

**15th MEETING OF THE IHO INTER-REGIONAL COORDINATING COMMITTEE
(IHO IRCC15)
Tokyo, Japan, 12-14 June 2023**

SOUTH WEST ATLANTIC HYDROGRAPHIC COMMISSION

SWAtHC Report to IRCC15

1. Chair: Rear Admiral Carlos ANDRÉ Coronha MACEDO, Brazil, since April 2023
Commodore Valentín Alejandro SANZ-RODRÍGUEZ, Argentina, from October 2020 until April 2023

Vice-Chair: Captain José DOMÍNGUEZ, Uruguay, since April 2023
Vice Admiral Renato ARRUDA, Brazil, from December 2021 to April 2023
Vice Admiral Edgar BARBOSA, Brazil, from October 2020 until December 2021

2. Membership

Members: Argentina, Brazil, Uruguay

Associate Member: Paraguay

Observer Countries: Bolivia, Portugal, Spain

3. Meetings

Following SWAtHC meetings have taken place:

14th SWAtHC Meeting	Niterói, Brazil	9 - 10 March 2020
15th SWAtHC Meeting	VTC (Argentina)	31 August - 1 September 2021
16th SWAtHC Meeting	Hybrid, Montevideo, Uruguay	30 - 31 August 2022
17th SWAtHC Meeting	VTC (Argentina)	14 - 15 March 2023

Next meeting: 18th SWAtHC Meeting will take place in March 2024 in Buenos Aires, Argentina.

4. Current SWAtHC Working Groups

- a) Planning Committee
- b) Working Group for individual certification for hydrographers and nautical cartographers

5. Status of IRCC actions and recommendations to RHCs

a) Status of actions (relevant for the SWAtHC):

N.	Action	Status
1	IRCC invited RHCs and Subordinate bodies to provide comments and inputs on the governance document on Dual Fuel Concept for S-100 ECDIS, intersessionally. (Permanent)	Noted.

b) Status of recommendations (relevant for the SWAtHC):

N.	Recommendation	Status
1	RHC are encouraged to increase the collaboration with the Data Quality WG and to try to find candidates for the vacancy of the Chair and Secretary positions.	Noted.
2	RHC to discuss how HO's can assume a geo-coordinating role to help ensure provision of data on a regional level.	Noted.
4	RHC to start or proceed with the debate on how the climate change related activities can be further investigated and what can be the role of the IHO.	Noted.
5	RHC 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.	Dependent on IMO decision about the implementation of newly recognized mobile satellite services by MSI providers.
6	RHCs to establish an S-100 Coordinator role.	Completed.
7	RHCs to apply Action WENDWG12/33 (WEND-100 Product Matrix will be made available on the WENDWG Repository webpage when finalized).	Completed.
8	RHC to encourage Member States and submitting institutions to engage with the IHO Secretariat early in the process of them preparing submissions for programme recognition.	Completed.
9	RHC encourage Member States and submitting institutions to consult the Guidelines, the FAQs and the White Paper (IHR-Nov-2017 – Article: Maintaining the Standards of Competence for Hydrographic Surveyors and Nautical Cartographers) early in the process of preparing submissions for programme recognition.	Completed.
10	RHC to encourage all Member States to respond to IHO CL 21/2020 and, if possible, offer a positive response, even if qualified, to enable provision of CSB data into the public domain collected from ships within waters subject to their national jurisdiction.	Completed.
11	RHC Chairs to bring the IRCC CL 1/2020 to the attention of all coastal States within their respective RHC, encouraging them to offer a positive response, even if qualified, to enable provision of enable	Completed.

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	provision of CSB data into the public domain collected from ships within waters subject to their national jurisdiction.	
12	RHC to encourage Member States to release datasets or subsets into the public domain via the IHO DCDB.	SWAtHC Action Completed.
13	RHC to encourage Member States to support the CSB initiative with positive actions, such as requiring all research vessels to collect bathymetric data for late uploading, when on passage or when it does not interfere with other research activities.	Noted.
14	Encourage RHCs to actively contribute with new data to GEBCO.	SWAtHC Action Completed.
15	Encourage RHCs to discuss how nations can share existing data.	Noted.
16	RHCs to encourage Member State and stakeholder bathymetric data contributions to the DCDB, regardless of origin.	Completed.
17	RHC to reply to the WEND WG template SPI 1.3.1.	SWAtHC Action Completed.

6. Agenda Items

The SWAtHC Meetings work with a permanent agenda that receives adjustments for the new issues as they arise. The main topics in the agenda addressed during these meetings are:

- Report of the IHO Secretariat;
- Progress on the IHO Council activities;
- Progress on the IRCC activities;
- Progress on the CBSC activities;
- Progress on the WWNWS-SC activities;
- Progress on the IEHG activities;
- National Reports from Members and Observer Countries;
- Status of the Seabed 2030 Project in the SWAtHC Region;
- Progress on Crowdsourced Bathymetry;
- Progress on S-100; and
- Report of the Planning Committee.

Maritime Safety Information (MSI) / World-Wide Navigational Warning Service (WWNWS)

SWAtHC Full Members issue navigational warnings in accordance with the IMO/IHO/WMO Manual on Maritime Safety Information (MSI).

