# THE NIPPON FOUNDATION-GEBCO

Webinar 4: Moving Ahead together: Summary, Next Steps and Wrap up

> Moderator: Ms. Cecilia Cortina Guzman, MACHC Seabed 2030 Coordinator

Presenters: Dr. Vicki Ferrini, Head Seabed 2030 Atlantic/Indian Regional Center

Ms. Jennifer Jencks, Director IHO Data Center for Digital Bathymetry





2020 MACHC Seabed 2030 Webinar Series: Webinar 3, Oct 09, 2020

# Welcome MACHC Seabed 2030 Coordinator, Cecilia Cortina Guzman







Organization



United Nations Educational, Scientific and . Cultural Organization

Intergovernmental Oceanographic Commission



## Today's Agenda

10:00 - 10:10 Welcome & Logistics (Seabed 2030 Coordinator, MACHC Chair)

## 10:00- 10:45

• Recap of Webinars 1, 2, and 3 (Head of RDACC for Atlantic & Indian Oceans and Director, IHO DCDB) and response to homework assignments (Seabed 2030 Coordinator)

11:45-11:30

- Introduction of Draft MACHC-IOCARIBE Seabed 2030 Strategic Plan (Seabed 2030 Coordinator)
- Introduction of draft proposed 2021 Workplan (Seabed 2030 Coordinator)
- Endorsement of Strategy as contribution to the UN Decade (IOCARIBE Secretary)

## 11:30-12:00

- Next steps to finalize draft Strategy and workplan for presentation at MACHC21 Conference (Seabed 2030 Coordinator)
- Reminders for MACHC21 general preparation (MACHC Chair)

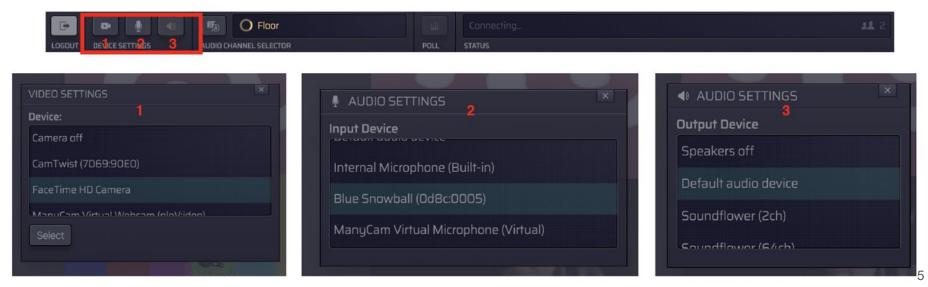


# Logistics MACHC Chair, Ms. Kathryn Ries



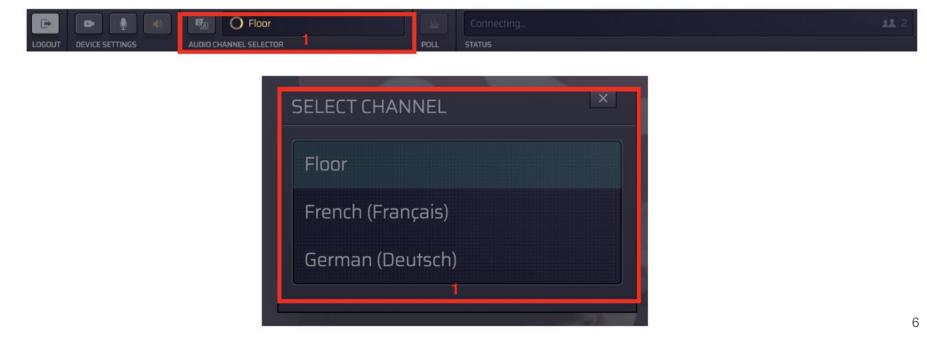
# How to Select Your Microphone and Camera (Top Left of Screen)

Select your camera (1), audio input device (2) (microphone, headset, etc.), output device (3) (headphones, speakers, etc.)



# How to Select the Language of Your Audio Channel

Select the audio channel (1) (language) you want to listen to.



