

**SOUTH-WEST ATLANTIC HYDROGRAPHIC COMMISSION**  
**18<sup>TH</sup> MEETING, 9-10 APRIL 2024, BUENOS AIRES (ARGENTINA)**  
**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 South-West Atlantic Hydrographic Commission.

### Status of Membership of the IHO

1. IHO membership now stands at 99, following the adhesion of Cabo Verde in November 2023 (cfr. IHO CL 39/2023). Unfortunately, Serbia and Syria remain suspended from Member States rights. 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.
2. In the SWAtHC, contacts are being made by the IHO Secretariat with the only two South American States not yet Members of the IHO, Bolivia and Paraguay, for which the situation is as follows:
  - **BOLIVIA:** In September 2022, at the invitation of the Plurinational State of Bolivia, a High Level Visit was conducted by the IHO Director Inter Regional Coordination and Support Programme, during which the Bolivian Authorities (Ministry of Foreign Affairs, Ministry of Defence and Chief of Staff of the Bolivian Navy) showed strong interest in the Plurinational State of Bolivia becoming a member of the IHO. Most recently, in February 2024, at the request of the Director of the Bolivian Hydrographic Service, an official letter signed by the Secretary General of the IHO was sent to the Minister of Foreign Affairs of Bolivia, confirming the full readiness of the IHO Secretariat to support Bolivia in the accession phase and requesting information on the status of the adhesion process.
  - **PARAGUAY:** At the request of the representative of Paraguay to the IMO and the Embassy of Paraguay in France, a virtual meeting was held on 28 February 2024 between the IHO Secretariat and representatives of the Ministry of Foreign Affairs, the Embassy of Paraguay in France and the Armada of Paraguay, to initiate the process of Paraguay's adhesion to the IHO. Following the meeting and at the request of the Paraguayan Authorities, an official Letter signed by the Secretary General of the IHO was sent to the Dirección de Cuenca del Plata y Navegación Fluvial de la Cancillería - Ministerio de Relaciones Exteriores del Paraguay with all the necessary information for the IHO accession process.
3. **Recommendations:** *SWAtHC is invited to support the process of IHO adhesion of Bolivia and Paraguay.*

### Decisions of the 3<sup>rd</sup> Session of the IHO Assembly of interest of SWAtHC

4. **Decision 8:** The Assembly agreed on the continuation of conduct of the annual Work Programmes on the basis of the Strategic Plan in place for 2021 – 2026 and directed the Council accordingly. Approved that Goal 1 of the IHO Strategic Plan and its targets shall have the highest priority in the implementation of the 2024–2026 Work Programme; directed IRCC to provide guidance to the MSDI Working Group on the implementation of Goal 2/Target 2.1 through supporting national and regional MSDIWG efforts via RHCs and the continued provision of global thematic layers by means of the existing IHO GIS infrastructure (trusted source, standardized, interoperable); tasked the Secretariat, assisted by the HSSC and IRCC chairs, to continue to measure the effectiveness and the efficiency of the three Work Programmes implementation by means of the Strategic Performance Indicators (SPI) as endorsed by the Council; and tasked the Council with the development of the revised Strategic Plan to be put in place for 2027 – 2032 in compliance with the Planning Cycle and

to submit the result for adoption by A-4 in 2026.

5. Decision 9: The Assembly directed the IHO Secretariat to implement the gender-inclusive language in M-1 as a first step and invited all IHO Committees, Sub-Committees, Working Groups, Project Teams and Regional Hydrographic Commissions to review their TORs and ROPs in application of the new IHO Resolution.

6. Decision 13: The Assembly took note and approved the fundamental strategic change introduced by the S-100 framework and approved the Dual Fuel Concept for S-100 ECDIS.

7. Decision 14: The Assembly recognized the need to establish the S-100 Infra Center and approved the foundation of a new Project Team under HSSC with a three-year work plan including the establishment of the S-100 Infra Center and to prepare for the actual implementation period with consideration of the possible location of the Center; and tasked Council to report to the 4th IHO Assembly the progress of its three year operation including the establishment of the S-100 Infra Center.

