



INTERNATIONAL HYDROGRAPHIC ORGANIZATION
MESO AMERICAN & CARIBBEAN SEA HYDROGRAPHIC COMMISSION



**Action List
from
20th Meso American & Caribbean Sea Hydrographic
Commission Meeting
2-6 December 2019
Santo Domingo, Dominican Republic
List of Actions**

Legend
White: open
Light Grey: continuous
Light Green: completed or closed

List of Actions from IRCC12 for RHCs:

Reference	Action	Responsible party	Due date	Status
IRCC 12/1	RHC to Instruct MS in the divulgation of publication of S-67 Mariners' Guide to Accuracy of Depth Information in Electronic Navigational Charts (ENC) to the Marine Institutions and Education Schools.	MACHC Chair	IRCC 13	Will be new MACHC21 Action
IRCC 12/2	Member States to review the paper on the Future of paper Charts and provide feedback on it.	MACHC Member States	IRCC 13	Will be new MACHC21 Action
IRCC 12/3 (17.2.1.4)	Member States strongly encouraged to continue updating C-55 .	MACHC Member States	IRCC 13	Continuous MACHC Action 17.2.1.4
IRCC 12/4	RHC to implement the IHO Resolution 2/1997 as amended by A-2.	MACHC Chair	IRCC 13	Will be new MACHC21 Action

IRCC 12/6	Invite the Member States who have experience in developing and providing e-Learning contents to share their resources and experiences to the e-Learning PT.	MACHC Chair	IRCC 13	Will be new MACHC21 Action
IRCC 12/11	Promote the discussion of any item with relevance to SDI/MSDI/MSP and to take appropriate actions.	MACHC Chair	IRCC 13	Addressed by MACHC MSDI WG
IRCC 12/12	Consider CSB and Seabed 2030 initiatives be permanently added as an agenda item at future RHC meetings.	MACHC Chair and Member States	IRCC 13	Already done for MACHC21
IRCC 12/13	Encourage Member States to support the CSB initiative with positive actions, such as requiring all research vessels to collect bathymetric data for late uploading, when on passage or when it does not interfere with other research activities	MACHC Chair and Seabed 2030 Coordinator	IRCC 13	In progress via Seabed2030 Strategy
IRCC 12/14	Support the modification of the current “RHC Seabed 2030 Coordinator” to a joint “RHC CSB/Seabed 2030 Coordinator” and provide the identification of the Coordinators	MACHC Member States	IRCC 13	To be discussed as part of Seabed2030 agenda item
IRCC 12/16	Encourage MS to release datasets or subsets into the public domain via the IHO DCDB.	MACHC Chair, Seabed 2030 Coordinator and Member States	IRCC 13	Continuous MACHC Action 20.6.4.1 and part of Seabed2030 Strategy
IRCC 12/17	Encourage Member States to promote the vital need to map the entire seabed.	MACHC Chair, Seabed 2030 Coordinator and Member States	Continuous	In progress via Seabed2030 Strategy
IRCC 12/19	Encourage all Member States to make existing seabed mapping data available for use by Seabed 2030 in the GEBCO Grid.	MACHC Chair, Seabed 2030 Coordinator and Member States	Continuous	Continuous MACHC Action 20.6.4.1
IRCC 12/20	RHC to participate at Regional level in those actions of the UN Ocean Decade matching with IHO’s new strategic targets (IRCC12-08C).	MACHC Chair, Seabed 2030 Coordinator Member States	IRCC 13	In progress via Seabed2030 Strategy

