23rd Conference of the Meso American - Caribbean Sea Hydrographic Commission

MACHC / IOCARIBE Seabed 2030: Planning Results and Recommendations

Cecilia Cortina

Seabed 2030 Coordinator





MACHC – IOCARIBE Seabed 2030 Strategy Work Plans addresses IHO Recommendations for CSB, GEBCO and Seabed 2030:

MACHC members are invited to:

- ✓ 33.1 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.
- **✓ 33.2** Make **data freely available** for inclusion in the **DCDB** and the widest possible use, in accordance with **IHO Resolution 1/2017**.
- ✓ 33.3 Consider to review national legislation to remove barriers restricting CSB activities within their waters.





UN Decade on Ocean Science

Ocean Decade Challenge 8:

Develop a comprehensive digital representation of the ocean



Nippon Foundation – GEBCO Seabed 2030 Project

Officially endorsed as part of the UN Ocean Decade



MACHC - IOCARIBE Seabed 2030 Strategy 2021 - 2030

Officially endorsed as part of the UN Ocean Decade

Regional Contribution









UN Decade on Ocean Science



INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION COMMISSION OCÉANOGRAPHIQUE INTERGOUVERNEMENTALE COMISIÓN OCEANOGRÁFICA INTERGUBERNAMENTAL MEЖПРАВИТЕЛЬСТВЕННАЯ ОКЕАНОГРАФИЧЕСКАЯ КОМИССИЯ Illeria llegia ll

政府间海洋学委员会

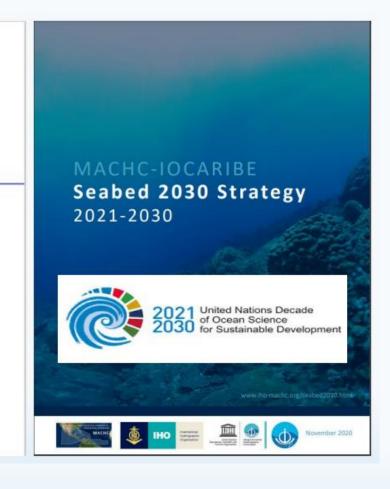
UNESCO - 7 Place de Fontenoy - 75352 Paris Cedex 07 SP, France http://ioc.unesco.org - contact phone: +33 (0)1 45 68 03 18 E-mail: v.ryabinin@unesco.org

Ref.: IOC/VR/22.286/JB/AC/ml 3 June 2022

Subject: Endorsement letter of Decade Action No.140.2

Dear Ms Cortina,

It is with great pleasure that I am writing to inform you of the endorsement of your Decade Action entitled "No 140.2. MACHC-IOCARIBE Seabed 2030 Project" 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.









MACHC / IOCARIBE Seabed 2030 Planning:

Overview of Virtual Meetings

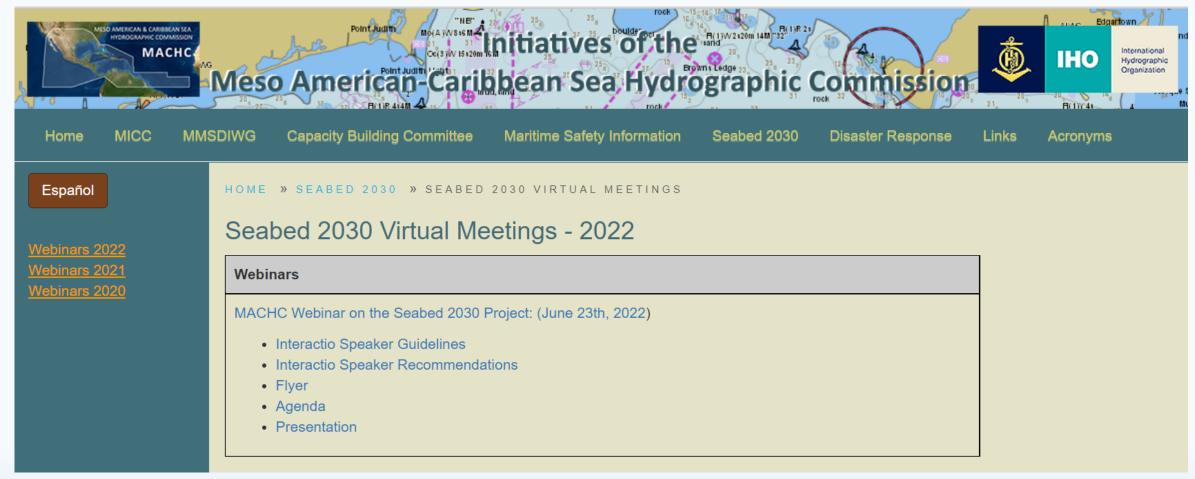
Webinar – June 23: Crowdsourced Bathymetry

