



INTERNATIONAL HYDROGRAPHIC ORGANIZATION  
MESO AMERICAN & CARIBBEAN SEA HYDROGRAPHIC  
COMMISSION



**MACHC Integrated Chart Committee**  
**Wednesday, 28 November 2018 – Meeting**

1. Commencement of Meeting:

a. Welcome & Introductions:

The Chair of the MICC, John Nyberg, opened the Meeting at 8:30, welcoming all participants. The Chair expressed surprise at the large group and thanked everyone for taking the time to participate in the Meeting. A full list of today's participants is attached as Annex B.

b. Approval of the Agenda:

The Agenda was presented. There were no suggested changes and the Agenda was accepted as proposed.

2. MICC Organization:

a. Approval of Minutes from the October 24 MICC Conference Call:

Erich Frey noted that Dan Garratt suggested that we revise the statement regarding the new Colombian and Venezuelan cells to "Dan Garratt confirmed that Venezuela and Colombia have recently sent additional new cells for validation to IC-ENC." This revision to the minutes was made and is reflected in the latest version. The Minutes and other relevant documents are available at: [https://www.iho-machc.org/documents/micc/MICC\\_Nov28\\_2018.html](https://www.iho-machc.org/documents/micc/MICC_Nov28_2018.html).

b. MICC Membership Update:

John Nyberg stated that there were no changes to the MICC Membership at this time.

c. Administrative Actions:

The statuses of Administrative Actions are as follows:

- i. Action 10.1: "Erich Frey to provide MICC Participants with both a clean version as well as a marked up version of the MICC ToRs and ask for feedback by November 5" **is completed.**
- ii. Action 10.2: "MICC Participants to respond and provide feedback on the proposed revisions to the MICC ToRs by November 5" **is completed.**

d. Revised Terms of Reference for MICC

Erich Frey introduced the revised MICC Terms of Reference (ToRs). Erich firstly mentioned France for special recognition for identifying the need to update the ToRs in

order to bring them in line with the revised S-11 and for France's subsequent efforts in final editing. Erich further indicated that while bringing the ToRs in line with S-11, the opportunity was used to look through the remainder of the document to see if any other revisions might be required, especially in light of the new IHO structure. Besides bringing the ToRs in line with S-11 and the new IHO structure, other revisions included:

1. Insertion of new Articles 3.6 and 3.7 to recognize the MICC "INT Chart Coordinator" and changed "Coordinator" (of the MICC) to "Chair". The term Coordinator originated from the IHB template for suggested ToRs. But the MACHC has always referred to this position as "Chair" including in reports and presentations. A secondary factor was the introduction of the "INT Chart Coordinator" (point 1 above), which may lead to confusion between the two positions.
2. Made use of the acronym "MACHC" throughout the ToRs instead of spelling out "Meso American and Caribbean Sea Hydrographic Commission" previously used throughout the document.
3. Made several minor editorial corrections (such as changing "ENC" to "ENCs" where appropriate).

France elaborated on the importance of S-11 and that they be specifically referenced in the ToRs. Finally, Erich Frey noted that all the responses to the proposed revised ToRs were positive and considered the revisions accepted. John Nyberg added that if anyone has further comments regarding the ToRs to provide comment before Friday when the MICC Report is presented in Plenary.

**Action 11.1: All Member States wishing to make comments on the new MICC ToRs to do so prior to Friday's Plenary on November 30. (All Member States)**

e. MICC Chair

John Nyberg indicated his plans to step down as the MICC Chair. He further noted that Bernice Mahabier of Suriname had indicated interest in serving in this capacity. John asked if the group could support Bernice serving as Chair. The response was unanimously supportive and it was considered that Bernice Mahabier of Suriname would assume the Chair position of MICC.

3. INT Charts:

a. Review of INT Chart Actions:

The statuses of INT Chart Actions are as follows:

- iii. Action 10.3: "MICC Report to Plenary to highlight the 5 new Colombian INT Charts" **is completed.**
- iv. Action 7.1: "Submit the INT Chart Scheme of the Suriname Coast to the MICC Meeting in Colombia for approval." is **in progress.** The U.K. introduced the INT Chart Scheme of Suriname and discussed a potential option of a 2-panel format chart and asked for approval. John Nyberg asked for comments and suggested

the U.K. work with Ricardo Freire (MICC INT Chart Coordinator) and Suriname so that this option might be progressed prior to the Plenary.