Table 1: ACTION ITEMS FROM THE 20th MACHC

No	Reference	Action	Responsible party	Due date	Status
List of actions 20th MACHC meeting					
20.2.1.1		Member states provide suggestions for articles for the region for the IHR (starting via the live polling at MACHC20)	Member States	12/13/2019	Completed
20.2.3	17.2.1.1	Countries not shaded in green in MSI matrix should get in touch with NAVAREA IV and XII Coordinator (Mr. Peter Doherty and Mr. Christopher Janus) and/or IHO Secretariat (Assistant Director Leonel Manteigas) to request an update as appropriate. (Current MACHC continuous action 17.2.1.1 updated accordingly). Also ensure that National Points of contact are accurate.	National Coordinators	7/31/2020	Continuous
20.3.b.1		Member States requesting “high level/technical visits” from the breakout group results should confirm their interest directly to the CB Coordinator (Lucy.Fieldhouse@ukho.gov.uk). These will be evaluated for potential inclusion in the 2021-2023 MACHC Capacity Building Plan.	Interested MACHC Members and CB Coordinator	2/28/2020	Completed
20.3.b.2		Use the IHO CB procedure 11 to assess the status of Member States within IHO CB phases to better evaluate the requests for phases 1, 2 & 3 training opportunities resulting from the breakout group process.	CB Coordinator	6/30/2020	Completed
20.3.b.3		Translate Procedure 11 into Spanish.	Guatemala		Completed
20.4.2		Establish links between the IOCARIBE and MACHC websites for easy access and visibility of available training courses of mutual interest, to advance the use of the Seabed 2030 tool, and continue current engagement between the CMA and MMSDIWG, the CARIBE-EWS, and the joint IBBCA.	MACHC Chair and Secretary IOCARIBE	3/31/2020	Completed
20.4.3		MACHC attendees to ask their IMO reps to raise awareness of Hydrographic issues at the potential donor organization meeting taking place in Jamaica, 20-24 January, with IALA, IHO participation.	MACHC Attendees	1/19/2020	Completed

No	Reference	Action	Responsible party	Due date	Status
20.5.1.1		Produce draft of 2021-2023 MACHC Capacity Building Plan; review training priorities and offerings offerings from SEPRHC and SWAtHC , COCATRAM, IALA, IMO, Spain, industry etc. to identify potential areas of common interest/opportunity for the new CB Plan.	CB Coordinator	8/31/2020	Completed
20.5.2		COCATRAM 2020 Hydrography and Cartography Course content and logistics to be planned and participants from the region identified.	CB Coordinator, COCATRAM, IHO, Colombia	8/31/2020 12/31/2022	Delayed by the pandemic, hope to hold in 2022 as part of the next IMO biennium plan.
20.5.3		Member States to liaise with their IMO representatives to request joint technical visits with IALA and IHO (funded by the IMO) as part of the IMO MS Audit Scheme (VIMSAS).	Interested MACHC Members	6/30/2020	Completed
20.5.6		Members interested in technical visits should note recommendations from the Technical Visit to Guatemala and speak with the US and Guatemala.	MACHC Members	7/31/2020	Completed
20.6.1		Consider request for additional data layers to further support the “Economic Assessment of Risks in Maritime Navigation across the Greater Caribbean Region” project in MMSDIWG workplan.	MMSDI WG Chair	8/31/2020	Completed
20.6.4.1	17.6.5	Provide existing bathymetric data to the IHO DCDB (bathydata@iho.int) as indicated in MACHC continuous action 17.6.5, <i>including that collected by private sector companies under their authorization (MS)</i> . (Existing continuous action updated with the italicized addition from MACHC 20). Guidance on how to contribute data is found in English and Spanish on the MACHC Initiative website.	All MACHC Members	10/31/2020	Continuous