Meeting POC – November 4: Status Work Plan 2022





Overview of Webinar



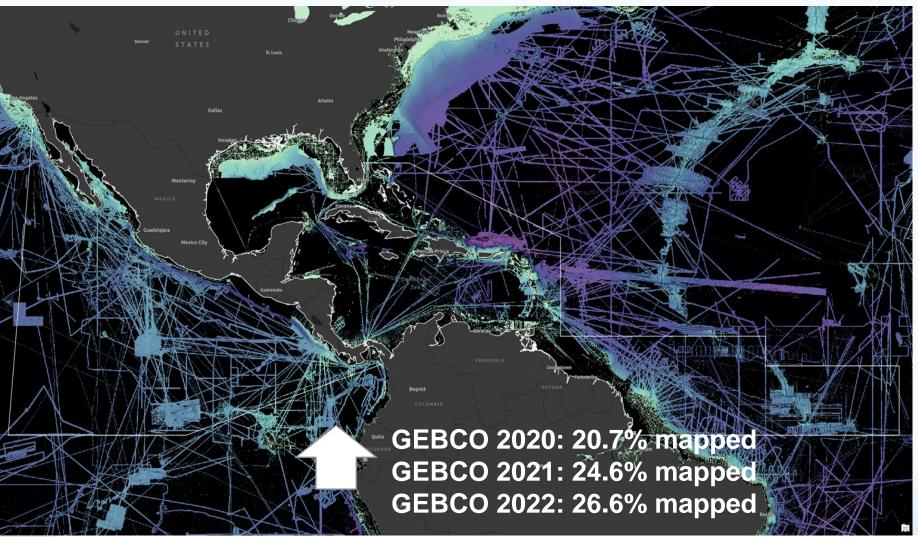
https://www.iho-machc.org/documents/seabed2030_doc3.html







Current Mapping Status in the Region (GEBCO 2022)









Overview of Data in the MACHC region

- Multiple sectors
 - Government
 - Academia
 - Industry
- Multiple data types
 - ENC
 - Multibeam
 - Singlebeam
 - Seismic
 - Satellite-Derived
 Bathymetry
- Curated data from 10 countries