8. Decision 19: The Assembly approved the proposed IHO Resolution on the recognition of the Southern Ocean; took note of the consequences on the limits of some global sea areas as a result of recognition of the Southern Ocean; and endorsed the fact that this new Resolution is without prejudice to or limitation of the views of the IHO, any other international body or any IHO.

9. Decision 20: The Assembly recognized the important global maritime issues facing the hydrographic community worldwide and that addressing these issues will require expanded global hydrographic capacity; approved the proposal to establish an ad hoc Project Team under IRCC to explore the possible establishment of reliable alternative funding for activities including capacity building and GEBCO; and authorized Council via IRCC to review progress reports from the Project Team at least annually and provide guidance to the Project Team in preparation to report out to 4<sup>th</sup> Assembly (A4).

10. Decision 27: 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.

### **Outcomes of the 7th Meeting of the IHO Council**

11. The following are the main outcomes of the 7<sup>th</sup> Meeting of the IHO Council:

- S-100 Infrastructure and Standards Development (C7/09): Set up a sustainable technical and administrative infrastructure around S-100 including standards development to meet the S-100 timeline.
- Champion of Hydrography Award (C7/16): IHO CL 6/2024 - Call for the approval of the IHO Resolution on the Proposed *Ex Abyssis ad Alta – IHO Award for Hydrographic Excellence*.
- Project Team on Fund Generation of IHO' Project Initiatives under the IRCC (C7/22): CL 42/2023 and CL 16/2024 announced the creation of the Project Team and its composition respectfully (the first virtual meeting will be held in April 2024).
- Gender Balance in Hydrography (C7/24): A follow-up to the successful Empowering Women in Hydrography Project.
- IRCC Workshops on IBSC and CSBWG (C7/25): So far IHO CL 14/2024 - IRCC Workshop on CSB on 26 April 2024, IHO Secretariat Hybrid Event.
- Update on the Joint IHO-Singapore Innovation and Technology Laboratory (C7/29): Projects on S-131 Marine Harbour Infrastructure Database (MHID) - Development of S-57 to S-101 Conversion Guidance Document - Creation and Test-Bedding of ECDIS capable of displaying S-102 (Phase 1) and S104 (Phase 2) on S-101 ENCs.
- Strategic Plan 2021-2026 (C7/36 – C7/38): The current structure is still relevant at conceptual level (vision, goals, etc.), and agreed that the objective for the next SP 2027-2032 should be limited to a revision of the current SP, welcomed the offer from the Council

Vice-Chair, to lead a correspondence group on the ways and means to prepare the next IHO Strategic Plan 2027-2032.

- IHO Resolution Guidelines for Making IHO Events More Inclusive (C7/40): an initial proposal for an *IHO Resolution Guidelines for Making IHO Events More Inclusive* (title to be confirmed) to be prepared by an ad hoc drafting group (AU, CL, FJ, NZ, SG, GB, US...).
- S-122 – Marine Protected Areas (MPA) (C7/44): The IHO Secretariat to establish liaison with relevant data providers of MPAs and IRCC through the MSDIWG to establish a pilot project for the High Sea and MPAs adopted by IMO, to demonstrate the benefits of S-122 for non-navigation purposes. As first consequence of C7/44, at the latest MSDIWG meeting held in March, Protected Seas led a discussion on Marine Protected Areas and the work Protected Seas is doing to present their MPA data in S-122. The discussion continued around MPA (S-122) and how the WG will contribute to the implementation of the standard. They noted the evolving IHO direction to the MSDIWG regarding S-122, and have made the decision to track progress, provide guidance, and possibly present data that Protected Seas will offer in the S-122 standard.