No	Reference	Action	Responsible party	Due date	Status
20.6.4.2		MS provide future survey plan polygons to add as a layer in the MACHC Seabed 2030 gap analysis tool to Percy.Pacheco@noaa.gov (MS) to encourage survey collaboration and avoid duplication of effort.		5/31/2020	Delete from list: Ongoing—Part of Seabed2030 Strategy and Workplan
20.6.4.3		A link to the Seabed 2030 Regional Gap Analysis tool will be shared with IOCARIBE, so that it, in coordination with the MACHC can raise awareness and encourage the increase in contributions to the IHO DCDB and Seabed 2030 from their respective member states through a joint MACHC/IOCARIBE CL01.	MACHC Chair and IOCARIBE Secretary	10/31/2020	Completed
20.6.4.b.1		Provide link on MACHC Initiative website to IHO CL11/2019 for MACHC IHO MS to review and provide their response on CSB national policies.	MACHC Initiative Webmaster		Completed—also part of Seabed2030 Strategy Action Items
20.6.4.b.2		Non-IHO MS to review and provide their comments to IHO IRCC-CL01/2020 to the MACHC Seabed 2030 Coordinator for collation and submission to IHO.	MS and MACHC-SB 2030 Coordinator	8/31/2020	Delete from list: Ongoing—Part of Seabed2030 Strategy Workplan
20.6.4.b.3		IHO to determine how to handle responses from non-IHO coastal states.	IHO	11/30/2020 MACHC22	In process- Contingent upon receipt of non-IHO coastal State responses
20.6.4.b.4		DCDB to provide instructions (in English and Spanish) on the bathymetric data submission process. (Member States may now use it to submit bathymetric data sets to the DCDB per continuous action 20.6.4.1)	DCDB Coordinator	3/31/2020	Completed

No	Reference	Action	Responsible party	Due date	Status
20.6.4.b.5		Translate technical CSB presentations and information into Spanish including key definitions.	MACHC Chair and DCDB Coordinator	6/30/2020	Completed
20.6.5		Seek and share information on the process by which the Inter-American Development Bank determines the criteria for funding projects	MACHC Chair	6/30/2020	Completed
20.7.1.1		Provide/update senior and working level POCs on the MACHC website for disaster response and complete country/industry/regional disaster response capability and resource templates .	All Members	5/31/2020	Continuous
20.7.1.2		Consider amendments for the MACHC disaster response framework based on the anticipated approval and amendment of the IHO resolution 1/2005 on disaster response at IHO Assembly-2.	MACHC Chair	11/30/2020 MACHC22	New MACHC21 action
20.7.2		Continue to reach out to the Bahamas to engage them in the MACHC.	UK, IHO Secretariat	11/30/2020	Completed (multiple attempts to contact without success)
20.7.4	19.4.1a	Engage Tsunami Warning National Contacts and determine if inundation modelers are using the best available bathymetric data (update existing continuous action 19.4.1.a with this italicized language).	All Members		Continuous
20.8.1.1		All MS invited to fill out the MMSDI WG Survey on the MACHC Initiative Website.	All Members	7/31/2020	To be addressed as part of MMSDI WG report to MACHC Plenary
20.8.1.2		MMSDI WG to explore how to become involved in the Caribbean Geospatial Development Initiative as part of next year's work plan. Put the documents on the MMSDI WG site for all to review.	MMSDI WG Chair	8/31/2020	To be addressed as part of MMSDI WG report to MACHC Plenary

No	Reference	Action	Responsible party	Due date	Status
20.8.1.3		MS and all coastal states are encouraged to make their other open marine spatial data available on the Caribbean Marine Atlas to take advantage of the excellent existing infrastructure and not have to recreate it individually.	All Member States		Continuous
20.8.2.1	19.8.1	MS consider joining the UN-GGIM-WGMGI (contact john.nyberg@noaa.gov for more information) as per existing continuous action 19.8.1.	All Members		Continuous
20.8.2.2		Complete the UN-GGIM-WGMGI Use Case Survey on the MACHC MMSDIWG page and ask John.Nyberg@noaa.gov for assistance as needed.	Interested MS	5/29/2020	Withdrawn by John Nyberg; overtaken by events
20.8.4		MMSDI WG to determine protocols needed to ensure that bathymetric data is accessible and in what formats to support MapAction disaster response mapping requirements.	MMSDI WG Chair	8/31/2020	To be addressed as part of MMSDI WG report to MACHC Plenary
20.9.1		Dominican Republic to provide additional input/assistance related to cruise ships to the MICC WG.	Dominican Republic	6/30/2020	Completed To be addressed as part of MICC report to MACHC Plenary
20.9.6		Support process outlined in WEND overlap Resolution 1/2018 – continue good work at keeping overlaps to a minimum - and for that, submit ENC Schemes to the approval of RHC S-11 Part A, Section 200 (as part of MICC Plan) Consider making CATZOC values available in INTogIS II additional layers for Management Mode only, before April 7-9 2020 WEND meeting. Support the development of the WENS Principles, by reviewing updated version after April WEND meeting.	MACHC Members	5/31/2020	Completed To be addressed as part of MICC report to MACHC Plenary

