



MACHC24

IHO Secretariat Report

Rear Admiral Luigi SINAPI
IHO Director





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IHO MEMBERSHIP & REGIONAL APPLICATION FOR IHO MEMBERSHIP

International
Hydrographic
Organization

- Since MACHC23, Cabo Verde acceded to the IHO Convention (see IHO CL 39/2023)
- IHO Membership now stands at **99**
- Serbia and Syria remain suspended

IHO Membership



Recommendation - MACHC is invited to encourage and propose to the IHO Secretariat High Level Visits to those States not yet IHO Member States.



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DECISIONS OF 3RD SESSION OF IHO ASSEMBLY OF INTEREST TO THE MACHC

International
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- **DECISION 8**
- **DECISION 13**
- **DECISION 14**
- **DECISION 19**
- **DECISION 20**
- **DECISION 27**





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OUTCOMES OF THE 7TH MEETING OF THE IHO COUNCIL

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Recommendations:

- To establish a sustainable technical and administrative ***infrastructure around the S-100***
- To create the ***S-100 regional coordinator***
- To participate in the ***Project Team on Fund Generation*** under IRCC (new IHO CL 42/2023 will be issued soon)
- To continue the ***EWH project***
- To continue the ***measurement of SPLs of regional interest*** assigned to IRCC
- To conduct a survey on the organization and ***attendance of meetings***



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CAPACITY BUILDING (1)

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- In 2024 the CBWP will return to its normal situation and funded activities not completed in 2024 will not be transferred to the 2025 CBWP
- CB's financial situation will be more difficult in 2024 with the expected reduction of unallocated funds
- ***MACHC has seven funded CB projects in the 2023CBWP and two in the 2024CBWP***
- Very important to share resources and projects, and invest in activities at a distance, also between regions.



- In 2023, 2 candidates for the 2023/2024 Master of Science in Hydrography Programme at the University of Southern Mississippi (USA), 7 candidates (1 from MACHC region) to participate in the 15th GEOMAC course in Cat B Cartography (IHO CL 16/2023), and 9 candidates (1 from MACHC region) for the 2023 Cat B Hydrographic Survey Programme (IHO CL 15/2023)
- For 2024/2025, IHO CL No. 27/2023 announced the Master of Science in Hydrography Programme at the University of Southern Mississippi (USA).



IHO CAPACITY BUILDING – EWH PROJECT (3)

International Hydrographic Organization

EWH project – Year 2024

- Mentoring programme
- IHO CCLL 40/2023 – 41/2023: Nr. 3 opportunities onboard French survey vessels and Nr. 2 training opportunities at SHOM
- Opportunities onboard NOAA ships
- ... other!

INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION
COMMISSION Océanographique Inter-gouvernementale
COMISSÃO Oceanográfica Inter-Governamental
مركز الأبحاث الهيدروغرافية بين الحكومات
國際海洋學委員會

UNESCO World Heritage Site
UNESCO World Heritage Site
UNESCO World Heritage Site

Ref.: IOC/AR22.237.US/CA/eb 9 September 2022
Dear Mr Marriages,

It is with great pleasure that I am writing to inform you of the endorsement of your Decade Action entitled 'No. 32.2 – Empowering Women in Hydrography' as a project forming part of the UN Decade of Ocean Science for Sustainable Development 2021-2030. Please accept my sincere congratulations for this achievement. Let me also thank you for your engagement and commitment to the Ocean Decade vision of the science we need for the ocean we want.

Within the structure set out in the Ocean Decade Implementation Plan, individual projects are typically attached to endorsed Decade programmes. We are pleased to inform you that your project will be attached to 'No. 32.2 – Empowering Women in the United Nations Decade of Ocean Science for Sustainable Development'. The attached Charter for Endorsed Projects provides some information on the respective roles and responsibilities of Decade programmes and projects. The contact person for your relevant Decade programme is Dr. Zhen Sun (z.sun@iho.int) and we encourage you to speak to them to compare experiences and discuss.

As you further develop and start implementing your project, we would like to remind you of the Ocean Decade endorsement criteria, including those related to co-design, engagement of users all along the ocean science value chain and decision and policy makers, and those related to open and accessible data management. As an endorsed Decade Action, we expect you to adopt these principles and approaches to your Decade project and to engage via the Communities of Practice that are described below to share experiences and access information and tools on these approaches. We have also attached here a recent publication from the Ocean Decade on co-design approaches that may prove useful in this regard.

