

**Visit to the Autoridad Maritima de Panama
& Seminar on “Raising Hydrographic Awareness”
Panama City, Panama – 2 December 2024**

**25th Meeting of Meso American and Caribbean Sea Hydrographic Commission
Panama City, Panama – 3-6 December 2024**

Contribution to the IHO Work Programme 2024

Task 3.2.1.5

MACHC - Meso American - Caribbean Sea Hydrographic Commission

High level summary

- The Visit to the Autoridad Maritima de Panama provided a good opportunity to reactivate the discussion with the Panamanian authorities on Panama's accession to the IHO. The seminar on “Raising Hydrographic Awareness” was a fruitful familiarization exercise on Hydrography and its applications for all States in the MAC region, some of which do not have yet a hydrographic capacity.
- Important progress in seabed mapping and participation in GEBCO and Seabed2030, as well as data sharing with the DCDB, shown a steady increase over the past five years in the MAC region seafloor mapped.
- The MACHC MSDIWG took the initiative to act as MSDI Ambassador to the IHO MSDIWG and support also the IHO EWH project, in the form of a co-Ambassador for MSDI and EWH projects.
- National reports presented by the MACHC’s members and observers shown internal difficulties in dealing with the S-100 implementation and the need for a regular conduction of courses on S-57 to S-101 conversion, activities on the production of the other S-100 products belonging to Phase 1 / Route Monitoring, and the need for more investments (funds and human resources) on hydrographic surveys and new technology.

Details:

On 2nd December in Panama City, Panama at the DGPIMA, the IHO Director Luigi Sinapi paid a visit to the Director General DGPIMA Mr Max Florez and his staff regarding the reactivation of Panama's accession process to the IHO. The meeting highlighted Panama's interest in becoming a member of the IHO and its willingness to remove all internal obstacles that have slowed down the process over the past two years.

Discussions between the IHO Director and DGPIMA were focused on the following topics:

- Reasons for the slowdown in the IHO accession process
- Procedural steps to join the IHO
- Allocation of budget (available since 2024) to secure the payment of IHO membership fee
- Institutional benefits to join the IHO (a permanent seat in the IHO Council, 6 votes in the election of the IHO Directing Committee – Full membership to the MACHC)
- Phases and time to create a full hydrographic capacity in Panama
- Capacity Building’s opportunities with particular attention to the Cat A and B Courses in Hydrography and Nautical Cartography
- Implementation of S-100 as opportunity to improve the performances in the Panama Canal.



IHO Director and DGPIMA delegation – Panama City, Panama, 2 December 2024

The Dirección General de Puertos e Industrias Marítimas Auxiliares of the Maritime Authority (DGPIMA) of Panama assured the IHO that the process for the admission of Panama to IHO has restarted. The Council of Ministers prepared a law for the admission that will be presented to the National Assembly (Parliament) by the MFA and the Autoridad Marítima de Panamá in January 2025 for the approval. After three rounds at the Parliament, the law will be signed by the President of Panamanian Republic hopefully late in 2025. A Technical Visit to Panama to assess the status of the hydrographic capacity in Panama was considered as a potential follow up action in 2026.

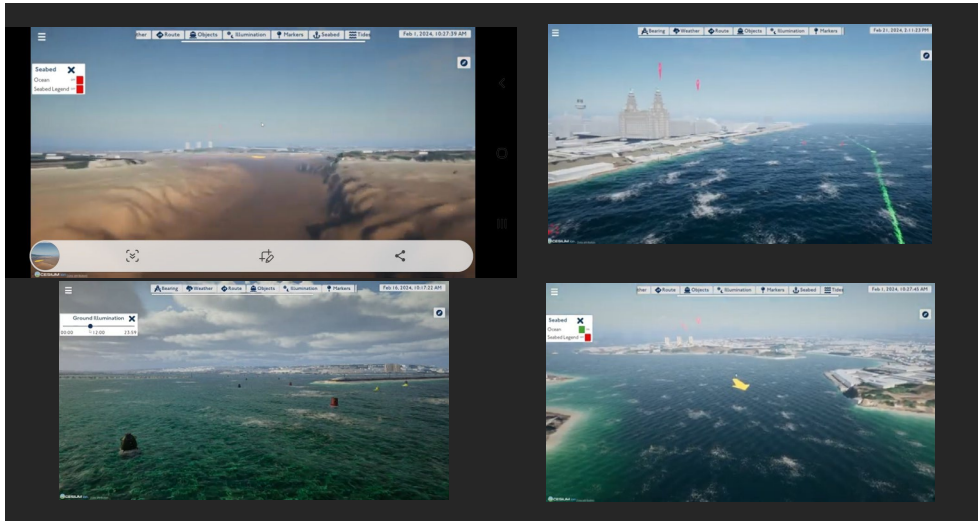
On 2nd December a Seminar on “*Raising Hydrographic Awareness*” as part of the regional 2024 IHO Capacity Building programme was held in favour of the MAC region’s members. 60 attendees from MAC region States participated in person and remotely to the Seminar. Themes related to Digital Maritime Services Development, IALA Maritime Buoyage System, Hydrographic Science Education, Capacity Building and S-100 were presented, highlighting those fields of major interest of the MAC region’s States like MSI, MSDI, S-100, Education and Training.