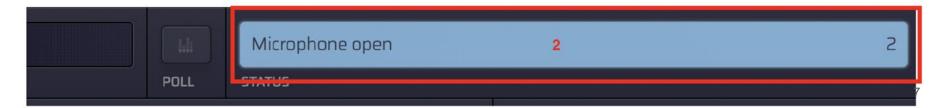
# How to Be Recognized by the Chair

Raise your hand, by pressing the button Raise Hand (1) to indicate the wish to speak.

When given the right to speak by the Moderator, Speak button will start glowing blue (2) and the Status line will say "Microphone open" (2).







# How to Speak to the Room

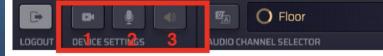
Press Speak (1).

Your speak button should turn red (2), and your Status should say Live (2) - this indicated that you are currently live and streaming.



# **Logistics - How to Speak**

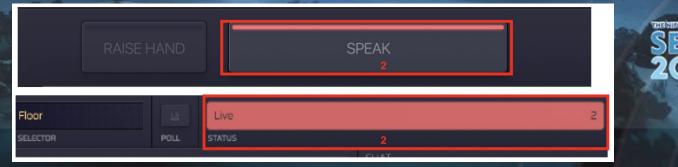
Make sure microphone (and video camera) is ACTIVE. This can be active through the entire meeting. We will not hear you if the Speak button is not RED



## Once the Chair opens your microphone **BLUE**



Press the SPEAK Button. When it is **RED**, your microphone is live. To mute your microphone press SPEAK again.

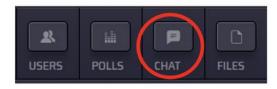


# How to Make a Video Channel Larger

Click on any video channel/square and it will move to the large viewing area.

# How to Ask Questions Via Chat

Although we encourage you to speak to the room on video and audio, you may also submit questions via chat. Click on the "CHAT" icon in the upper right and submit a question via text. Percy Pacheco will moderate this chatroom and raise questions to the Chair.



# THE NIPPON FOUNDATION-GEBCO SEABED 2030

# Introduction, Recap & Homework Review

Dr. Vicki Ferrini, Head Seabed 2030 Atlantic/Indian Regional Center

Ms. Jennifer Jencks, Director IHO Data Center for Digital Bathymetry





2020 MACHC Seabed 2030 Webinar Series: Webinar 3, Oct 9, 2020

# **Overview of Webinar Series**



## **Objectives of this Webinar Series**

- Overview & Introduction:
  - Objectives, strategy and motivation of the Nippon Foundation -GEBCO Seabed 2030 Project
- Promote collaboration and coordination
- Review current status of ocean mapping for this region
- Demonstrate online tools that are available
- Engage the community of stakeholders

   Gather information about existing data, planned mapping efforts
   Input on needs of stakeholders with respect to tools, workflows, state regional mapping priorities
- Develop a strategy for completing mapping of the region by 2030

## Webinar Schedule

- Webinar 1 Sept 11: Where are we now? Introduction and Goals including review of current mapping status in the region
- Webinar 2 Sept. 25: How do we build the map? How can you contribute data?
- Webinar 3 Oct. 9: Increasing Data Coverage: Crowdsourced Bathymetry and Data Coverage Polygons
- Webinar 4 Oct. 23: Moving Ahead Together: Summary, Next Steps and Wrap up.



# **Goals for today**

Recap previous webinars and homework responses

 Introduce draft MACHC-IOCARIBE Seabed 2030 Strategy and 2021 Workplan

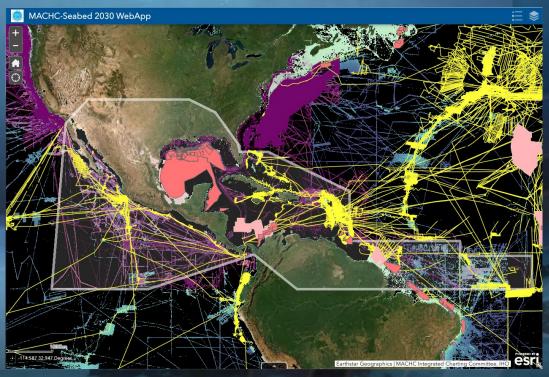
Identify and agree on next steps



# **Recap Webinar 1: Where are we now?**

#### • Project Goals

- Seabed 2030 MACHC Web App
  - GEBCO 2020 Map & Coverage
  - Known Data Coverage Layers
    - Public Data
    - Embargoed Data
  - Planned Surveys
- Data Gaps