M Leonel Marrages
International Hydrographic Organization (IHO)
Member
E-mail: Leonel.marrages@iho.int

Sincerely,
Marianne Hupstein
Executive Secretary, IOC



IHO-CANADA Empowering Women in Hydrography (EWH) project



SUSTAINABLE OCEAN SUMMIT
INVESTING IN OCEAN FUTURES: Finance and Innovation for the Blue Economy
Paris / 20 - 22 November 2019
Women in Ocean Industries: Leadership, Sustainable development and Maritime security



MASTER MARINERS OF CANADA
A Master Mariners of Canada Symposium
The Evolution of Equality and Inclusion in the Maritime Profession
Thursday, 3 October 2019, University of Ottawa

WMU WORLD MARITIME UNIVERSITY
THIRD WMU INTERNATIONAL WOMEN'S CONFERENCE
EMPOWERING WOMEN IN THE MARITIME COMMUNITY
4 - 5 APRIL 2019, MALMÖ, SWEDEN

WOMEN IN MARITIME
IMO's GENDER PROGRAMME

CHC 2020 CONFERENCE
Hydrography 2020: Dynamic Evolution
Quebec City
February 24 - 27 2020
Wednesday, February 26, 2020 Afternoon session: Leadership, feminine style!



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CAPACITY BUILDING – IHO E-LEARNING CENTER (4)

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- With IHO CL 24/2023 the Steering Committee was created
- The first meeting of the Steering Committee was held on 25 September 2023 by VTC:
 - ✓ Playing the role of the General Manager (GM)
 - ✓ Development of the Centre in phases
 - ✓ Phase 1: Centre to be a catalogue of existing material
 - ✓ Thereafter, appropriate Working Groups and Hydrographic Offices should be approached to review and support the material submitted.



Recommendations:

- To follow up and evaluate the ***possibility of contributing to the CB Programme***, hoping to implement also an inter-regional approach
- To participate in the EWH project and to submit proposals through its dedicated website (<https://iho.int/en/basic-cbsc-ewh>) and to continue to disseminate the call for ***Mentors and Mentees for the EWH Mentoring programme*** (IHO CL 46/2022)
- ***To contribute to the IHO e-Learning Centre in KHOA.***



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MARITIME SAFETY INFORMATION SERVICES (1)

SPI - Coastal States by NAVAREA

NAVAREA	Coastal States with MSI Capacity	Total Coastal States
NAVAREA XI (Japan)	21	21
NAVAREA XII (United States)	9	10
NAVAREA XIII (Russian Federation)	1	1
NAVAREA XIV (New Zealand)	10	12
NAVAREA XV (Chile)	1	1
NAVAREA XVI (Peru)	1	1
NAVAREA XVII (Canada)	1	1
NAVAREA XVIII (Canada)	1	1
NAVAREA XIX (Norway)	1	1
NAVAREA XX (Russian Federation)	1	1
NAVAREA XXI (Russian Federation)	1	1
WWNWS	189	218

SPI = 87%

- Constant review and updating of SOLAS Chapters III and IV
- Iridium SafetyCast service mandated by SOLAS from 1 January 2020
- WWNWS agreed that use of all IMO RMSS should be mandatory
- WWNWS provided information on IHO SPI 3.1.1 (90% target) assigned to GMDSS: MSI capacity of Coastal States by 2023 was **87%**.