The 25th Meeting of Meso American and Caribbean Sea Hydrographic Commission – MACHC25 took place in the W Panama Hotel, Panama City, Panama, in the days 3-6 November, hosted by the United Kingdom as Chair of MACHC. Eighty attendees in person and virtually from 16 IHO Member States (Brazil, Colombia, Cuba, Dominican Republic, France, Guatemala, Guyana, Jamaica, Mexico, Netherlands, Spain, Suriname, Trinidad and Tobago, United Kingdom, United States of America and Venezuela), 13 non-IHO Member States (Antigua and Barbuda, Belize, Costa Rica, El Salvador, Grenada, Honduras, Monserrat, Panama, St Kitts and Nevis, St. Vincent, The Bahamas, The Grenadines and Turks and Caicos), IALA, IC-ENC and Industry participated in the meeting. All the 15 MACHC members were represented. The IHO Secretariat was represented by Director Sinapi.

The Chair opened the MACHC25, remarking the importance of the meeting to improve safety of navigation in the area and to progress in a smooth and harmonious implementation of S-100 amongst the States of the Region. He also announced that the MACHC Statutes remained unchanged after a round of revision from the previous MACHC meeting.

During the presentation of the IHO Secretariat Report, IHO Director Sinapi highlighted the importance of enlarging the IHO membership and the outcomes of the High Level Visit to The Bahamas conducted in April 2024, the approach of a new era for *e-navigation*, with the implementation of the first bunch of S-100 products which will become operational in 2025 for the injection on the market from the 1st January 2026 to be used in ECDIS-100, the need for more investment in the IHO Capacity Building Work Programme, with particular focus on the S-100 activities requested by the Regional Hydrographic Commissions. Finally, the importance for an active participation of the IHO at the global initiatives in favour of the oceans which will take place in 2025 in Monaco and France, and some insights on the new IHO Portal were also presented.

The USA, as chair of the SPRWG, presented the IHO Strategic Plan Review for 2027-2032, explaining that the drafting phase will commence from 1st January 2025 to present the new SP to Council-9 in October 2025. Retain the focus on safety and efficiency of navigation through the current GOAL 1 and the two options on merging GOAL 2 and 3 or leaving them unchanged, were also presented. MAC region is represented in the SPRWG by 4 States (Brazil, France, UK and USA).



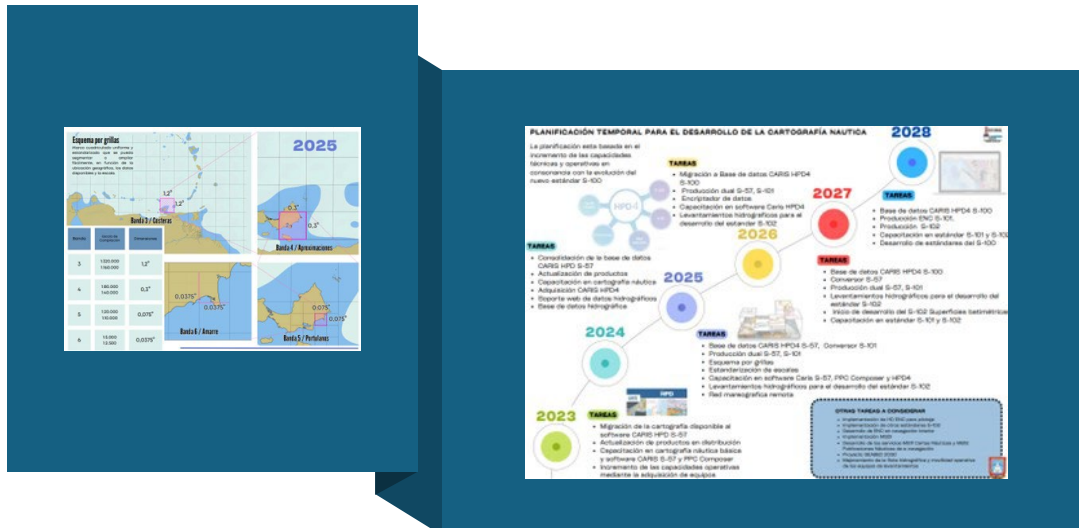
Development of a new Virtual Port Situational Awareness Service tool from the UKHO

UKHO presented on the development of a new (Virtual) Port Situational Awareness Service (see links: <https://youtu.be/a0mLxRzi0Jc> - <https://youtu.be/hdhDcgTXM7U> - <https://youtu.be/a6FouoUjAkE> - <https://youtu.be/NTNrL-4E71w>), actually using S-57 information, with the plan to integrate the Service with the S-100 products' data when ready, to open new opportunities for seafarers in planning route to ports approach in real time.