# Summary of Homework #1

- Are there existing datasets that are not represented in the Seabed 2030 - MACHC web app?
- Are there technical challenges that we might be able to help you address?
- Have you thought about strategies for gaining access to nonpublic data?



# Summary of Outcomes from Homework #1

Received responses from:

Antigua and Barbuda, Barbados, Belize, Brasil,
 Colombia, Costa Rica, El Salvador, Guyana, Mexico, Netherlands,
 Trinidad and Tobago, UK, USA, Fugro...

## Responses include:

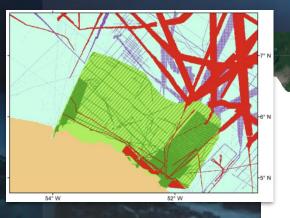
- Committed to the process
- Data will be shared
- Transit data will be acquired
- New polygons contributed to Web App
- Challenges with data sharing\*\*



# **Recap Webinar 2: How do we build the map?**

- Data Assembly Process

   Type Identifier (TID) Grid
- How to access data
- How to contribute data





Home » About » Contributing data

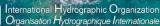
#### How to contribute data

Please use the form below to make contributions of multibeam and/ or single-beam survey data, individual soundings or existing grids to help update our gridded data sets and products. If you have any problems in completing the form, then please email this information to the Global Center (gdace@seabed2030.org).

#### **GEBCO** Data Contribution Form

GEBCO's aim is to provide the most authoritative, publicly-available bathymetry of the world's oceans. It operates under the joint auspices of the International





IHO DCDB Home Contribute Data

Crowdsourced Bathymetry CSB Mapping Projects

#### IHO Data Centre for Digital Bathymetry (DCDB)

The IHO DCDB was established in 1990 to steward the worldwide collection of bathymetric data. The Centre archives and shares, freely and without restrictions, depth data contributed by mariners. The IHO DCDB is hosted by the U.S. National Oceanic and Atmospheric Administration (NOAA) on behalf of the IHO Member States.



IHO DCDB Data Viewer highlighting ship tracks and data availability over the Pacific Ocean and neighboring regions The DCDB archive includes over 30 terabytes of oceanic depth soundings acquired with multibeam and singlebeam sonars by hydrographic, oceanographic and industry vessels during surveys or while on passage.

The DCDB also archives and provides access to data contributed in support of the IHO Crowdsourced Bathymetry (CSB) initiative.

The IHO DCDB Data Viewer shows the global coverage of the DCDB's bathymetric data holdings as well as the spatial extent of data archived at other repositories via web services.

Access Data

Jump to

- > Our data contributors
- > Join the Crowdsourced Bathymetry initative

#### Share this





# Summary of Homework #2

- Do existing data exist that can be contributed? <u>http://www.gebco.net/about\_us/contributing\_data</u>
- Do you have upcoming surveys that you can share information about?
  - Assemble information about upcoming surveys and data acquisition opportunities (bounding box, polygons, shapefiles, coordinates)
- Do you have technical challenges that we might be able to help you address?



# Summary of Outcomes from Homework #2

## • Received responses from:

Barbados, Costa Rica, El Salvador, Guatemala, Mexico, Netherlands, Nicaragua, Dominican Republic, St. Vincent and the Grenadines, Suriname, UK, USA, Uruguay, TCarta.