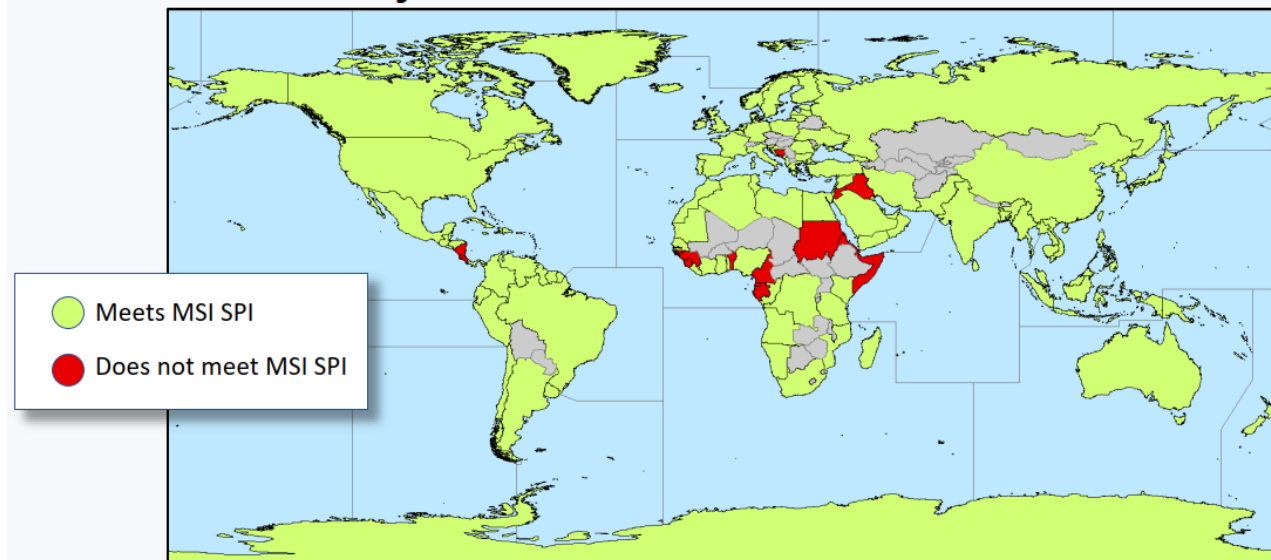


IHO MARITIME SAFETY INFORMATION SERVICES (1)

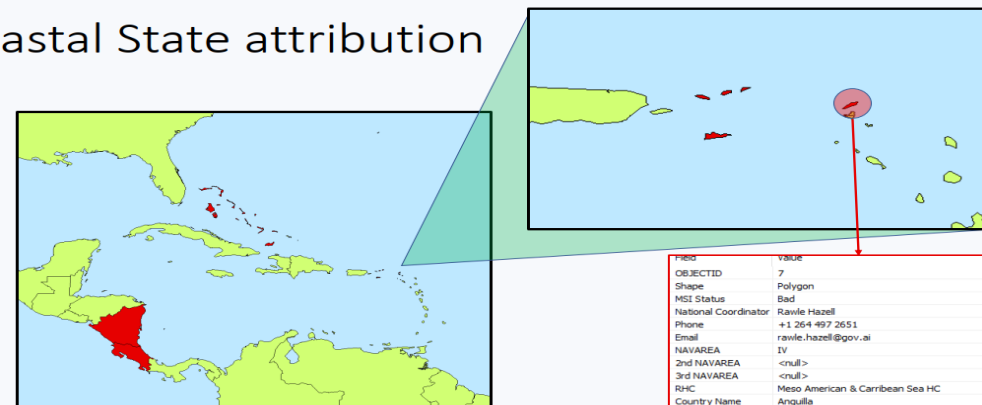
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- WWNWS is working in cooperation with CBSC on a C-55 GIS project
- S-124, Edition 1.0.0 is ready for submission for approval
- NCSR10 approved Joint IMO/IHO/WMO Manual on Maritime Safety Information

C-55 GIS Project



Coastal State attribution



Field	Value
OBJECTID	7
Shape	Polygon
MSI Status	Bad
National Coordinator	Rawle Hazell
Phone	+1 264 497 2651
Email	rawle.hazell@gov.ai
NAVAREA	IV
2nd NAVAREA	<null>
3rd NAVAREA	<null>
RHC	Meso American & Caribbean Sea HC
Country Name	Anguilla
ISO	AI
Affiliated Country	United Kingdom
AFF_ISO	GB
Shape_Length	0.468389
Shape_Area	0.007798



Recommendations:

- To establish and maintain effective ***communications with relevant NAV and MET Area Coordinators*** to ensure timely provision of MSI
- To use and follow the guidelines provided by ***S-53 - Joint IMO/IHO/WMO Manual on Maritime Safety Information*** - to ensure the availability and maintenance of the necessary facilities and capabilities for MSI capture and communication within their national area of responsibility
- To ***implement Iridium SafetyCast services***, as a consequence of the approval by IMO Member States of Iridium SafetyCast as RMSS.



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CROWDSOURCED BATHYMETRY - GEBCO - SEABED 2030 (1)

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- Following B-12 Ed 3.0.0, the CSBWG focused on a critical review of the group's operational mandate
- IHO CL 21/2020 and IRCC CL 1/2020 are receiving new positive responses, in addition to the 34 already available
- DCDB will continue to support the interoperability of the GEBCO Gazetteer and the KHOA Beta Gazetteer
- DCDB would cooperate with RHCs to produce annual regional breakdowns of data holdings as part of SPI reports
- New Trust Nodes have been created with the invaluable assistance of DCDB and the CSB Working Group.