The following main topics were discussed alongside the presentation of the National reports, divided into Achievements (A), Challenges (C) and Plans (P) affecting MAC region's Countries:

- Automated production of new nautical charts (A)
- Use of new technologies and transformation of the hydro-oceanographic capacities (A)
- New opportunities within the EWH project and the UK "Improving Gender Balance Fund" (A)
- Increasing the surveys' coverage of waters under national jurisdictions (C)
- Need of more Capacity Building investments, more educational (Hydrography and Nautical Cartography Cat A & B courses) and training (on new technology and S-100) opportunities
- Establishing / improving national MSDI portals (C)
- Increasing data sharing (C)
- Implementing National Hydrographic Committees and raising the awareness in Hydrography at national level via High Level Visits and Technical Visits (C)
- Implementation of S-100 based products, achieving a consistent gridded scheme and a full transition from S-57 to S-101 (C)
- Contribution to CSB, Seabed2030 and GEBCO via the delivery of depth data to DCDB (C)
- Increasing the investments into Hydrography (funds and human resources) (C)
- Increasing the PCA support to the PCA Countries in seabed mapping (P)
- Facing climate change effects (P)
- Negotiation of maritime boundaries (P)
- Investment in new equipment, survey vessels, new technology and autonomous and uncrewed vehicles to employ in hydrography (P).

The Bolivarian Republic of Venezuela presented on their national S-100 Implementation plan, highlighting the challenges related to the short time remaining to implementation of the Phase 1 product and the need of supporting the production of both S-57 and paper charts. A uniform and standardized grid framework for S-101 was also proposed for a potential use at regional level.



Bolivarian Republic of Venezuela S-100 Implementation plan and Grid Scheme

Regional Capacity Building initiatives conducted, underway and planned were described, highlighting the importance of the benefits of the inter-regional coordination, the importance of investing in S-100 implementation, MSI courses, on-line courses, High Level Visits and Technical Visits to respectively increase the hydrographic awareness in the MAC region's States and assess the national hydrographic capacity. A Technical Visit to Panama to assess the status of the hydrographic capacity in Panama was included in the regional Capacity Building plan for 2026.

Progress in the development of the S-124 - Navigational Warnings in the region was reported, made via the development of a MACHC S-124 implementation plan and the forthcoming publication on the IHO e-learning Centre portal of MSI capacity building material "on demand" on S-124.

The INT Charts and ENCs coverages in the MAC region were presented by the INT Chart – ENC regional coordinator (Suriname as MICCWG Chair). Thanks to the RENCs assessments, the overlaps in the region were presented, highlighting that the bilateral cooperation and more communication between the ENCs producers contribute to eliminate overlaps. The MACHC S-100 services coordinator will be identified when the process to finalize the ToR and RoP of the MACHC International S-100 Coordination Working Group is completed. The MICCWG Chair will work closely with the WENDWG in accordance with the next "Guidelines for the Coordination and Management of the Development of S-100 Electronic Navigational Data Services (other than S-101 ENCs)" actually under drafting by the WENDWG, and to meet the 2026 IMO target (S-100 ECDIS).

France – as representative of MACHC to the IENWG – presented on the last developments / achievements of the initiatives of the IENWG, with focus on EMODNET and its 2035 vision and the Capacity Building's initiative on "IHO and EC cooperation in third countries", including the MAC region's countries, S-100 products and data collection needs. In addition to that, France presented on behalf of PRIMAR about the latest achievements of such RENC, particularly on the establishment of a "PRIMAR S-100 CB Fund" with the aim to support the implementation of S-100.

IC-ENC General Manager presented on the IC-ENC latest developments, projects and initiatives. IC-ENC Learning Management System (LMS), member-to-member secondments (new in 2024), Cloud training environment, IC-ENC/Industry/User Conferences, "Activity Fund" established from those IC-ENC members that decided to "opt-in" part of their ENC revenues to support the test-bed and implementation of S-100 products, were presented, highlighting the opportunities for the MAC region to catch via the MACHC working groups.

Industry presentations on the state-of-the-art Technology, Geo-data and Education, and IALA representative's presentation on the new intergovernmental status of IALA, World-Wide Academy and the obligations related to Marine Aids to Navigation, completed the agenda of the conference.

Ms Bernice Mahabier from Suriname took over the position of MACHC Chair and Rear Admiral Laurent Kerleguer from France was elected MACHC Vice Chair.

Photo



MACHC25 participants – Panama City, Panama

Upcoming meetings:

Next meeting will be held in Jamaica on the period 8-12 December 2025 (venue TBD).