## • Responses include:

- Hydrographic planning process but without definite dates due to the pandemic
- Challenges with deep water surveys (most are near coastal)
- Some data are available in Web services



# Recap Webinar 3: CSB and the role of HOs and other data collectors

- IHO CSB Initiative Introduction, description of how CSB can be used and contributed to the IHO DCDB, and how hydrographic offices can become involved.
- Web App Review
- Polygon Coverage purpose, formats & metadata



# Homework #3

- Encourage the review and response of IHO CL 21/2020 and IRCC CL 1/2020 by MACHC21 (November 30-December 3)
- 2. Consider participating in the next round of CSB Field Trials by receiving Seabed 2030-funded data loggers
- 3. Contribute shapefiles/polygons of existing coverage and planned surveys
- 4. Assemble information about technical challenges that we might be able to help you address



# CL Questionnaire asks:

# • Do you support or object to the CSB data provision for depth measurements from the internal waters, territorial sea, or EEZ of your country?

- Do you wish to be informed when such information is received by the IHO DCDB?
- Do you wish to review such information before its ingestion into the IHO DCDB?
- Do you wish for the opportunity to put caveats on the further dissemination of such data?

#### CROWDSOURCED BATHYMETRY DATA PROVISION – COASTAL STATE POSITION FOR WATERS SUBJECT TO THEIR NATIONAL JURISDICTION

TEMPLATE FORM

(to be returned to the IHO Secretariat no later than 4 Septemeber 2020

E-mail: cl-lc@iho.int - Fax: +377 93 10 81 40)

#### IHO clarification on Crowdsourced Bathymetry Activity

For the purpose of this Circular Letter, the following terms have the specified meanings: <u>Bathymetry</u> is the determination of ocean, coastal, and inland water depths. The general configuration of sea floor as determined by profile analysis of depth data.

<u>Crowdsourcing</u> is a process by which people and/or groups voluntarily submit observations, data, or information to accomplish a task or goal.

<u>Crowdsourced bathymetry</u> is defined by the IHO as the collection of depth measurements from vessels, using standard navigation instruments, while engaged in routine maritime operations. <u>Crowdsourced bathymetry data provision</u> is the transmission to the IHO Data Centre for Digital Bathymetry for ingestion, aggregation, categorization, and public dissemination of depth measurements made by vessels, using standard navigation instruments, while engaged in routine maritime operations.

IHO Data Centre for Digital Bathymetry (DCDB) was established in 1990 to steward the worldwide repository of bathymetric data. The Centre archives and shares, freely and without restrictions, depth data contributed by mariners. The IHO DCDB is an IHO resource that is hosted by the U.S. National Oceanic and Atmospheric Administration (NOAA) on behalf of IHO Member States.

Internal Waters, <u>Territorial Sea</u>, and <u>Exclusive Economic Zone</u> have the same meanings as are given those terms under the 1982 UN Convention on the Law of the Sea.

Questions:

 Do you support or object to the crowdsourced bathymetry data provision for depth measurements from the internal waters of your country?

		OBJECT 🛛	
CAVEAT	:		



# **Homework #3 Discussion/Questions**

 Encourage the review and response of IHO CL 21/2020 and IRCC CL 1/2020 by MACHC21 (November 30-December 3)

## Have the MACHC Members States begun review of the letter?

<u>Brazil,</u> Colombia, Cuba, Dominican Republic, France, Guatemala, Guyana, Jamaica, Mexico, <u>Netherlands</u>, Suriname, Trinidad and Tobago, United Kingdom, <u>United States</u> <u>of America</u>, Venezuela

Have the MACHC Associate Member States begun to review IRCC CL 1/2020?

Antigua and Barbuda, Barbados, Belize, Costa Rica, El Salvador, Grenada, ABED Haiti, Honduras, Nicaragua, Panama, Saint Lucia, St Kitts and Nevis, St. Vincent and the Grenadines

# Homework #3 Discussion/Questions cont...

2. Are there organizations potentially interested in participating in a Seabed 2030-funded CSB Field Trials in our region?

## Receive FREE DATA LOGGERS

- Distribute to your community
- Assist local mariners in set up
- Act as a data assembly center
- Provide a copy of these data to the IHO DCDB
- 2. Any other information on planned surveys or existing coverage to contribute to the WebApp layer?
- 2. Any other technical challenges?