In order to improve MSI services, Brazil developed a web-based system to standardize, record and control the dissemination of MSI.

A Contingency Plan between the NAVAREA V Coordinator (“Diretoria de Hidrografia e Navegação”, Brazil) and NAVAREA VI Coordinator (“Servicio de Hidrografia Naval”, Argentina) for the transmission of navigational warnings in the SWAtHC Region is in effect since 2016.

This Contingency Plan ensures the transmission of navigational warnings and the monitoring of navigational warnings transmitted in the area of responsibility in the neighboring NAVAREA, in case of interruption of the operation of one of the NAVAREAs.

The exercises between both NAVAREAs were carried out annually until 2021 and from 2022 onwards are being conducted biannually, once every semester.

Capacity Building (CB)

On the eve of the 16th SWAtHC Meeting, on August 29, 2022, the 3rd Seminar on Raising Awareness in Hydrography was held, in hybrid format with support from IHO CB Fund, with the coordination of the “Servicio de Oceanografía, Hidrografía y Meteorología de la Armada” (SOHMA), Uruguay. The participation was satisfactory with the attendance of 41 representatives from Argentina, Brazil, Bolivia, Dominican Republic, Guyana, Spain and Uruguay and from the companies Kongsberg Maritime, Norbit Brasil, Xylem HYPACK and Teledyne Geospatial.

The Commission has sought to submit proposals with support from IHO CB Fund jointly with neighboring South American Regional Hydrographic Commissions (MACHC and SEPRHC) in recent years and has benefited from this partnership.

The Maritime Safety Information Workshop held from September 26 to 30, 2022, in Cartagena de Indias, Colombia, by MACHC with support from IHO CB Fund, was attended by a representative from Argentina and a representative from Uruguay.

The “Diretoria de Hidrografia e Navegação” (DHN), Brazil, carried out the Port and Shallow Water Survey Course with support from IHO CB Fund, from October 10 to 14, 2022, which included practice activities in a navigation simulator and in a hydrographic boat. The course received a total of 17 participants, 6 of which were representatives of the Hydrographic Offices of Argentina, Peru and Uruguay and of the Maritime Authority of Guatemala.

A delegation from the Commission with support from IHO CB Fund headed by Commodore Valentín Alejandro SANZ-RODRIGUEZ, Director of the “Servicio de Hidrografía Naval” (SHN), Argentina, with the assistance of Commander Marcelo OLIVERA from SOHMA, carried out a Technical Visit to the “Servicio Nacional de Hidrografía Naval” (SNHN), in Bolivia, on November 15 and 16, 2022.

The Workshop on Hydrographic Databases Management held from November 29 to December 2, 2022, in Guayaquil, Ecuador, by SEPRHC with support from IHO CB Fund, was attended by a representative from Brazil and a representative from Uruguay.

In December 2022, an Officer from Cameroon concluded the IHO Category “A” Advanced Course in Hydrography (CAHO) organized by DHN. The course was offered free of charge to Cameroon.

The following CB events were proposed for 2023 but unfortunately have yet to receive financial support from IHO:

- MBES data processing course (proposed by Argentina),
- Data management course for the production of ENC S-100 (proposed by Uruguay), and
- Tides and Water Level Workshop (proposed by Brazil).

SWAtHC approved the establishment of a Working Group for individual certification for hydrographers and nautical cartographers. Portugal and Spain accepted to work with the Commission on this matter.

The following CB events were proposed for 2024 and are still pending decision by the CBSC at the next meeting in June 2023:

- Seminar on Raising Awareness in Hydrography (proposed by Argentina),
- MBE Data Processing Course (proposed by Uruguay),
- Basic ENC production (S-100) (proposed by Argentina), and
- MSDI and data assessment (proposed by Brazil).

In 2023, an Officer from Bolivia and an Officer from Cameroon are attending the IHO Category "A" Advanced Course in Hydrography (CAHO) offered by DHN. The course is being offered free of charge to Bolivia and Cameroon.

Nautical Charts and Publications

Exchange procedures were approved by the Full Members for the exchange of paper nautical charts and publications in PDF format for use on their navies' ships. It is important to emphasize that the guarantees of property rights are given.

Based on the experiences carried out in 2022 with the exchange of nautical charts in PDF format, it appears that it is of great importance to continue with these exchange procedures, as it facilitates and reduces boarding procedures, customs clearance, logistical procedures, resulting in cost reduction.

Procedures for exchanging nautical publications in PDF format will need gradual improvement.

Two binational paper nautical charts in the Mirim (or Merín) Lagoon as part of the Uruguay-Brazil Waterway were published. Larger scale Inland ENCs are planned for this waterway.

Bearing in mind that the official cartography of the La Plata Basin, approved by the 5 countries bathed by this Basin and located in the SWAtHC Region (Argentina, Bolivia, Brazil, Paraguay and Uruguay), is still the paper nautical chart issued by the Hydrographic Offices of these countries, the Commission decided to analyze the possibility of adopting digital nautical products in the future to replace the official cartography, such as ENCs and Inland ENCs, reducing the workload of the Hydrographic Offices involved in charting production and to improve the ping-to-chart workflow.