**Action 11.2: The U.K. work with Ricardo Freire (MICC INT Chart Coordinator) and Suriname so that this option might be progressed prior to the Plenary (November 30) to settle on an appropriate action on the Suriname INT Chart Scheme. (U.K., Suriname and Ricardo Freire)**

- v. Action 12: “Venezuela and U.K. to review limits for INT 4102. Venezuela indicated that they are happy to work with the U.K. on this issue. Lee Truscott agreed to follow-up with Venezuela” **remains outstanding**. John Nyberg asked if there was an update on the INT 4102 limits. The U.K. responded, noting that they are looking to adjust the limits. Venezuela indicated support for such an adjustment, but noted that it would take time because it would similarly require other adjustments in the Venezuelan scheme. The Chair emphasized that everyone involved work closely with the INT Chart Coordinator and hopefully can agree to a date when the issue is resolved.

France asked about INT 4022 in Venezuela. Venezuela responded that this chart is in the process of editing and will be made available as soon as possible.

b. INT Chart Coordinator:

The MICC INT Chart Coordinator, Ricardo Freire, Brazil, stated that there was nothing new to report at this time.

c. Updates to Current INT Chart Coverage:

Colombia previously reported that five new Colombian will be printed of MACHC area, which they will present during the 19<sup>th</sup> MACHC.

4. GGIM:

a. Review of GGIM Actions:

There were no outstanding actions pertaining to UN-GGIM.

b. UN-GGIM Activities Update

John Nyberg indicated that he will have a presentation in the MACHC Plenary and suggested we defer repeating the information of that presentation at this time. John further noted that the Geospatial Marine Information Working Group will have its first face-to-face meeting during the week of March 4, 2019 in Busan, Korea. He further suggested that others consider joining and becoming a member of this group.

5. Electronic Charts:

a. Review of Electronic Chart Actions

The statuses of Electronic Chart Actions are as follows:

- i. Action 10.4: “MICC Chair to request update from IC-ENC for the On-Line viewer in preparation for the 19<sup>th</sup> MACHC” **is completed.**
- ii. Action 10.5: “MICC Participants who DO NOT want their data updated for the On-Line viewer to inform John Nyberg in a timely manner prior to the 19<sup>th</sup> MACHC” **is completed.**
- iii. Action 7.3a: “Venezuela to provide progress update of the Orinoco River Project to Jesse Murphy for inclusion in the MICC Report” **is completed.** *[Updates had been received prior to the October 24 Conference call. No further updates were received since then. Venezuela has produced 24 ENC’s from the mouth of the river to Matanzas. Venezuela made a presentation of the 2,400 km Orinoco River project. This satisfies the request of this action.]*
- iv. Action 7.4: “Mexico to provide further details on their planned ENC revisions.” **remains on-going and is deferred until the next MICC Conference Call on April 10, 2019.** Mexico noted that they still have some chart requirements in the Baja California area and will be concentrating on priority localities. Mexico also indicated that they will provide further updates.
- v. Action 7.5: “U.K to take appropriate action on the minor overlaps involving the 2 US-GB Cells.” **Is completed.**

b. MACHC ENC Schemes

Jesse Murphy displayed the ENC coverage diagram, indicating that the MACHC is now covered by 914 ENC’s.

c. Ports Analysis Update

Jesse Murphy displayed the MACHC ENC coverage of the 914 ENC’s in the MACHC Region. France inquired about the relationship between the INT Chart Scheme and an ENC Scheme, and the need for such a scheme. France further elaborated about discussion with the IHO Staff regarding an ENC scheme. John Nyberg interjected that up until now, we have concentrated on filling gaps as our first priority. There was extensive discussion on the necessity for an ENC scheme, noting that the specifications provide the necessary guidance. The MICC Chair summarized the discussion and concluded that it may be useful to have an ENC scheme although there does not seem to be a consensus on this. The U.K. added that S-100 encourages a de-facto INT Scheme, and that there is no need for a formal MACHC scheme. The Netherlands noted RENCs already provide oversight and that it would be very difficult to coordinate a scheme, considering national priorities. France indicated the requirements of S-11 for a scheme, but that there is no approval process similar to that for the INT Chart Scheme. The IHO Secretariat added that there is a need for a scheme for “tracking progress” purposes in order to know what is happening in each RHC and to inform all stakeholders accordingly. After John Nyberg summarized the above discussion the following action was taken:

**Action 11.3: MICC Participants to consider the requirement of a Regional ENC Scheme and agree on a way forward, considering the requirements of S-11. (All MICC Participants)**

France clarified that the scheme covers only small and medium scale ENCs. The Netherlands stated that there is a difference in that paper charts are used by humans, while ENCs are used by machines. The IHO Secretariat added that we should not be approving ENCs, but rather ENC Schemes. The IHO Director commented on the general ideas of coordination and promoting the progress of ENCs.

