

19th Meeting of the South West Atlantic Hydrographic Commission (SWAtHC19), Niterói, Brazil - 24 – 26 March 2025

Contribution to the IHO Work Programme 2025

Task 3.2.1.13

SWAtHC - South West Atlantic Hydrographic Commission.

High level summary

- Brazilian-sponsored S-100 Workshop focused on the production of S-100 Phase 1 products in real-time (from the AUV drone survey to the production of S-102 Bathymetry layer);
- In line with the WEND-100 principles, approval of an S-100 Implementation Plan at regional level, for a coordinated production of S-100 Phase 1 products at national level;
- Involvement of all regional Stakeholders (Governments, Academia, Institutions, Maritime Community) in the collection of seabed data to contribute to IHO DCDB, GEBCO and Seabed2030;
- Regional recognition of the importance of *Inland Waters Navigation*, for inclusion in the new IHO Strategic Plan 2027-2032 as a specific Target within GOAL 1;
- Initiation of coordinated actions between Brazil (NAVAREA V) and Argentina (NAVAREA VI) to initiate the transmission of MSI by Iridium SafetyCast;
- Bolivia's intention to manage the procedures before the competent authorities for the accession to the IHO through its national Hydrographic Office (SNHN).

Details:



AUV survey and production of S-102 Bathymetry layer

On 24th March an S-100 Workshop sponsored by Brazil was held at the Directorate of Hydrography and Navigation of the Brazilian Navy (DHN) in favour of the South West Atlantic region's members. 36 attendees from SWAtHC's states participated in person and remotely to the Workshop. Themes related to Digital Maritime Services Development, Hydrographic Science Education, High technology survey equipment and sensors, Software solutions for the development and production of S-100 Phase 1 products, the status of the art of S-100 products and related testbeds for their implementation were presented. A special focus on the execution of a hydrographic survey by means of an AUV and the real-time restitution of the seabed detected according to the new S-102 – Bathymetry product was provided by the representatives of the Industry, highlighting the benefits in terms of low environmental impact and cost-optimization deriving from the use of uncrewed vehicles and automated processing systems.



Heads of delegation of BR, AR, SP and IHO Secretariat met with Director General Navigation of the Brazilian Navy onboard the Brazilian Navy Survey Ship VITAL DE OLIVEIRA

On 24th March, the heads of delegation of Brazil, Argentina, Spain and IHO Secretariat met Vice Almirante de Esquadra Sílvio Luís dos Santos – Director General Navigation of the Brazilian Navy onboard the Brazilian Navy Survey Ship VITAL DE OLIVEIRA. He confirmed Brazil's attention to issues related to hydrography and nautical cartography, assuring the Brazilian Navy's commitment to continue with investments to modernize such sectors starting with the education and training.

related to hydrography and nautical cartography, assuring the Brazilian Navy's commitment to continue with investments to modernize such sectors starting with the education and training.

IHO Director visits the “Centro de Instrucao e Adestramento Almirante Radler de Aquino”

On 25th March, the IHO Director Luigi Sinapi, accompanied by Vice Admiral Marco Antonio Linhares Soares - Director of the Directorate of Hydrography and Navigation of the Brazilian Navy and the participants of the SWAtHC19, visited the *Centro de Instrucao e Adestramento Almirante Radler de Aquino*, addressing the students of the *Curso em Hidrografia para Oficiais Category A* about the importance of education and training in the fields of Hydrography, emphasizing the future of Nautical Cartography and Marine Science.



The 19th Meeting of South West Atlantic Hydrographic Commission – SWAtHC25 took place in the Centro de Hidrografia da Marina Brasileira in Niteroi, Brazil, in the days 25-26 March, hosted by the Directorate of Hydrography and Navigation of the Brazilian Navy. 34 attendees in person and virtually from the 3 SWAtHC Member States (Argentina, Brazil and Uruguay), 3 SWAtHC Observer States (Bolivia, Portugal and Spain) and Industry participated in the meeting. Only Paraguay – Associate Member of SWAtHC – didn't participate in the meeting. The IHO Secretariat was represented by Director Luigi Sinapi.

