS, to become legal to use after 1 January 2026 and from 1 January 2029, new systems must comply with the new IMO Resolution on ECDIS Performance Standards).

5. C6 noted the recommendations made by HSSC on the automated production of paper charts and confirmed the Decision made at A-2 by which priority is to develop guidelines for the automated production of paper charts meeting S-4 chart minimum content requirements from S-101 ENC data. The Council welcomed the information provided by the Republic of Korea on the S-100 Test-bed Project and agreed that it is a critical component of the Roadmap. The Council invited IHO Member States to participate in this S-100 test-bed project and in addition, to consider whether other criteria should also be considered (expected geographical coverage implementation rate compared to existing S-57 ENCs, distribution and update mechanisms and NPubs coverage, for instance).

6. The Council noted the outcome of the IRCC April 2022 Workshop on the Strategic Performance Indicators, the new TORs of the IBSC and the progress made by IRCC to establish an IHO e-Learning Center. C-6 endorsed the new proposed Capacity Building Strategy, which will be submitted to the 3rd Session of the IHO Assembly for approval, and noted the decrease of Capacity Building fund over the last few years. The Council noted the progress made by IRCC in the development of the methodologies and metrics for SPIs allocated to IRCC and endorsed the proposals (definitions, metrics, action plan...) as reported in IHO CL 23/2022, with particular attention to SPI 1.2.2 - Percentage of navigationally significant areas for which the adequacy of hydrographic knowledge is assessed through the use of appropriate quality indicators (CATZOC) assigned by the Member States.

7. The Council approved the proposed amendment to the S-100 Implementation Roadmap with the updated version 2.0 dated July 2022. Version 3.0 of the Roadmap, to include an additional proposal on the dual fuel Concept for S-100 ECDIS, would appear only after approval by the forthcoming Assembly-3. C6 approved version 1.0 of the Guidelines on the Implementation of the WEND-100 Principles, noting that the efforts on establishing a common global gridding system could not reach consensus and is put on hold. C6 endorsed the Dual Fuel Concept for S-100 ECDIS Executive Summary and the full report, and noted that several Members requested guidance on the best way to prepare the operational implementation phase of S-100 data services within their Regional Hydrographic Commissions.

8. Recommendations:

8.1 SAIHC members are invited to continue on the implementation of the IHO Strategic Plan and support IRCC in identifying measures and values to measure those SPI of regional interest allocated to IRCC, and to consider providing their CATZOC values - through the RENCs - to support the IHO Secretariat in the process of measuring SPI 1.2.2.

8.2 SAIHC members to note the updated version 2.0 of the S-100 Implementation Roadmap, and the version 1.0 of the Guidelines on the Implementation of the WEND-100 Principles, with particular attention to the creation of a new role of S-100 Services Coordinator or the expansion of the role of Regional Chart Coordinator to include S-1xx products.

3rd Session of IHO Assembly

9. The 3rd Session of the Assembly of the International Hydrographic Organization was held at the Grimaldi Forum in Monaco from Tuesday 2 May to Friday 5 May 2023. The session took place as an in-person event which marked the return to the normal practice stipulated in the General Regulations after the conduct of the 2nd Session of the Assembly in 2020 as a remote event due to the limitations induced by the COVID-19 pandemic.

10. The session was attended by just under 300 representatives from 75 of the 98 Member States of the IHO, together with 3 non-Member States. In addition, 28 representatives from observer international, regional or national organizations took part in the discussions. A meeting of the Finance Committee was held prior to the opening of the Assembly on 1 May. Two groups of exhibitions, one illustrating the work of the IHO Member States and another provided by 23 commercial exhibitors, ran from 2 to 5 May.

11. The Assembly examined 15 proposals and several reports tabled by Member States, subordinate organs and the Secretary-General. It agreed on 35 decisions including the approval of the Work Programme and Budget of the Organization for the next three-year period.

12. An important item on the Agenda of the Assembly was the election of the Secretary-General and a Director for the forthcoming period. The elections took place on Friday 5 May: Dr Mathias Jonas (Germany) was re-elected as the Secretary-General for a three-year term and Dr John Nyberg (USA) was elected as a Director for the period 2023-2029. Both will take up their posts on 1 September 2023.

13. In principle, the Assembly agreed to host its fourth session from 21 to 24 April 2026 in Monaco, subject to confirmation in due course by the Secretary-General, in liaison with the Government of the Principality of Monaco.

14. Recommendation:

14.1 SAIHC members are invited to take note of decisions from A-3 in the webpage (<https://iho.int/en/circular-letters-documents-0>).

The Assembly approved the increase of the value of the Member States contribution share by 3% to 4,145.05 Euro (~ 120 Euro per share) in one step taking effect in 2024.

IHO and United Nations Decade of Oceans for Sustainable Development

15. The IHO Secretariat attended the 2nd UN Oceans Conference in Lisbon, 27th June – 1st July 2022 with the principle aim to ensure that seabed mapping and hydrography were appropriately represented and that the IHO's leadership in these domains was duly recognised. The IHO led one side event on Seabed Mapping and Marine Data for Multifunctional Spatial Planning and provided closing remarks for the SB2030 side event, ensuring that the role of hydrography was properly represented and that due credit was attributed to the activities in which we are engaged. It is clear that the essential role that bathymetry plays in underpinning ocean science and related activities is becoming a mainstream concept, and consequentially other stakeholders (often with a more visible presence, larger network but less expertise/authority) are developing their own activities, initiatives and solutions that have the potential to encroach on, or duplicate IHO activity.