## Moving Ahead Together: Summary, Next Steps and Wrap up

- Introduction of Draft MACHC-IOCARIBE Seabed 2030 Strategy and 2021 Implementation Work Plan
- Potential endorsement of Plan as a regional contribution to UN Decade on Ocean Science
- Next steps for review of Draft Strategy and Workplan for presentation to the MACHC Plenary

MACHC-IOCARIBE Seabed 2030 Strategy





# DRAFT MACHC-IOCARIBE Seabed2030 Strategy 2021-2030

**Vision:** A complete baseline seabed map of the MACHC Region by 2030 that informs the sustainable, multi-purpose use of our regional ocean.

**Mission:** Acquire and share the data necessary to create a complete map of the MACHC Region through multi-sector partnerships and collaboration.





Call to Action: First region to be mapped by 2030!

100% mapped:100 metersin shallow water,300 meters in deeper

water

29

# ~DRAFT~ MACHC-IOCARIBE Seabed2030 Strategy 2021-2030

## Current Mapping Status in the Region

- 20% of the region has been mapped (based on data in the GEBCO grid)
- More data exists that has yet to be shared!
- The Webapp tool highlights gaps, existing public and non-public data to help prioritize future efforts to fill them

 Goal is to increase contributions by 8% a year to achieve 100 % coverage by 2030!



# ~DRAFT~ MACHC-IOCARIBE Seabed2030 Strategy 2021-2030

Goal 1: Discover existing non-public data to contribute to IHO DCDB and GEBCO grid

Objective 1.1. Share existing bathymetric data in the MACHC region for inclusion in the GEBCO Grid and long-term preservation and public accessibility via the IHO DCDB.

Objective 1.2. Identify all existing non-public data and create/share polygons delineating the extent of data coverage for integration into the Seabed 2030 - MACHC Web App.

Objective 1.3. Collaborate with partners to determine and provide acceptable access to non-public data sets from regional governments, scientific investigators, private industry, and public organizations.

# DRAFT MACHC-IOCARIBE Seabed2030 Strategy 2021-2030 Goal 2: Increase Data Coverage

Objective 2.1. Design, implement, and resource a systematic mapping campaign with partners and donor organizations to map all gaps.

Objective 2.2. Encourage the acquisition of mapping data by academic and industry survey vessels during transits through the region to fill gaps in data coverage.

Objective 2.3 Encourage the collection and contribution of CSB data among volunteer commercial and non-commercial vessels.

# DRAFT MACHC-IOCARIBE Seabed2030 Strategy 2021-2030

## **Goal 3:** Build Capacity for mapping contributions

Objective 3.1 Expand and enhance the suite of DCDB and RDACC tools available to support and assist data contributors through the packaging and provision of data at any resolution or access level.

Objective 3.2 Automate data submission and simplify user interfaces.

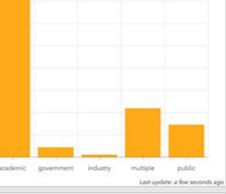
# How will we track our progress?

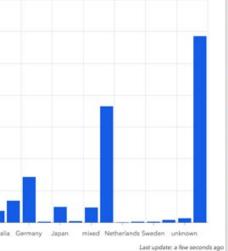
-Online tools and metrics that show the growth of data contributions of different stakeholders by sector on an annual basis.

-An annual work plan of implementation actions









# **DISCUSSION PERIOD**



## DRAFT MACHC-IOCARIBE Seabed2030 Workplan for 2021





MACHC & Seabed 2030 DRAFT 2021 Work Plan Activities

Goal 1: Discover and Share Existing Non-public Data

Objective 1.1. Share existing bathymetric data in the MACHC region for inclusion in the GEBCO Grid and long-term preservation and public accessibility via the IHO <u>DCDB</u>.

Action 1	Review of existing bilateral or contractual arrangements for surveying to determine what data can be made publicly available and at what resolution is acceptable for the data owner.	All coastal states and partners	January 2021	
Action	Broadly communicate the steps to submit data to both the RDACC and the IHO DCDB.	Seabed2030	ongoing	
2		Coordinator	2030	



MACHC & Seabed 2030 DRAFT 2021 Work Plan Activities

Goal 1: Discover and Share Existing Non-public Data

Objective 1.2 Identify all existing non-public data and create/share polygons delineating the extent of data coverage for integration into the Seabed 2030 - MACHC Web App.