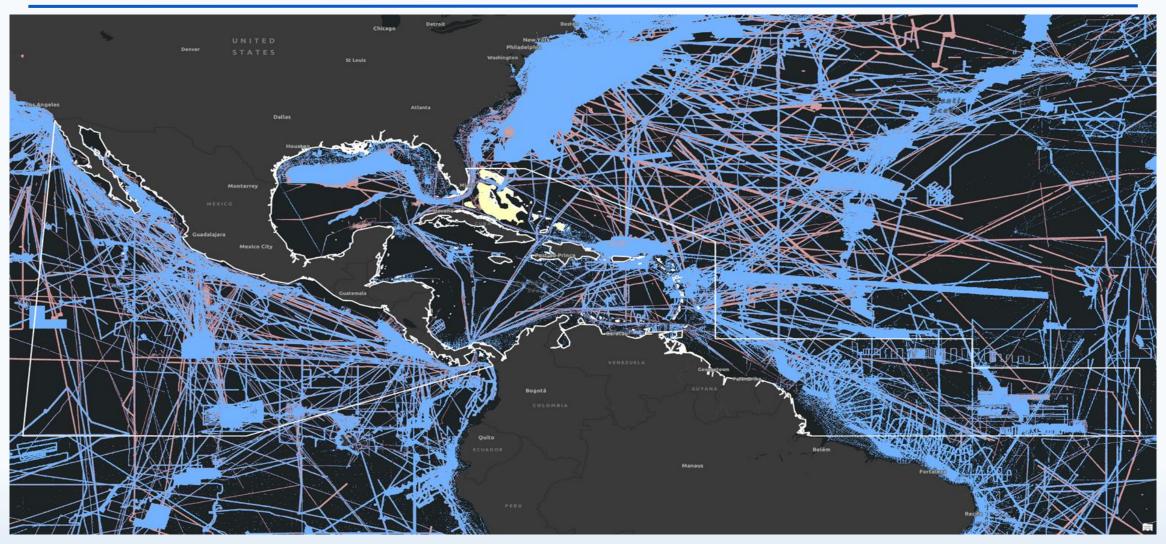


THANK YOU TO ALL CONTRIBUTORS!





GEBCO 2022 plus newly contributed data









MACHC – IOCARIBE Seabed 2030 2022 Work Plan Status



MACHC-IOCARIBE Seabed 2030 Work Plan for 2022









MACHC – IOCARIBE Seabed 2030 2022 Work Plan Activities Status

#	Action Item	Contribution so far
001	Assemble information (polygons) about existing non-public bathymetric data falling under its remit not yet identified on the MACHC Web App to identify gaps.	NLD, UK
002	Broadly communicate the steps to submit polygons showing data coverage of existing data to both the RDACC and the IHO DCDB.	HND, GTM, DOM, CRI
003	Look at existing regulatory requirements, legislation, bilateral, contractual or other arrangements for surveying within national waters of jurisdiction to reassess what bathymetric data can be made publicly available and at what resolution is acceptable to the government and to the data owner. what resolution is acceptable to the government and to the data owner. Share examples on the MACHC Initiative Seabed 2030 webpage	NLD, UK, BRA
004	Broadly communicate the steps to submit data to the IHO DCDB and the RDACC.	Webinar 2020, 2021, 2022



Organization



MACHC – IOCARIBE Seabed 2030 2022 Work Plan Activities Status

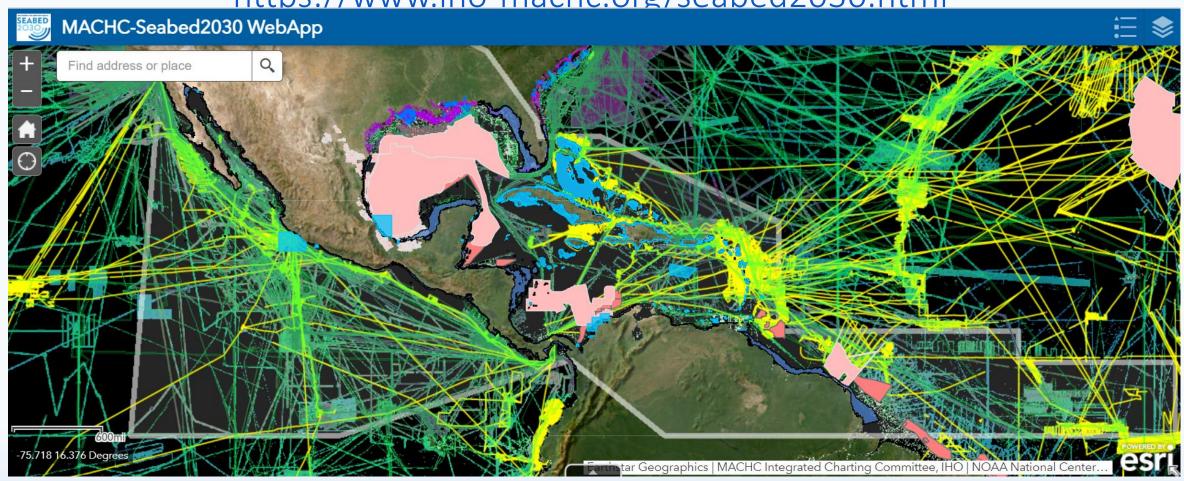
#	Action Item	Contribution so far
	Contribute multibeam, single-beam and ENC data to the IHO DCDB,	NLD, UK, BRA
005	wherever possible, for long-term archive and data access.	
006	Contribute national bathymetric data products to the RDACC at	NLD, UK, BRA
	the appropriate resolution approved by the national authorities	
	for integration into the GEBCO grid.	
007	Identify ways to promote or to support bathymetric data sharing.	NLD, UK, BRA
800	Assemble information and polygons about upcoming surveys and	NLD, UK, BRA
	data acquisition opportunities in national waters of jurisdiction to	
	integrate into the WebApp to define data gaps and plan	
	coordinated mapping campaigns.	