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CROWDSOURCED BATHYMETRY - **GEBCO** - SEABED 2030 (2)

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- In 2023, GEBCO's 120th anniversary celebrations took place in Monaco during the IHO Assembly, in Paris during the IOC General Assembly and at the Maps the Gaps Symposium in Monaco
- A new GEBCO Strategy, a GEBCO Code of Conduct, a review of GEBCO's Governance are in progress.



H.S.H. Principe Alberto II en la Asamblea de la OHI el 2 de mayo 2023:
“La cobertura de Datos ahora ha aumentado del 6% al 25% del área total del océano.”





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CROWDSOURCED BATHYMETRY - GEBCO - SEABED 2030 (3)

International
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- The project was endorsed as a UN Decade Action
- The project signed many MoU in recognition of the work of the organizations in advancing the understanding of ocean bathymetry
- With IHO CL 11/2023, the IHO encouraged Member States to participate in the online questionnaire to obtain information on the status and potential of ocean floor mapping, prepared by NLA International on behalf of Seabed 2030: the survey aims to reflect the views of the hydrographic and oceanographic communities with responsibilities for seabed mapping in EEZs and ocean basins beyond national jurisdiction.



Recommendations:

- 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
- ***Make data freely available for inclusion in the DCDB and the widest possible use, in accordance with IHO Resolution 1/2017***
- Consider to review national legislation to ***remove barriers restricting CSB activities within their waters***

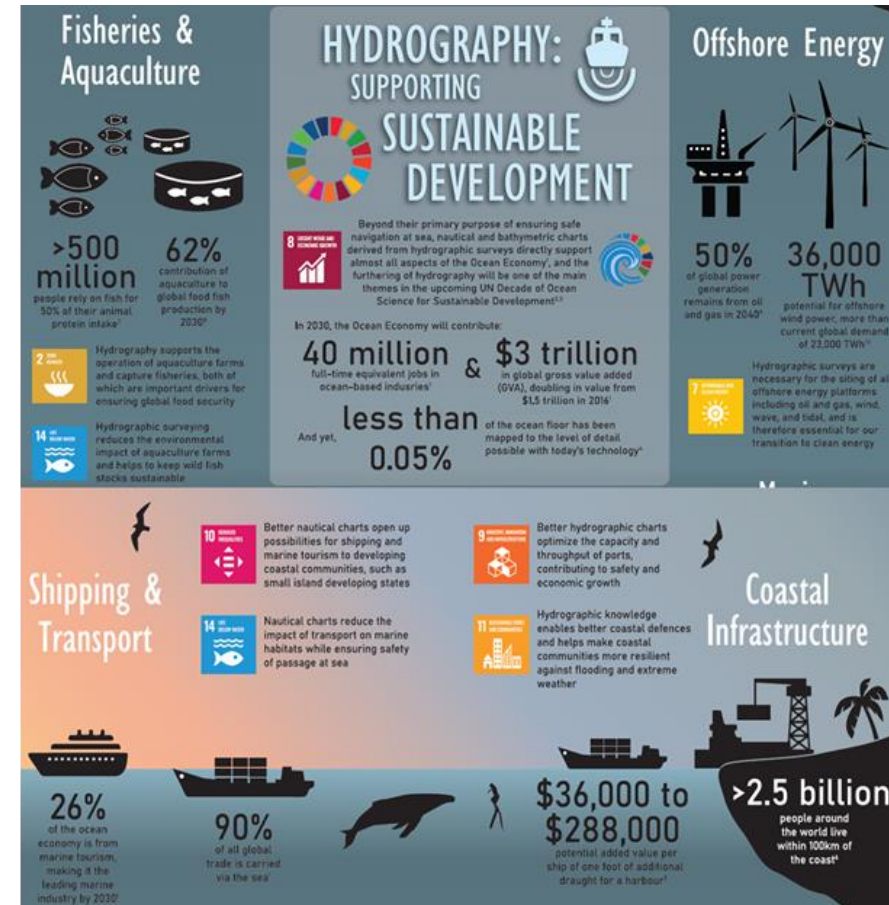


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IHO AND UNITED NATIONS DECADE OF OCEANS FOR SUSTAINABLE DEVELOPMENT

International Hydrographic Organization

- The IHO and the OECD (Organization for Economic Co-operation and Development), with input from a wide range of stakeholders, have undertaken a joint project to explore and identify the links between seabed mapping, ocean economics and ocean health,
- In order to produce an updated report on the Ocean Economy in 2045 before the UN Ocean Conference in 2025 in Nice (France).