Action 3 Assemble information about polygons about existing non-public data not yet identified on the MACHC Web App.	All coastal states and partners	February 2021
---	---------------------------------	------------------





#### MACHC & Seabed 2030 DRAFT 2021 Work Plan Activities

**Goal 1: Discover and Share Existing Non-public Data** 

Objective 1.3. Collaborate with partners to determine and provide acceptable access to non-public data sets from MACHC region governments, scientific investigators, private industry, and public organizations.

Action<br/>4Identify barriers to data sharing<br/>and develop strategies to resolve<br/>themAll coastal<br/>states and<br/>partners<br/>w/Seabed<br/>2030<br/>CoordinatorOngoing



**Goal 2: Increase Data Coverage** 

Objective 2.1. Design, implement, and resource a systematic mapping campaign with partners and donor organizations to map all gaps.

Action 5

Assemble information and polygons about upcoming surveys and data acquisition opportunities to integrate into the WebApp.

Coastal February States / Seabed2030 Coordinator

2021



#### **Goal 2: Increase Data Coverage**

Objective 2.2. Encourage the acquisition of mapping data by academic and industry survey vessels during transits through the region to fill gaps in data coverage.

 Action
 Grant permission for opportunistic data acquisition via<br/>research and survey vessels during transits,<br/>consistent with national policy.
 Coastal<br/>States
 Ongoing<br/>States



#### **Goal 2: Increase Data Coverage**

Objective 2.3. Encourage the collection and contribution of CSB data among volunteer commercial and non-commercial vessels.

Action 7	Review and 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.	MACHC Members/ Associate Members	December 2020
Action 8	Establish crowd sourced bathymetry field trials with designated "trusted nodes" (data liaisons) and data collectors (mariners) in the region to provide data to the IHO DCDB.	Coastal States SE other 20 partners	March 2021



**Goal 3: Build Capacity for mapping contributions** 

Objective 3.1. Expand and enhance the suite of DCDB and RDACC tools available to support and assist data contributors through the packaging and provision of data at any resolution or access level.

Action	Identify technical challenges and other obstacles to data	Coastal	Мау
9	collection, assembly and sharing.	States to	2021
		Seabed2030	and the second
an A	Commence Carol	Coordinator	ABED
STATE OF		20	30,,,,



**Goal 3: Build Capacity for mapping contributions** 

Objective 3.2. Simplify data submission workflows and user interfaces for data entry.

Action 10	Conduct an annual review process to resolve challenges to data collection and sharing.	Seabed2030 Coordinator, Director IHO DCDB, Head RDACC	June 2021
Action 11	Provide technical support and data submission guidelines for data and accompanying metadata and Type Identifier (TID) information.	Seabed2030 Coordinator, C Director IHO DCDB, Head RDACC	and the second se

# **Discussion Period**



# Endorsement of Strategy as regional contribution to the UN Decade on Ocean Science

- First Call for Decade Actions is happening now, followed by periodic Calls from 2021-2030
- First Call focuses on two types of large-scale Decade Actions:
  - Large-scale, multi-country, transformative Decade programmes
  - In-kind or financial contributions including support to central or decentralized coordination functions
- First Call is open from October 15, 2020 to January 15, 2021
- Decisions to endorsements under this Call will be made in early 2021



21 United Nations Decade of Ocean Science for Sustainable Development





United Nation ucational, Scientific an Cultural Organizatio Intergovernmental Oceanographic Commission

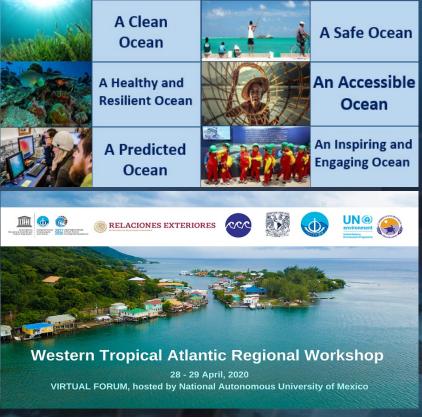


Additional information and documents that support the Call can be found on <u>www.oceandecade.org</u>