## 12. Recommendations:

- 12.1 *SWAtHC Members are encouraged to support the continuation of the EWH project through financial and / or in-kind support.*
- 12.2 *SWAtHC is requested to provide the IRCC Chair with their contribution to continue on the measurement of those SPI of regional interest allocated to IRCC.*
- 12.3 *SWAtHC Chair is invited to conduct a survey within the SWAtHC on hosting and attending meetings in the four different modalities (in-person, in-person with live streaming, hybrid, or full VTC).*
- 12.4 *SWAtHC is invited to review the statutes implementing the gender-inclusive language as mentioned in Decision 9b of the 3<sup>rd</sup> Session of the IHO Assembly.*

## Capacity Building Programme

13. The CBSC 21 decided that the funded activities which were not executed in the 2023 CBWP could be carried over to the 2024 CBWP. The 2024 CBWP has 293,265 euros for non-earmarked projects and 790,223 € for earmarked projects. The total of funds available for 2024 is 1,083,488 €. In 2024 the CBWP will return to the pre-COVID practice of not carrying over incomplete activities from year-to-year. Significant increment of the funds for non-earmarked activities was received from Republic of Korea in 2024 and for 2025 (50% more than in 2024).

14. The 3rd Session of the Assembly (A- 3 Decision 20) approved the proposal to establish an *ad hoc* Project Team under IRCC to explore the possible establishment of reliable alternative funding for activities, including human and technical capacity building and GEBCO. The 7th Meeting of the IHO Council (Decision C7/22) tasked the IHO Secretariat to issue a CL on the establishment of an IHO Fund Generation Project Team (ToRs available under the IRCC webpage). CL 42/2023 and CL 16/2024 announced the creation of the Project Team and its composition respectfully (the first virtual meeting will be held in April 2024).

15. The IHO expects increased pressure on CB finances in 2024 with the expected reduction of non-earmarked funds, so it will be increasingly important to share resources across projects along with investing in remote activities, including across regions. CBSC21 evaluated and ranked submissions for 2024 and has posted the results on the Capacity Building and Technical Cooperation webpage on the IHO website. The focus is on the S-100 Implementation Roadmap and important support will be received from both RENCs. SWAtHC has the following activities planned for 2024:

- P-09 Seminar on Raising Awareness of Hydrography (funded)
- P-17 MBES Data Processing Course (not funded yet)
- P-22 MSDI and Data Assessment Workshop (not funded yet)
- P-25 Basic ENC production (S-100) Course (not funded yet)

16. In 2024, the following courses sponsored by the IHO and ROK and Nippon Foundation have been approved:
- CAT A courses at USM sponsored by ROK (2 selected for 11th course 2023/2024; 2 selected for 12th course 2024/2025 starting in August 2024);
  - Cat B course in Hydrography from 17 June to 1 November 2024 at KHOA-ROK (10 participants selected with IHO CL 15/2024);
  - GEOMAC Cat B course in 2024 sponsored by Nippon Foundation (7 participants selected with IHO CL 17/2024).
17. The C-55 PT progressed the proposal on the future of the IHO C-55 publication, highlighting that the C-55 PT developed a solution for survey status in countries based on CATZOC provided via the RENCs directly to the IHO Secretariat. IRCC tasked CBSC to liaise with the RENCs and the IHO Secretariat to investigate Member State contributions of CATZOC data to the IHO Secretariat via the RENCs and to proceed with the proposed solution as given to IRCC11 (to populate C-55 Status of Survey for Safety of Navigation purpose).

#### Empowering Women in Hydrography (EWH)

18. CANADA and IHO signed an EWH Agreement available at <https://iho.int/en/mou-agreements> . The Agreement secured funding for the period 2021-2023 (until March 2024), and describes a series of activities and initiatives which will enable more women to participate equitably in the field of hydrography. A webpage (<https://iho.int/en/basic-cb-sc-ewh> ) has been set up under the Capacity Building Sub-Committee (CBSC) for this project. The third year of EWH has demonstrated success in several areas: a dedicated event prior to the start of A-3, with sponsored participants from around the world, three candidates selected for the 2023 at-sea experience onboard NOAA ships, one candidate selected for a knowledgebase secondment at IC-ENC, a new mentorship programme, continued interviews of women engaged in hydrography and related sciences, and the presence of an EWH Assistant at the IHO Secretariat.