MACHC Seabed 2030 Web Application

https://www.iho-machc.org/seabed2030.html











MACHC – IOCARIBE Seabed 2030 2022 Work Plan Activities Status

#	Action Item	Contribution so far
	Identify gap areas in the MACHC region without any kind of	2021
009	bathymetric data (distances greater than 1,000 m) providing the	
	polygons to the respective Coastal States.	
010	Explore with national authorities expanded permissions for	NLD, UK, BRA
	opportunistic data acquisition via research and survey vessels	
	during transits, consistent with national policy.	
011	Provide information webinar on how to respond to IRCC CL 1/2020	CRI, COL, BRA,
	or IHO CL 21/2020 to allow for the provision of CSB data from ships	NLD, USA, GBR
	within waters subject to their national jurisdiction into the public	
	domain, according to national policy, or update it.	
012	Provide informational webinar on how to carryout CSB field trials	NLD, UK
	with designated "trusted nodes" (data liaisons) and data	
	collectors (mariners) in the region to provide data to the IHO	
	DCDB.	A

MACHC – IOCARIBE Seabed 2030 2022 Work Plan Activities Status

#	Action Item	Contribution so far
	Identify technical and other challenges to data collection, assembly	NLD
013	and sharing and look for solutions.	
014	Conduct an annual review process to resolve challenges to data collection and sharing.	This action will be informed by the responses from action 13
015	Provide technical support and data submission guidelines for data	Webinar 2021
	and accompanying metadata and Type Identifier (TID) information.	





MACHC – IOCARIBE Seabed 2030 2022 Work Plan Activities Results

Technical and other challenges to data collection, assembly and sharing and look for solutions:

BRA: The Brazilian Hydrographic Office has no authority to obtain the sharing of data acquired under the remit of the Brazilian Oil and Gas Agency.

CRI: It does not have an official Hydrographic entity to collected bathymetry. CRI has requested a high level visit from IHO through MACHC CBC.

GTM, HND: Equipment and training.





MACHC – IOCARIBE Seabed 2030 2022 Work Plan Activities Results

Technical and other challenges to data collection, assembly and sharing and look for solutions *continued*:

COL, MEX: Legal aspects about share data.

SUR: No platform and equipment for surveys beyond the EEZ.









MACHC-IOCARIBE
Seabed 2030
DRAFT Work Plan
for 2023









Action 4 Proposed amendment

#	Action Item
004	2022: Broadly communicate the steps to submit data to the IHO DCDB and the RDACC.
004	2023: "Constantly communicate the Seabed 2030 Project importance, the gap areas identified and the steps to submit data to the IHO DCDB and the RDACC."





Action 11 Proposed amendment

#	Action Item
011	2022: Provide information webinar on how to respond to IRCC CL 1/2020 or IHO CL 21/2020 to allow for the provision of CSB data from ships within waters subject to their national jurisdiction into the public domain, according to national policy.
011	2023: Respond to IRCC CL 1/2020 or IHO CL 21/2020 to allow for the provision of CSB data from ships within waters subject to their national jurisdiction into the public domain, according to national policy.







Action 12 Proposed amendment

#	Action Item
012	2022: Provide informational webinar on how to carry out CSB field trials with designated "trusted nodes" (data liaisons) and data collectors (mariners) in the region to provide data to the IHO DCDB.
012	2023: Consider carrying CSB field trials with designated "trusted nodes" (data liaisons) and data collectors (mariners) in the region to provide data to the IHO DCDB.





Accelerating Toward 2030:

- **Technical Innovation**
 - Data acquisition
 - Data synthesis & integration
- Collaboration
 - Leverage efforts to work toward common goals
 - Share knowledge, data, approaches, workflows, and tools
 - Prioritization for mapping campaigns











Actions requested at MACHC Plenary:

- 1. Note this report
- 2. Approve the 2023 Workplan (retaining all the actions from the 2022 Work Plan with the proposed amendments)



THANK YOU!!!

• GRACIAS !!!



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