### Endorsement of Strategy as regional contribution to the **UN Decade on Ocean Science**

- MACHC Region aiming to be the first fully  $\bullet$ mapped region by 2030 - can contribute directly to the UN Decade
- High-resolution bathymetric map will greatly  $\bullet$ inform and contribute to the goals, challenges and outcomes of the UN Decade
  - **Ocean Decade Challenge 8:** Develop a 0 comprehensive digital representation of the ocean through multi-stakeholder collaboration that provides free and open access to explore, discover, and visualize past, current, and future ocean conditions.
- Map completion identified as high priority during the UN Decade of Ocean Science Regional Workshop for the Western Tropical Atlantic

#### **UN Decade of Ocean Science Goals**



# UN Ocean Decade – objectives to take benefit from IHO competencies

**Obj. 1:** Increase transformative ocean knowledge capacity and capability globally

**Obj. 2:** Expand, innovate and integrate ocean knowledge systems globally

**Obj 3:** Understand and predict the whole ocean system and its component parts

**Obj 4:** Develop integrated assessment and decision support systems and other transformational tools and processes Data portals (IHO: MSDI)

based on open data approach (IHO: Standardization)
 expanding scientific and technical capability (IHO: capacity building)

Global ocean observing systems (IHO: tides, currents, plastic monitoring (**new**))

partnering with information generators and end-users develop and maintain new technology (IHO: Satellite derived bathymetry, autonomous technologies, S-44) integrate local knowledge (IHO: RHCs)

Ocean Mapping (IHO: DCDB, CSB, GEBCO, S-100 data products interoperability)

 Develop and disseminate analytical tools to predict human and environmental interactions based on multiple stressors.
 (IHO: existing means for navigation in Arctic waters and S-101 next Generation ENC in combination with AIS and others)



Endorsement of Strategy as regional contribution to the UN Decade on Ocean Science

## Proposal: Submit the MACHC-IOCARIBE Seabed 2030 Strategy and Implementation Plan via the Decade Actions endorsement form by January 15, 2021



# **DISCUSSION PERIOD**



## **Proposed Next Steps**

November 6: Provide comments on Draft MACHC-IOCARIBE Seabed2030 Strategy and 2021 Implementation Work Plan to MACHC Seabed 2030 Coordinator Cecilia Cortina Guzman: cecilia cortina@cmail.com

November 10: Draft Strategy and workplan uploaded to IHO Website in advance of MACHC21 (November 30--December 3)--all MACHC members requested to brief their heads of delegation in advance.

**November 10:** Draft Strategy and workplan distributed to IOCARIBE Member States for their consideration



## **Proposed Next Steps**

December 3: Report of the MACHC Seabed2030 Coordinator to Plenary, with recommendation to approve the Strategy and Workplan and submission for endorsement as a UN Decade activity

**December 30:** Approval of Strategy and Workplan by IOCARIBE

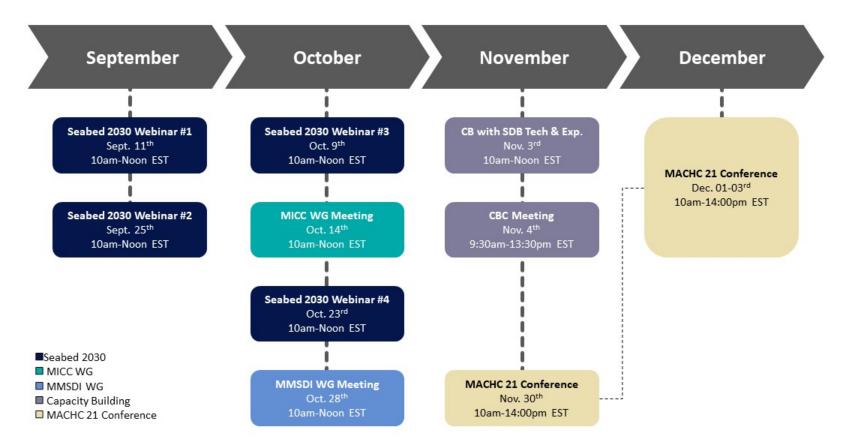
January 15, 2021: Submit the MACHC-IOCARIBE proposal for endorsement by the UN Decade 2030

