

24TH MEETING OF THE MESO AMERICAN & CARIBBEAN SEA HYDROGRAPHIC COMMISSION (MACHC)

Paramaribo, Suriname – 12 - 15 December

Contribution to the IHO Work Programme 2023

Task 3.2.1.5	Prepare for and report meetings of the Regional Hydrographic Commissions: MACHC
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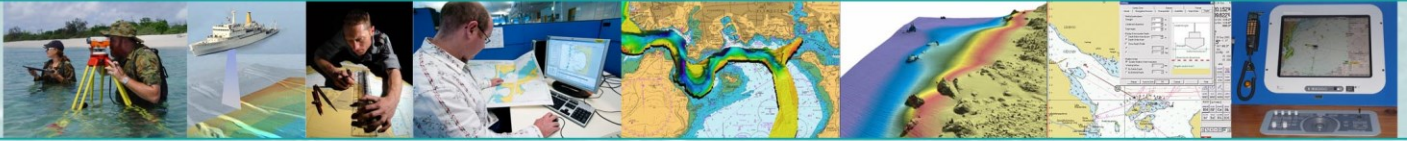
The 24th Meeting of the Meso American & Caribbean Sea Hydrographic Commission (MACHC24) was held at the Torarica Resort in Paramaribo, Suriname from 12 to 15 December 2023, with 82 participants, 57 in person and 35 online. 14 Member States, 6 Associate Members, one Observer State, 8 observer organizations and 10 industry members were represented. Director Luigi Sinapi and Assistant Director Leonel Pereira Manteigas represented the IHO Secretariat.

Pre-plenary Working Group meetings took place on 12 December 2023, including MACHC Marine Spatial Data Infrastructure Working Group (MMSDIWG), MACHC Seabed 2030 (SB2030), MACHC Maritime Safety Information Working Group (MSIWG), MACHC Capacity Building Committee (CBC) and MACHC International Coordinating Charting Working Group (MICC).

The Opening Ceremony took place on 12 December afternoon at the Maritime Authority of Suriname. At the ceremony, the Director of the Maritime authority of Suriname, the President of the Maritime Association of Suriname, the MACHC Chair, the IHO Director and the Ministry of Transports Communications and Tourism of Suriname delivered their speeches, highlighting the importance of MACHC meetings for safety of navigation and the conservation and sustainable use of the oceans and maritime resources at national, regional and international levels.



Participants at MACHC24 meeting



The MACHC24 plenary started on 13 December with welcoming remarks from the MACHC Chair RAdm Angus ESSENHIGH (UK), who expressed his gratitude to the host organization, thanked all participants as well as the ones attending by VTC and the representatives of the industry. In line with IHO Resolution 2/1997, the new Statutes of MACHC and the opportunity to annex the list of the ongoing actions to them were discussed.

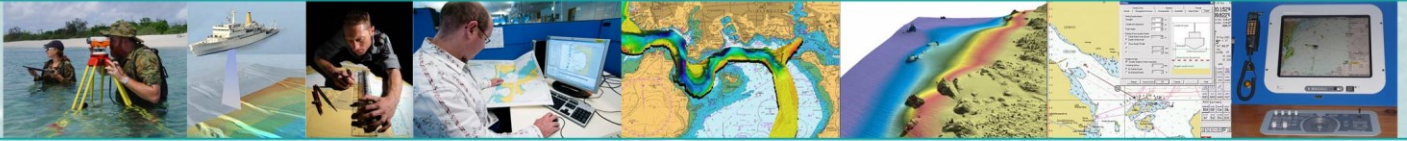
Spain informed the audience about the intention to intensify the cooperation with the Members of the Region, and mentioned the hydrographic courses sponsored by the Spanish Government in favour of the Spanish speaking countries. The Netherlands presented the European Marine Observation and Data Network (EMODnet) project and the plan to extend to the Caribbean area the use of the respective portal containing bathymetric data and metadata. The bathymetry DTM available free of charge and then the collaboration with the IHO DCDB and GEBCO were mentioned.



IALA Membership signing of Dominican Republic, witnesses by IHO Director Luigi Sinapi and RAdm Angus ESSENHIGH (UK) MACHC Chair

The IALA representative presented a video about the history of IALA, with the focus on training and capacity building, providing some examples of collaboration projects with several Coastal States of the Region, describing the IALA Academy founded in 2012, which provides courses on AtoN and VTS via also distance learning systems.