SWAtHC Chair Vice Admiral Marco Antonio Linhares Soares - Director of the Directorate of Hydrography and Navigation of the Brazilian Navy opened the meeting, remarking the importance of improving cooperation and safety of navigation in the area and progressing in a smooth and harmonious implementation of S-100 amongst the States of the Region.

During the opening session and presentation of the IHO Secretariat Report, IHO Director Sinapi highlighted the importance of SWAtHC19 as an opportunity to discuss the deployment on board SOLAS vessels of the first S-100 products belonging to Phase 1, the approval of the new IHO Strategic Plan, which will take place at the 4th Session of the IHO Assembly scheduled for April 2026, the United Nations Ocean Conference (UNOC3) to be held in June 2025 in Nice, France, where the IHO will be present at several events, and finally the IHO's commitment to expand its membership, in a continent such as Latin America which has all its coastal states as members of the Organization.



Bolivia inland waters' surveys executed in the period 2023-2024

The following main topics were discussed alongside the presentation of the National reports from the 3 Members States and 3 Observers States to SWAtHC:

- Initiation of the use of the Iridium SafetyCast System for the dissemination of Maritime Safety Information (MSI) in NAVAREA V and VI;
- Need to prioritize human resources within the Hydrographic Offices for the implementation of the new S-100 products belonging to Phase 1;
- Uruguay acquired a new Scientific Survey Vessel from NOAA to carry out surveys on the continental shelf;
- Importance of navigation safety and hydrography in inland navigable waters;
- Bolivia presented on the 1. 200 kilometer surveys performed in the last 2 year (2023 and 2024) hydrographic activity, highlighting the importance that in-land navigation has on the economy and the sustainable development of their Country and all Latin America's countries affected by internal navigable waters in the Amazons and Rio de La Plata basins;
- Implementation of the first Regional Training Centre for the validation of ENC's within the Directorate of Hydrography and Navigation of the Brazilian Navy;
- Start of the production of the first S-101 ENC's from 2025-2026 in the three SWAtHC members' HO's, in accordance with the regional S-100 Implementation Plan, fully aligned with the IHO S-100 Roadmap;
- Spain, as NAVAREA III, developed a system for the automation of the MSI dissemination via the available channels (NAVTEX and Iridium SafetyCast) to avoid human errors;
- Portugal reported about the progress made in mapping proper EEZ (actually at 66%) and Continental shelf to get 100% coverage by 2030.

Regional Capacity Building initiatives conducted, underway and planned were described, highlighting the importance to invest on S-100 implementation, MSI courses, on-line courses in the SWAt region, underlying the benefits of an inter-regional approach to Capacity Building – actually concerning 4 RHCs (SWAtHC, SEPRHC, MACHC and EAHC) –, as multiplier of activities for the concerned IHO Member States.

The CSB/GEBCO/Seabed2030 coordinator for the SWAtHC region presented on the contribution provided by SWAtHC to DCDB, GEBCO and Seabed2030, highlighting the involvement of the local Governments, Academia, Institutions and Merchant Navies in providing seabed data from ENC, Multibeam and Single beam echosounders, Seismic devices, etc. to populate the GEBCO grid and increase the percentage of global seafloor mapped.

Finally, Brazil presented on the principles activities and achievements of the Inland ENC harmonization Group (IEHG), highlighting that S-401 (Inland ENC) is under development and the related edition 2.0.0 will be ready for approval in October 2026. On this regard, a paper will be submitted to the HSSC to verify the possibility of that ECDIS S-100 supports S-401 and then to create the S-403 to address interoperability of its own products. In case that is not possible, S-401 will be integrated with the S-98 in the future.

Photo



SWAtHC19 participants – Niteroi, Brazil

Upcoming meetings:

Next meeting will be held in Uruguay in the period 9-13 March 2026 (venue TBD).