IHO IHO GIS AND DATABASES

International Hydrographic Organization

- Yearbook (P-5) and Status of Hydrographic Surveying and Charting Worldwide (C-55) are regularly updated
- The IHO Online Form system has been used since March 2019
- An Esri-based GIS solution has been implemented for the efficient visualization of geospatial data stored in the Country Information System

Country	P-5 –Yearbook Last update received	C-55 Last update received
Brazil	January 2022	May 2023
Colombia	July 2023	November 2022
Cuba	December 2022	December 2016
Dominican Republic	August 2020	January 2023
France	January 2021	November 2023
Guatemala	August 2023	December 2019
Guyana	June 2023	December 2022
Jamaica	November 2021	February 2023
Mexico	May 2023	November 2012
Netherlands	October 2021	October 2022
Suriname	June 2023	November 2022
Trinidad and Tobago	September 2019	December 2022
United Kingdom	July 2022	December 2022
United States of America	July 2023	December 2018
Venezuela	June 2022	November 2021
Antigua and Barbuda	October 2023	November 2023
Barbados	-	December 2022
Belize	November 2019	December 2022
Costa Rica	-	-
El Salvador	March 2020	December 2016
Grenada	April 2017	December 2022
Haiti	-	December 2016
Honduras	June 2017	November 2005
Nicaragua	-	-
Panama	September 2017	December 2022
Saint Lucia	December 2020	December 2022
St Kitts and Nevis	September 2017	December 2022
St. Vincent and the Grenadines	-	December 2022

Recommendation - MACHC is invited to *review their entry in the IHO Yearbook P-5 and C-55* and to provide the IHO Secretariat with the appropriate updates or to report no change (CL 20/2019 refers)



IHO IHO OUTREACH (1)

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- In 2022 the IHO website had a total of 863,322 views
- The IHO had over 8,600 followers on LinkedIn in November 2023 (compared to 2880 in November 2020)
- The Secretariat has increased its presence on social media and has participated in regional and global ocean initiatives



Investment in Hydrographic Services discussed during Dominican Republic high-level technical visit

In line with its mandate to plan, administer, and implement Capacity-Building activities, the International Hydrographic Organization (IHO) conducted a high-level technical visit to the...

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Naming undersea features using the same system as the stars discussed during SCUFN meeting

With this year seeing a new record number of proposals to name undersea features, members of the GEBCO Sub Committee on Undersea Feature Names (SCUFN) discussed ways to deal with increasingly large number...

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New IHO Council meets in Monaco

Representatives of IHO Member States discussed the future of digital data services and other priorities during the meeting of the new IHO Council. Taking place at the Secretariat in Monaco, the 30 countries sitting on Cou...

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- IHO CL 35/2023: WHD 2024 motto:
“Hydrographic Information - Enhancing Safety and Efficiency in Marine Activities”
- This theme is proposed to highlight that Objective 1 of the Strategic Plan and its aims will receive the highest priority in the implementation of the Work Programme 2024-2026: prioritizing the application of material and human resources, coordination with public sector and industry partners, the promotion of coordinated regional approaches including increased collaboration with RENCs, and the support of test-beds that provide examples of good practice for the production, maintenance and distribution of S-100
- Comments, no later than 31 December 2023.



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IHO OUTREACH (3)

International Hydrographic Review (IHR)

- As announced by IHO CL 03/2022, as of 5 January 2022 the IHR has a new editor, Dr Patrick Westfeld from Germany
- The deadlines for submission of articles are:
 - ✓ End of January for the May issue
 - ✓ End of July for the November issue
- At the 3rd Session of the IHO Assembly, the Review celebrated its 100th Anniversary with a report from the IHR Editor on the history, successes and evolution of the Review. Issue Nr.29 of the IHR in May 2023 was the commemorative issue and was distributed to the Assembly delegates.



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ACTION REQUESTED OF MACHC

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- a) **Note** this report
- b) **Consider** the recommendations proposed, in particular the creation of the ***role of S-100 Regional Coordinator*** and the participation in the ***IHO Project Team on Fund Generation of Project Initiatives*** within the IRCC (IHO CL 42/2023)
- c) **Review** entries related to IHO C-55 and P-5 (Yearbook) annually
- d) Forward ***comments to IHO CL 35/2023 on the topic for WHD 2024***
- e) **Consider** submitting papers for publication in the International Hydrographic Review (IHR)
- f) **Take any other actions as considered appropriate**