IHO Director Sinapi provided an overview on the IHO most important activities and challenges, highlighting on the results of the High Level Technical Visits (HLTVs) to the Dominican Republic and Jamaica. The success of the HLTVs was possible thanks to the outstanding organization provided by the local authorities and the delivery of clear and straightforward messages to local Governments on the importance of Hydrography for the sustainable development of both Countries. The representative of the Dominican Republic and Jamaica enhanced the importance of the HLTVs and informed the MACHC the respective Governments will approve measures to support the respective hydrographic sectors.



High Level Technical Visit - Dominican Republic

IHO Report available on website: [High Level Visit – Dominican Republic](#)

Stakeholders:

- President of the Dominican Republic, Mr Luis Rodolfo Abinader Corona
- Vice Admiral, Chief of the Navy, Agustin Alberto Morillo Rodriguez
- Administrative Minister of the President
- President of the Senate House
- Minister of the Chamber of Deputies
- Minister of the Armed Forces
- Port Authority of Dominican Republic
- Radio Interview and Lecture to the Armada Officers and Government Representatives



High Level Technical Visit - Jamaica

IHO Report available on website: [High Level Visit - Jamaica](#)

Stakeholders:

- Hon. Alando Torrelonge, State Minister, Ministry of Foreign Affairs and Foreign Trade
- Mrs Arlene Williams, Permanent Secretary, Ministry of Economic Growth and Job Creation
- National Land Agency
- National Maritime Authority (NLA)
- Port Authority of Jamaica
- NLA - Surveys and Mapping Division
- Jamaica Defence Force Coast Guard
- Faculty of Built Environment, University of Technology, Jamaica



Discussions outlined the importance of the Blue Economy for Jamaica's growth, the aspirations of the Government to develop this economy, but the lack of awareness of how Hydrography underpins this



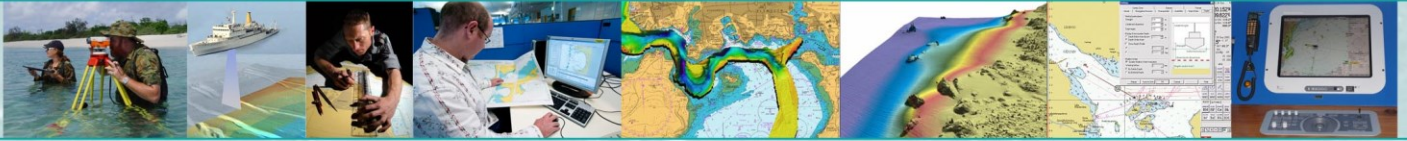
HLTVs to Dominican Republic and Jamaica

The Netherlands, as one of the two MACHC members having a seat at the IHO Council, highlighted on the outcomes of the 7th meeting of the Council, with a particular focus on the most important decisions. The USA presented on the revision of the IHO Strategic Plan (SP) and the establishment of a Correspondence Group to prepare the IHO Strategic Plan 2027-2032. The Correspondence Group chaired by the Council Vice-Chair is expected to present to 8th Council in October 2024 a final draft on the process of revision of the IHO SP. It was recommended to the MACHC members to strive for a major involvement in the implementation of the IHO SP.

PRIMAR illustrated its ENC's distribution scheme and the Portal with 17 training modules on S-100 and S-101, available for free to all IHO Member States. IC-ENC provided an overview of the respective organization and governance. The validation service and the good cooperation with PRIMAR were highlighted, and the Learning Management System (LMS) established in 2021 for the IC-ENC members was presented.

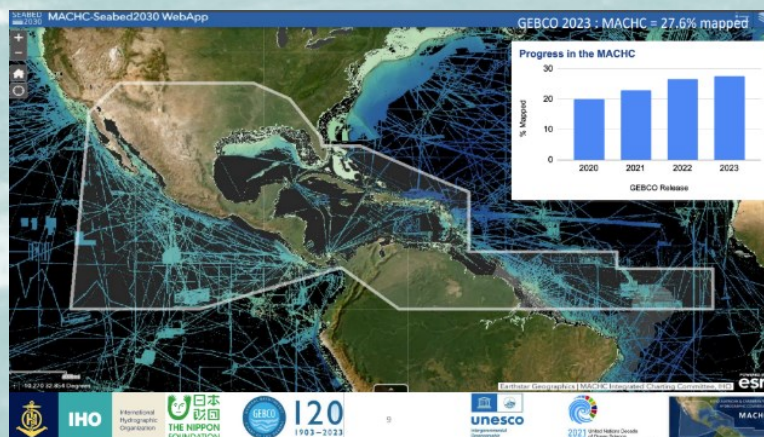
Due to the large number of Members and Associated Members, the National Reports were presented into three different groups. In the end, each group provided a report on the main topics discussed. The importance of the HLTVs and technical visits, the implementation of MSP/MSDI, the need of survey platforms, equipment and training, the importance of the conversion from S-57 to S-101 ENC's and the S-100 roadmap were highlighted as common aspects to the majority of the MACHC members. Venezuela raised the issue related to the restrictions to have access to the software for cartographic production due to the embargo.