# Reminders for MACHC21





### **MACHC 21 Meeting Schedule**

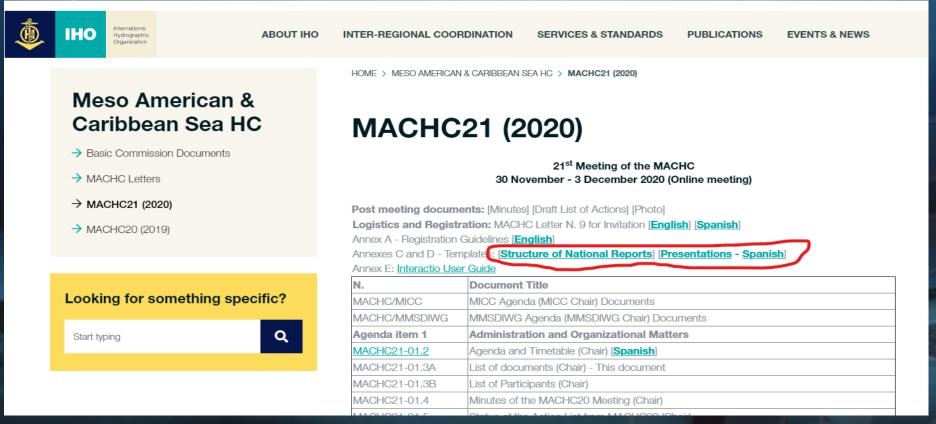


#### **MACHC21 REMINDERS-Other Pre-meetings**

September 11: Seabed 2030 Webinar #1 (already held)
September 25: Seabed 2030 Webinar #2 (already held)
October 9: Seabed 2030 Webinar #3 (already held)
October 14: MACHC Integrated Charting Working Group (MICC-already held)
October 23: Seabed 2030 Webinar #4 (held today)

October 28:MACHC Marine Spatial Data Infrastructure Working GroupNovember 3:Capacity Building Committee/SDB Technology, ExperienceNovember 4:Capacity Building Committee MeetingNovember 30--December 3:MACHC21

### OTHER MACHC21 REMINDERS-National Reports due November 6 to be posted on the IHO website-use recommended template





Meso American-Caribbean Sea Hydrographic Commission

Home	MICC	MMSDIWG	<ul> <li>Capacity Building</li> </ul>	1 Committee	Maritime Safety	v Information	Seabed 2030	Disaster Response	Links	Acronyms

Español

#### HOME » seabed 2010 ty seabed 2030 vietual meetines.org/documents/seabed2030\_doc.html Seabed 2030 Virtual Meetings

#### Interactio Video Conference Platform

- 1. Interactio Platform User Guide
- 2. Interactio Video (1:43 min)
- 3. Interactio Troubleshooter
- 4. Interactio Mobile App (Listening Only)

#### Webinars

Webinar 1: Agenda (Introduction - September 11th, 2020)

- Instruction Letter (MACHC/IOCARIBE Joint CL-03)
- Presentation Slides
- Audio Recording
- Participant List

Webinar 2: Agenda (Sharing Data and Attribution - September 25th, 2020)

- Instruction Letter (MACHC/IOCARIBE Joint CL-04)
- Presentation Slides
- Audio Recording
- Participant List

Webinar 3: Agenda (Crowdsourced Bathymetry and Data Coverage Polygones - October 9th, 2020)

- Instruction Letter (MACHC/IOCARIBE Joint CL-05)
- Presentation Slides

Webinar 4: Agenda (Wrap up - October 23th, 2020)

Eduartown

IHO

B(1)(4

 $(\mathbf{B})$ 

Internationa

Hydrographic Organization

## Thank you!

#### We look forward to seeing you at MACHC21 November 30-December 3, 2020