19. In 2024, thanks to the generous support from Belgium, Denmark, France, Norway and the U.S.A., IHO CLs 40/2023 and 41/2023 called for applications to hydrographic training and hydrographic and oceanographic surveys provided by SHOM (France) and with IHO CL 11/2024 five women candidates were selected; IHO CL 9/2024 announced that three opportunities are projected to be available in 2024 associated with the EWH project for an at-sea experience on a NOAA hydrographic ship.

20. Thanks to the Letter of Intent signed between the IHO and the WMU (World Maritime University of IMO), numerous activities on Gender Equality (workshop, webinars, etc.) and the participation at the UN Ocean Decade Conference in Barcelona in April 2024 with a joint WMU-IHO Satellite Event “177. *The People We Need for the Ocean We Want: Achieving Gender Equality for the Ocean Decade*“ were secured.

#### IHO e-learning Center

21. The IHO e-learning center, established by KHOA, is accessible at <https://elearning.iho.int> , or via the main page of the IHO website. An e-Learning Centre Project Team completed guidelines for the proposed composition of a Steering Committee. The CBSC endorsed the guidelines and IRCC approved them. With IHO CL 24/2023 the e-Learning Centre Steering Committee was established in line with the indications provided in the guidelines.

22. The first meeting of the Steering Committee was held on 25 September 2023 by VTC. The need to identify or find a way to fulfil the role of the General Manager (GM) was recognized as a priority. The Centre will be implemented in phases with phase 1 focusing on a catalogue of existing eLearning Material. In future phases the appropriate Working Groups and Hydrographic Offices should be approached to review and support material submitted.

## 23. Recommendations:

- 23.1 SWAtHC members are invited to continue following and evaluating the possibility to contribute to the CB Programme, looking forward to implementing also an inter-regional approach.
- 23.2 SWAtHC members are invited to participate at the EWH project and provide proposals via the specific webpage (<https://iho.int/en/basic-cb-sc-ewh>) and continue disseminating the call for Mentors and Mentees of the EWH Mentorship Programme (IHO CL 46/2022).
- 23.3 SWAtHC members are invited to provide contributions of the IHO e-Learning Center at KHOA.

## Maritime Safety Information Services

24. Work by the International Maritime Organization (IMO) on the modernization of the Communications and Global Maritime Distress and Safety System (GMDSS) continues with the ongoing review and updating of the SOLAS chapters III and IV and on the related and consequential amendments to existing instruments. The consequential changes as a result of the recognition of the Iridium SafetyCast service as a recognised mobile satellite service (RMSS) provider in the GMDSS continue to be implemented. The Iridium SafetyCast service became SOLAS carriage compliant from 1 January 2020. As a key outcome of MSC105 was that the use of all Recognised Mobile Satellite Services (RMSS) is now mandatory. The IMO made it clear that if any member state was experiencing issues with the implementation of SafetyCast, regardless of the nature of the issue, they should contact the IMO to discuss what support could be provided.

25. WWNWS provided feedback on IHO SPI 3.1.1 (target 90%) assigned to WWNWS. Overall, for 2023, WWNWS assessed Coastal States MSI capacity to be 87%. The SPI is measured yearly, based on the navigational warnings issued and on the MSI support provided by NAVAREAs. WWNWS is working in cooperation with CBSC on a C-55 GIS project, considering the States having MSI capacity and meeting the MSI SPI, and those not having such capacity and not meeting the MSI SPI. The presented demo on the C-55 GIS project will be evaluated to be incorporated into the INTToGIS III. On Iridium SafetyCast Implementation, WWNWS agreed that the use of all IMO RMSSs should be mandatory, showing those NAVAREAs already fully implementing the Iridium SafetyCast system, as well as those still in trial and those that have not yet implemented the system. Two courses on MSI were conducted in 2022.