No	Reference	Action	Responsible party	Due date	Status
20.10.1.c1		Respond to the invitation to attend a Latin American hydrography conference in 2021 and consider lending assistance by MACHC21.	All Member States	11/30/2020	Delete from list. Still in planning stage, may be reintroduced in the future)
20.10.1.c2		English-speaking MS interested in a 2-week Hydrographic Office management training course should approach their IMO reps to request a similar IMO training in 2021 (or in the next IMO biennium plan for 2022-23) at the Senior Maritime Administrators' Workshop (5-6 March, 2020). Similarly, Spanish-speaking MS should request a similar course for Spanish speakers from their IMO representatives, to be coordinated with the IHO, IMO, IALA, and COCATRAM in 2021.	Interested Member States	2/28/2020	Completed
20.10.1.c3		Develop and post a list of acronyms on the MACHC website (in both English and Spanish).	MACHC Chair with Costa Rica (offered translation)	4/30/2020	Completed

Table 2: STATUS OF PREVIOUS OPEN ACTIONS (as agreed at MACHC20)

No	Reference	Action	Responsible party	Due date	Status
List of actions 19th MACHC meeting					
19.5a	Capacity Building	Continually update the list of CBC training activities on the MACHC Initiative website sponsored by other Member States, Committees, regional and other partners, such as FOCAHIMECA, COCATRAM, National training opportunities, IMarEST, etc.	CBC Chair	Annually before each conference	Open—in progress. <i>(New continuous action)</i>
19.5c 20.5	Capacity Building	Report on the efforts to develop an individual recognition scheme (for Latin American hydrographers graduated from CAT A and B programs)	IHO Secretariat with Brazil, Spain and Portugal	MACHC22	Open-in progress.
19.6.4a	Seabed 2030	Encourage IBCCA chart contribution completion.	Colombia	ASAP	Open—in progress.
19.9	MICC	The new MICC Work Plan should address the issue of a regional ENC scheme.	MICC Chair	ASAP	Open-in progress To be addressed as part of MICC report to MACHC Plenary

No	Subject matter	Action	Responsible party	Due date	Status at the start of 18 th MACHC
List of open actions 15th MACHC meeting					
15.5.1.2		Haiti will send the Instrument of Accession to the IHO.	Haiti	ASAP	Open , Not deposited yet. Expect after-elections in 2017. Early in 2020

No	Subject matter	Action	Responsible party	Due date	Status at the start of 18 th MACHC
15.6.3.4	MSI	Invite the Caribbean Disaster Emergency Management Agency (CDEMA) to attend the MACHC meetings.	MACHC Chair	MACHC 20	Open. Contact established. No attendance at 17 th , 18 th , 19 th , and 20 th MACHC meetings. (propose closing if no participation in MACHC21) COMPLETED CDEMA at MACHC21

Table 3: CONTINUOUS ACTION ITEMS

No	Subject mater	Action	Responsible party	Due date	Status
List of continuous actions 20th MACHC meeting					
20.5.1.2		Provide/update content for the Training Opportunities section of the MACHC Initiative website. (Contact Percy Pacheco) Kongsberg, COCATRAM, Spain, etc.	All Member States, Industry, Regional Orgs	Annually, or as changes occur.	Continuous.
20.5.3		Member States to liaise with their IMO representatives to request joint technical visits with IALA and IHO (funded by the IMO) as part of the IMO MS Audit Scheme (VIMSAS).	MACHC Attendees	As appropriate.	Continuous.
20.7.1.1.		Provide/update senior and working level POCs on the MACHC website for disaster response and complete country/industry/regional disaster response capability and resource templates.	All Members	Annually, or as changes occur.	Continuous.