The MACHC MSDI Chair reported that the website was updated. The link with EMODnet was described and the intention to continue with the incorporation of the UN-GGIM principles and to have a workshop with the UN-GGIM were presented. Mr Andy Dippolito from USA was elected Chair of the MMSDIWG. The MACHC International Charting Coordination (MICC) Chair reported on the status of the regional ENC's available. INT Chart coverage for the region had no update. The need to nominate an S-100 regional coordinator and create a regional S-100 working group entirely virtual were discussed. It was also remembered that some MACHC members didn't respond yet to the WENDWG CL01/2023. Finally, it was noted that implementing a scheme for S-100 based products would prevent overlaps. The MSIWG Chair highlighted on the IHO MSI Strategic Performance Indicator - SPI 3.1.1 with a



target of 90% of Coastal States capable to provide MSI by 2026 and reported that in 2023 at NAVAREA IV/XI there was an increase in the MSI received to 94%. The CARIBE WAVE system aiming to make 100% of coastal communities at risk of tsunamis prepared and resilient by 2030 was described. Mr. Timothy “Ed” Stacy from USA was elected Chair of MSIWG.

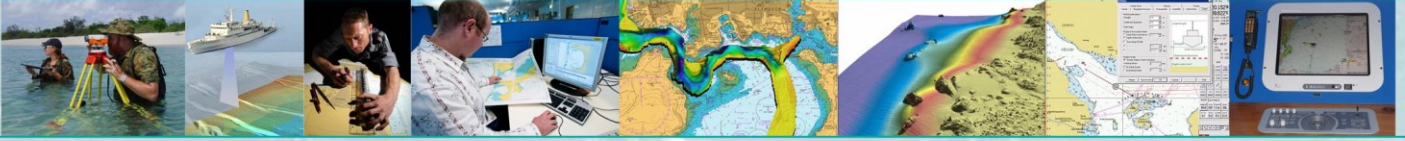
The Capacity Building (CB) Coordinator presented the main achievements of the CBSC21 Intersessional and CBSC21 meetings, enhancing the activities completed by the Empowering Women in Hydrography (EWH) project and the opportunities onboard NOAA ships. Venezuela reported that 40% of the personnel working in Hydrography, Cartography and Aids of Navigation are women. An update on the C-55 Project Team was provided along with the progress made in the IHO e-Learning Center. The CB activities to be proposed for 2025 and the 2024-2026 Workplan were also presented.



Seafloor coverage in the MACHC region

The Seabed 2030 and CSB Coordinator reported on the importance of Seabed 2030 and the Regional activities, as well as the data types received and the formats for the ingestion into the DCDB. In the Region, the seafloor coverage stands at 27,6%. On CrowdSourced Bathymetry, the CruisePack was presented as a data packaging and metadata gathering software tool NCEI has developed to simplify data submission preparation for cruise-based data.

The Caribbean Community Climate Change Centre presented on a LiDAR project for climate change adaptation. The Centre obtained a grant from the Caribbean Development Bank (CDB) to survey all 19 borrowing Member Countries. The objective of the project is to contribute to mitigate the effects of climate change providing information to decision makers. The participation of Industry was large and much appreciated by the participants. The representatives of Industry presented on the two recognized programmes S-5B and S-8B, satellite derived bathymetry, transatlantic collaboration to address Hurricane Disaster Risk Management and the Scenarios for Storm Surge Risk Mapping, integration of Satellite and Marine Based Hydrographic Survey methods in the MACHC Region, LiDAR, tools for S-100



migration and production, automated Paper Charts, the latest developments on echosounders and Maritime Technical Services available for the Caribbean region.

The United Kingdom presented an update on the paper chart production and the IHO ECS Project Team, which was created to identify and prioritize ECS navigation requirements, analyse their impacts on current IHO hydrographic standards and develop a set of recommendations/issues. Some MACHC members expressed concerns of what this will mean in terms of workload for the respective HOs.

Next MACHC25 meeting will be held from 2 to 6 December 2024 (venue TBD).