26. S-124, Edition 1.0.0 is ready for submission for approval. NCSR10 approved the joint IMO/IHO/WMO Manual on Maritime Safety Information. IRCC recommended RHCs to encourage relevant Member States to report to the IMO Secretariat and the Chair of the EGC Coordinating Panel on the progress and status of implementation of newly recognized mobile satellite services by MSI providers. It has to be noted that MSI providers, should they implement Iridium SafetyCast services, are compelled to bear the burden of all additional costs, as a consequence of the approval by IMO Member States of the Iridium SafetyCast as an RMSS. Good progress has been made with implementation with a number of NAVAREAs due to become operational in 2022-2023, with more entering the formal testing phase. However, there is still a number of NAVAREAs that need to commit to implementation before the service can be declared fully operational. This causes concerns for Coastal States.

## 27. Recommendations:

*The SWAtHC Chair is requested to encourage all Commission's members to:*

- 27.1 *Establish and maintain effective communications with the relevant NAV and MET Area Coordinators to ensure the timely provision of MSI.*
- 27.2 *Use and follow the guidance provided in S-53 – Joint IMO/IHO/WMO Manual on Maritime Safety Information – to ensure the necessary facilities and capabilities are provided and maintained for the gathering and communication of MSI within their area of national responsibility.*
- 27.3 *Implement the Iridium SafetyCast services, as a consequence of the approval by IMO Member States of the Iridium SafetyCast as an RMSS.*

## **Crowd-Sourced Bathymetry, GEBCO and Seabed2030**

28. Following the publication of B-12 Ed 3.0.0, CSBWG focused on a critical review of the group's operating mandate, as set out in the ToRs and RoPs. The new version of CSBWG ToR was approved by IRCC. CSB has reached a level of maturity and is picking up momentum rapidly, assisting in a change in the way many Member States view CSB. CSB is working on designing a work plan and determining their direction forward, reviewing the evidence, working on the strategy and agreeing with the outcome. An important point is to investigate and promote ways to increase data contributions and incentives to take active part in the CSB initiative, also investigating ways to foster and facilitate data providers, increase data contributors and identify incentives on how and why mariners should become involved.

29. 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 34 already available at the link: [https://iho.int/uploads/user/Inter-Regional%20Coordination/CSBWG/MISC/B-12\\_2023\\_EN\\_Acceptance\\_of\\_CSB\\_Data\\_in\\_NWJ\\_v7.0.pdf](https://iho.int/uploads/user/Inter-Regional%20Coordination/CSBWG/MISC/B-12_2023_EN_Acceptance_of_CSB_Data_in_NWJ_v7.0.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.

30. The IHO Council noted the information from IRCC to organize a workshop by the first semester 2024 on the benefit of CSB and how to expand data contribution. The CSBWG Chair, in consultation with the IRCC Chair and IHO Secretariat, decided to schedule a hybrid workshop on the subject on 26 April 2024. The workshop and the respective agenda were announced with IHO CL 14/2024. The Workshop will present an overview of activities, legal considerations and experiences from the hydrographic community on CSB as a collaborative approach to gather and share depth data.

31. A CSB Pointstore Dashboard is under development and the DCDB is formatted into a database schema and will then go through a data ingest pipeline to get archived and published. DCDB will continue to support the GEBCO Gazetteer and KHOA Beta-Gazetteer interoperation, developing a modern user interface. DCDB reported on SPIs 3.2.1 and 3.2.2 in a way that allows better understanding on the evolution on the amount of data and number of contributors to DCDB who are not Hydrographic Offices. For the next reports, DCDB would cooperate with RHCs to produce annual regional breakdowns of data holdings as part of SPI reporting.

32. The GEBCO Guiding Committee (GGC) has been working on the celebrations of GEBCO 120<sup>th</sup> years of ocean discovery, a new GEBCO strategy, a GEBCO Code of Conduct, a GEBCO Governance review, including the GEBCO organogram with all the relations codified and the next steps for the approval of the new GEBCO governance. The high activity and intense cooperation with Seabed2030 was highlighted. A new GEBCO SubCommittee on Education and Training was established. Celebrations of GEBCO 120<sup>th</sup> anniversary were held in Monaco during the 3<sup>rd</sup> Session of the IHO Assembly in May 2023, in Paris during the IOC General Assembly in June 2023, and at the *Maps the Gaps Symposium* held in Monaco in November 2023.