Following the Global Ocean Alliance - an international movement to protect 30% of the world's land mass (land and ocean) by 2030S -, S-122 – Marine Protected Areas could have a key role to play in supporting the sustainable use of such areas, as well as providing a global standard for the measurement of progress towards the target.

- In 2016, the Organisation for Economic Co-operation and Development published the seminal report entitled 'The Ocean Economy in 2030'. For the first time, this report explored the growth prospects for the ocean economy, its capacity for future employment creation and innovation, and its role in addressing global challenges. Further, it examined the risks and uncertainties surrounding the future development of ocean industries and the innovations and actions required in science and technology to support their progress. One area that was not explicitly described was the role of seabed mapping data and hydrography in underpinning blue growth and sustainable development. In 2023, the OECD will begin work on the revision of this report entitled 'the Ocean Economy in 2045'. Given the importance placed upon seabed mapping at the conference, the IHO has been asked to consider being the key point of contact for a dedicated section relating to seabed mapping and hydrography.

16. **Recommendation:** SAIHC is invited to take note of the engagement of the IHO Secretariat in the UN initiative and the items for further consideration.

IHO GIS and Databases

17. Work has continued on the IHO internal systems. Especially, two components are to be mentioned:

- IHO Country Information system, and
- IHO Online Form system.

18. The IHO Country Information system has been progressively upgraded to include administrative information and facilitate the maintenance of the IHO publications such as Yearbook (P-5) and Status of Hydrographic Surveying and Charting Worldwide (C-55) posted on the IHO website. The IHO Online Form system has been used since March 2019 and has been widely accepted by the Member States for the Circular Letter responses and the updating of P-5 and C-55 (CL20/2019 and CL03/2020 refers). Countries in the *SAIHC* Region are invited to review their entry in the publications on an annual basis and provide the IHO Secretariat with the appropriate updates through the IHO Online Form system. The status of the data in the IHO Country Information Database concerning the *SAIHC* Member States, including those provided for C-55 is as follows:

Country	P-5 –Yearbook Last update received	C-55 Last update received
Angola	May 2023	September 2022
Australia - Heard I	January 2021	February 2019
Comoros	December 2022	May 2023
France	January 2023	May 2023
India	November 2021	February 2019
Kenya	July 2021	August 2020
Madagascar	August 2019	March 2022
Malawi	August 2019	August 2019
Mauritius	June 2023	August 2022
Mozambique	September 2019	May 2016
Namibia	September 2018	November 2012
Norway - Bouvet Island	February 2020	April 2022
Portugal	November 2022	August 2022
Seychelles	September 2019	August 2020
South Africa	May 2020	August 2022
South Africa - Prince Edward Is.	May 2020	August 2019
United Kingdom - Ascension Island	July 2023	April 2022
United Republic of Tanzania	September 2019	August 2020

19. An Esri-based GIS solution has been implemented for the efficient visualization of geospatial data stored in the Country Information System. This Cloud-based service has enabled access to various layers and functions through the IHO website such as the IHO ENC Catalogue. Currently, six WebGIS applications have been available to the public in this new environment (ENC Coverage Catalogue, IHO Web Catalogue of INT Charts and ENC Schemes, IHO Member States Map, FIG-

IHO-ICA IBSC Recognized Programmes and Schemes, GEOMAC project and the Map regarding National Marine Spatial Data Information (MSDI) Portals).

20. **Recommendation.** *Countries in the SAIHC 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 (CL 20/2019 refers).*

IHO Outreach

21. There was continued increase in reach of IHO digital communications. In 2022, the IHO website had a total of 863,322 page views. The LinkedIn page had 6525 followers in January 2023, and totaled 245,573 post impressions in 2022. The post with the most views was the one on Tsunami Awareness Day in November which had 9173 views. The upwards trend continued on Facebook with a post on the ship Sir Ernst leaving for Antarctica with data loggers getting 8,2K impressions in January 2022. On Twitter, June 2022 had the biggest reach with the tweets around participation in the UN Ocean conference and WHD leading to 13.3 K tweet impressions. However this is down compared to the record of 22.9K in June 2021.

22. There were also several actions to raise awareness about the IHO's work and the importance of hydrography to a broader audience. The Secretariat continued communicating on social media and participated in regional and global initiatives for the ocean. Together with several Member States and partners, it organized a side-event at the UN Ocean Conference in Lisbon and participated in the Seabed 2030 side-event outside the venue. This ensured hydrography was discussed at this global gathering, which was timely as many international organizations and participants mentioned the importance of mapping the ocean.

International Hydrographic Review (IHR)

23. 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.

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

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

25. 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>. In order to increase visibility of the publication, some articles are shared on social media. On LinkedIn for example, the article "Using multibeam bathymetry & sonar imagery to locate shipwrecks in Cartagena de Indias, Colombia" had 6228 impressions.

26. This year, the Review will celebrate its 100th Anniversary.

27. Actions Requested of SAIHC:

- a) Note this report.
- b) Consider the recommendations proposed in this report.
- c) Review entries related to IHO C-55 and P-5 (Yearbook) at least annually.
- d) Consider submitting papers for publication in the International Hydrographic Review.
- e) Take any other actions as considered appropriate.