The Commission approved the SWAtHC S-100 Implementation Plan which will undergo annual review.

The SWAtHC Planning Committee assumed responsibility for coordinating the implementation of the S-100 in the Region.

Marine Spatial Data Infrastructure

Argentina and Brazil established their Marine Spatial Data Infrastructures (MSDI) and Uruguay shares nautical information with the Uruguayan Spatial Data Infrastructure (SDI). **Geoportal SHN** is the Argentinian MSDI accessed through

<http://geoportal.ddns.net/#/geoportal> .

IDEM-DHN is the Brazilian MSDI accessed through <https://idem.dhn.mar.mil.br/> .

ideuy is the Uruguayan SDI accessed through https://visualizador.ide.uy/ideuy/core/load_public_project/ideuy/ .

The Nippon Foundation-GEBCO Seabed 2030 Project / Crowdsourced Bathymetry (CSB)

SWAtHC members attended the 2022 MACHC Webinar on the Seabed 2030 Project.

The three coastal States of the SWAtHC Region (Argentina, Brazil and Uruguay) answered the IHO CL 01/2020 and IRCC CL 21/2020, and indicated their position on the provision of CSB data from ships within waters subject to their jurisdiction into the public domain.

These three coastal States contributed with bathymetric data in 2022 to the IHO DCDB and to the Seabed 2030 Project.

The bathymetric coverage in the SWAtHC Region in support of the Seabed 2030 Project has increased considerably from 2021 to 2022, as can be seen in the evolution found in the GEBCO Grid.

7. SWAtHC cooperation with stakeholders (organizations, industry, etc.):

A representative of the National Geospatial-Intelligence Agency (NGA/USA) attended in-person the 16th SWAtHC Meeting, as an Invited Observer, and introduced their new system, the Global Maritime Traffic Density Service (GMTDS).

SWAtHC has had good relationship with Industry Partners involved in hydrographic surveying, charting production and the future development of S-100 based products.

The Commission will continue to search partnerships with neighboring South American Regional Hydrographic Commissions (MACHC and SEPRHC) to succeed with the CB submissions to CBSC.

8. Difficulties encountered and Challenges yet to be addressed

a) Difficulties:

1. The main difficulty found is the lack of qualified personnel available versus the increase in workload.
2. Shortage of Spanish-speaking trainers.
3. The continuity of the approval of CB events for the SWAtHC Region, given the scarce resources allocated by the Capacity Building Work Programme (CBWP). The execution of the SWAtHC Capacity Building Plan is considered a strategic issue of vital importance for all Members.
4. Absorption of new technologies in surveying and charting, demanding the availability and qualification of personnel.

b) Challenges:

1. The main challenge is the implementation of S-100 based products for the Region.
2. Carrying out trainings and workshops beyond the scope of the CBWP.

3. Installed infrastructure and costs involved if the Iridium SafetyCast becomes mandatory for the NAVAREAs of the SWAtHC Region.

9. Achievements and Lessons Learned

The Full Members updated C-55 by May 2023.

The Full Members have approved the request of the SNHN (Bolivia) to become an Associate Member of SWAtHC and Bolivia started the procedure of its adhesion.

The Statutes of the SWAtHC was updated accordingly with the IHO Resolution 2/1997 as amended at A-2. The most important modification was the northern limit of the SWAtHC Region that makes boundary with the MACHC Region, moving it from 0° (Equator) to 1° South. This change implied the inclusion of the entire Amazon Basin in the MACHC Region to facilitate regional coordination.

There are no issues between Nautical Charts of the Members in the Region. The few inconsistencies and overlaps in ENCs found by IC-ENC during last year were immediately solved.

The invitation to “Instituto Hidrográfico” of Portugal and “Instituto Hidrográfico de la Marina” of Spain to attend last two SWAtHC Meetings was very positive, as the Members were able to learn about the ongoing developments with S-100 implementation and MSDI.

10. Conclusions

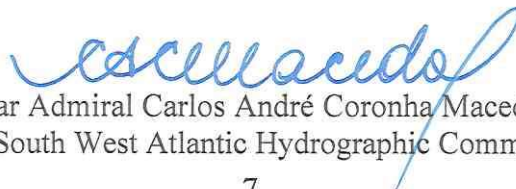
The countries of the SWAtHC Region that are not yet IHO Member States, Bolivia and Paraguay, continue without submitting their instruments of accession. The Commission will continue to support their accession.

NAVAREA V Coordinator and NAVAREA VI Coordinator fully exercise their responsibilities, according to the SOLAS Convention. The adherence to new ISM service providers will depend on IMO making it mandatory. If this occurs, these NAVAREAs will need some time to adapt.

SWAtHC is committed to coordinate hydrographic and cartographic activities incorporating new standards and to cooperate in capacity building in straight alignment with the IHO objectives and goals.

11. Actions required of IRCC

The IRCC is invited to take note of this report.



Rear Admiral Carlos André Coronha Macedo
Chair, South West Atlantic Hydrographic Commission