33. With IHO CL 12/2024 (expiration date 14 April 2024) – and with an IOC CL within the IOC community as well – the IHO advised Member States that nominations are being sought for the 21<sup>st</sup> 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 21<sup>st</sup> course will begin in late August 2024 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, GGC38 decided to establish a new Sub-Committee on Education and Training (SCET), now operational.

34. 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 24.9%, as announced by H.S.H. Albert II - Prince sovereign of the Principality of Monaco at the opening ceremony of the 3<sup>rd</sup> Session of the IHO Assembly on 2<sup>nd</sup> May 2023. 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.

35. Nippon Foundation GEBCO-Seabed 2030 project signed many 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. Data contributions increased from the previous year and, in addition to the regional programmes in support of IHO's Crowdsourced Bathymetry (CSB) initiative, it is seeing increasing interest across a diverse community of owners and operators of super yachts and small vessels who wish to help gather new depth information and support the harvesting of this bathymetry. New Trusted Nodes were established with the invaluable assistance of DCDB and CSB Working Group.

#### 36. Recommendations:

*SWAtHC members are invited to:*

36.1 Consider the impacts of the increasing global societal and United Nations (UN) driven need to complete the picture of the seafloor as well as the potential benefits to individual coastal States.

36.2 Make data freely available for inclusion in the DCDB and the widest possible use, in accordance with IHO Resolution 1/2017.

36.3 Consider to participate at IRCC workshop on CSB as announced with IHO CL 14/2024.

#### IHO and United Nations Decade of Oceans for Sustainable Development

37. GOAL 3 confirms the IHO's ambition to help facilitate a paradigm shift in the design and delivery of qualitative and quantitative ocean knowledge to inform solutions that will contribute to the 2030 Agenda for Sustainable Development, whilst the IHO's ambition to be an effective and recognized contributor to the major Ocean related challenges identified by the international community. The IHO Secretariat, for its part, is moving in line with the aforementioned GOAL 3, reinforcing and expanding cooperation with International Organizations and participation in those events and initiatives closely related to the knowledge and the sustainable use of the Ocean. In fact, in accordance with the *Decade Challenge nr.8 – Create a digital representation of the ocean*, IHO is promoting the essential role of bathymetry in underpinning ocean science and related activities.

38. Within the framework of the UN Ocean Decade, significant attention is being paid to the importance of bathymetry, in addition to that range of ocean parameters such as temperature and salinity. The Global Ocean Observing System (GOOS) steering committee has identified a number of Essential Ocean Variables (EOVs), suggesting that depth could be added to such list, with the IHO and IOC as leads under the auspices of the General Bathymetric Charts of the Oceans (GEBCO). In addition, the IHO and the OECD (Organization for Economic Co-operation and Development), with input from a broad range of stakeholders, have been undertaking a joint project to explore and identify the linkages between seafloor mapping, the ocean economy and ocean health and an IHO-OECD Workshop held in November 2023 in Monaco. The joint project has also the aim to discuss the benefits of increased investment in ocean mapping and better ocean knowledge. The initiative will bring to a dedicated report from IHO and OECD work on seafloor mapping and the ocean economy, as well as a key step in the OECD's project to produce an updated Ocean Economy in 2045 report ahead of the 2025 UN Ocean Conference, in order to directly support the aims and objectives of the Ocean Decade, as well as examine what a sustainable framework for global seabed mapping in the future would require. That will be preceded by the IHO's participation in the UN Ocean Decade Conference in Barcelona in April 2024 with two satellite events in cooperation respectively with the OECD, IMO's WMU (World Maritime University), the Nippon Foundation GEBCO-Seabed2030 project and other partners.