No	Subject mater	Action	Responsible party	Due date	Status
20.8.1.3		MS and all coastal states are encouraged to make their other open marine spatial data available on the Caribbean Marine Atlas to take advantage of the excellent existing infrastructure and not have to recreate it individually.	All Member States	As data becomes available.	Continuous.
List of continuous actions 19th MACHC meeting					
19.4.1a 20.7.4	Reports from Observing Organizations	Engage National Tsunami Warning contacts and determine if inundation modelers are using the best available bathymetric data to support improved land-sea inundation models.	MACHC Member States	Annually	Continuous.
19.5	Capacity Building	Members to send capacity building and other requirements officially to the Chair to channel to others/committees who might help;	MACHC Member States	ASAP	Continuous.
19.5a	Capacity Building	Continually update the list of CBC training activities on the MACHC Initiative website sponsored by other Member States, Committees, regional and other partners, such as FOCAHIMECA, COCATRAM, National training opportunities, IMarEST, etc.	CBC Chair	ASAP	Continuous.
19.8.1	SDI/MSDI (15.5.1.4) 20.8.2.1	MS to consider joining the UN-GGIM-WGMGI. If not participating directly in the UN-GGIM WG on Marine Geospatial Information are encouraged to contact their national representatives to the UN to make them aware of the importance of this initiative (contact John Nyberg for further information) and its benefits.	MACHC Member States	Annually	Continuous.
List of continuous actions 17th MACHC meeting					
17.2.1.1 20.2.3	IHO Secretariat (MSI)	Countries not shaded in green in MSI matrix should get in touch with NAVAREA IV and XII Coordinator (Mr. Christopher Janus) and/or IHO Secretariat (Assistant Director Leonel Manteigas) to request an update as appropriate. Also ensure that National Points of contact are accurate.	MACHC Member States	MACHC 21	Continuous.

No	Subject mater	Action	Responsible party	Due date	Status
17.2.1.4	IHO Secretariat (IRRC 8/32)	Member States review entries related to IHO C-55, (Status of Hydrographic Surveying and Nautical Charting Worldwide, P-5 (yearbook) and ECDIS backup up arrangements (iaw. IHO CL 61/15) and report annually to IHO secretariat, including reports of “no change”. https://www.iho.int/iho_pubs/CB/C-55/c55.pdf	MACHC Member States	Annually	Continuous.
	IRCC 11/8	RHC Chair to request National Coordinators to review the contents of the relevant Annexes of the GMDSS Master Plan and of section C (MSI) of IHO Publication C-55 – <i>Status of Hydrographic Surveying and Nautical Charting Worldwide</i> to ensure consistency for their national entries.	MACHC Chair	Annually	Continuous.
17.2.2.3	IRCC 8/8	Encourage closer engagement of the National MSI Coordinators of Member States with the relevant NAVAREA Coordinator (7b). Delegates to update their contact information in the NAVAREA IV list. (now found on the new MACHC initiative website/MSI page).	National Authorities and RHC Members to the NAVAREA Coordinator	Annually	Continuous.
17.2.2.4	IRCC 8/31	Be attentive to opportunities to raise awareness on the role of hydrography and the importance of improving mankind’s knowledge of the seas and oceans in support of the sustainable development goals, disaster risk reduction and the integrity of the oceans.	MACHC Chair in coordination with Member States		Continuous. (examples: UN-GGIM; Seabed 2030; UN Decade of Ocean Science)
17.5.2.3	Risk Assessment	Invite Ms. Dawn Seepersad to provide an update on her Risk Assessment project for the GCR. (see also action 17.5.2.1).	MACHC Chair	Annually till project completion.	Continuous.
17.6.4	DTM	Members States to consider making ENC bathymetric and contour information available for the IBCCA project via GEBCO (DCDB).	MACHC Member States		Continuous.

No	Subject mater	Action	Responsible party	Due date	Status
17.6.5 20.6.4.1	DTM	Provide existing bathymetric data to the IHO DCDB (bathydata@iho.int) as indicated in MACHC continuous action 17.6.5, <i>including that collected by private sector companies under their authorization (MS)</i> . Guidance on how to contribute data is found in English and Spanish on the MACHC Initiative website.	MACHC Member States		Continuous.