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

**Technical Program and S-100 Implementation**

40. As presented in CL 43/2023, the Hydrographic Services and Standards Committee, S-100 Working Group put forth a 2024 timeline for advancing Phase 1 / Route Monitoring product specifications. In order to meet IHO and IMO expectations for 2024, the HSSC intends to adhere to the following schedule:

TASK	IHO CL issue date	MS Response due
S-100 Edition 5.2.0	January 2024	May 2024
S-100 Phase 1 Endorsement	October 2024	December 2024

41. S-100 Ed. 5.2.0 is under approval with the IHO CL 18/2024.

42. The IHO Secretariat will update the Maritime Safety Committee 108th session on the progress on the development and implementation S-100 in future S-100 ECDIS in accordance with resolution MSC.530(106).

43. WENDWG highlighted the importance of defining a S-100 capabilities-based approach at regional level and for the WENWG to provide subsequent guidelines through the IRCC to the S-100 Regional Coordinators for a timely and harmonized implementation of the S-100 Roadmap. The RENCs, which maintain the S-57 ENC's Data Flow Diagram from Producers to End-Users on an annual basis, confirmed that they had started to design the much more complex description of the diagram applicable to ENDS (Electronic Navigation Data Services) in the S-100 eco-system

44. From 2025 onwards, there is the need to prepare the IHO Reports to the IMO, the expected coverage of the full Phase I spectrum of S-100 based products in January 2026 and onwards, including S-101. INTogIS III remains the one-stop-shop platform to support the RHCs and give a worldwide vision of the S-100 plans and production. The Republic of Korea confirmed its intention to pursue this development.

45. **Recommendation:** SWAtHC is kindly requested to monitor IHO Circular Letter distribution and vote accordingly at their earliest convenience.

**IHO GIS and Databases**

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

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

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 SWAtHC 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 SWAtHC Member States and one Observer, including those provided for C-55 is as follows:



Country	P-5 –Yearbook Last update received	C-55 Last update received
Argentina	July 2022	March 2024
Brazil	July 2023	May 2023
Uruguay	April 2020	December 2003
Paraguay	January 2024	March 2023
Bolivia	-	May 2019

47. 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).

48. **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 (CL 20/2019 refers).*

## IHO Outreach

49. The IHO continues its efforts in public relations and outreach, increasing its visibility via IHO website and social media. The IHO website had a total of 921,575 views in this calendar year 2023. The LinkedIn page grew to 8,821 followers in December and reached total post impressions of 322,413.

50. There have been also several actions to raise awareness about the IHO’s work and the importance of hydrography to a broader audience. The Secretariat has continued communicating on social media and participated in regional and global initiatives for the ocean.

### World Hydrography Day

51. With IHO CL 35/2023, the following theme for WHD 2024 was proposed for the Members States’ approval:

*“Hydrographic Information -Enhancing Safety and Efficiency in Marine Activities”*

This theme is proposed to highlight that - as per Decision 8 of the 3<sup>rd</sup> Session of the IHO Assembly in May 2023 - Goal Number 1 of the Strategic Plan and its targets shall have the highest priority in the implementation of the 2024–2026 Work Programme, which means priority in application of material and human resources, liaison with public sector and industry partners, promotion of concerted regional approaches including increased collaboration with the RENCs, and support of test beds delivering best practice examples for the production, maintenance and distribution of all prioritized S-100 derivatives. The Secretariat would welcome any comments and suggestions aimed at improving the impact and the organization of annual WHD celebrations.

### International Hydrographic Review (IHR)

52. 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. Recently Dr Westfeld has been confirmed for another two year term as IHR editor.

53. 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.

54. At the 3<sup>rd</sup> Session of the IHO Assembly, the Review celebrated its 100<sup>th</sup> Anniversary with an IHR editor's report on the history, the achievements and evolution of the Review. The IHR May 2023 nr.29 issue was the jubilee issue and it was delivered to the Assembly's delegates.

55. **Actions Requested of SWAtHC:**

- a) Note this report
- b) Consider the recommendations proposed in this Report
- f) Take any other actions as considered appropriate.