*[Subsequent to the MICC meeting Olga Bonfante (Colombia) made a presentation in the MACHC Plenary on ENC schemes and has indicated a desire to contribute to the scheming effort based on her PhD thesis to solve these problems especially in gaps and data inconsistencies of the ENC scheme in MACHC region. This topic had been discussed in the MICC meeting earlier in the week and is noted as Action 11.3, above. Olga Bonfante's studies include a proposal on the standardization of regional ENC schemes, emphasizing efficient and consistent products for safe navigation. The presentation, "[Academic Proposal of a Method to Standardize The Regional ENC Schemes](#)" notes expected goals which include:*

- i. Uniform coverage and information at appropriate scales*
- ii. Addresses areas of overlap*
- iii. Avoids gaps*
- iv. Reduces maintenance of numerous excessive cell, and*
- v. Provides a basis for generating other products*

*Olga Bonfante and Colombia have generously offered to lead the MACHC ENC scheming effort (Action 11.3, above) and the MICC is enthusiastically prepared to accept and take advantage of this opportunity.]*

c. Ports Analysis Update

The Ports List is available on the MIC website at [https://www.iho-machc.org/documents/micc/MICC\\_Nov28\\_2018.html](https://www.iho-machc.org/documents/micc/MICC_Nov28_2018.html). The Netherlands asked about updates to the Ports analysis. John Nyberg responded that primarily Cruise Ship Ports were considered and that it may be time to expand and go beyond Cruise Ship information, especially, if an ENC Scheme might be developed. John also added that the Ports List is based on 2014 AIS data and is in need of refreshing.

d. Updates to Gap Analysis

Venezuela has produced 24 ENCs from the mouth of the Orinoco River to Matanzas. Venezuela made a presentation of the 2,400 km Orinoco River project. See also Section 5-a, iii, above.

e. Updates/Resolutions on Overlaps

IC-ENC provided an "Overlap Report" which was referenced. This report is available at: [https://www.iho-machc.org/documents/micc/MICC\\_Nov28\\_2018.html](https://www.iho-machc.org/documents/micc/MICC_Nov28_2018.html). France mentioned the "overlap checker" provided by PRIMAR, noting its usefulness. There was no further discussion on this topic.

f. ENC On-Line

John Nyberg reported that the ENC On-Line data had been updated for this meeting and that it included the Orinoco River ENC's, which are available on the On-Line viewer

6. Other Business:

John Nyberg thanked all those in attendance. He especially thanked Colombia for being such gracious hosts. John also indicated that it was an honor to represent the MICC in other international venues due to the significant progress with positive outcomes achieved in the MACHC.

7. Adjourn:

Finally, John thanked the group for their participation in today's meeting and for all their contributions. The meeting was adjourned.

## SUMMARY OF ACTIONS

## Annex A

<b>"New" General &amp; Administrative Actions</b> from the November 28, 2018 Meeting			
#	Action	Who	Status
11.1	All Member States wishing to make comments on the new MICC ToRs to do so prior to Friday's Plenary on November 30	All MICC Participants	Nov 30 <b>Completed</b>

<b>"New" INT Chart Actions</b> from the November 28, 2018 Meeting			
#	Action	Who	Status
11.2	The U.K. work with Ricardo Freire (MICC INT Chart Coordinator) and Suriname so that the suggested 2-panel option might be progressed prior to the Plenary (November 30) to settle on an appropriate action on the Suriname INT Chart Scheme.	U.K./Suriname/ Ricardo Freire	<del>Nov 30</del> April 2019
<b>Outstanding INT Chart Actions</b> from the July 11, 2018 Conference Call			
7.1	Submit the INT Chart Scheme of the Suriname Coast to the MICC Meeting in Colombia for approval.	U.K./Suriname	<del>Oct 24</del> <del>Nov 28</del> April 2019
<b>INT CHART Actions carried forward from MICC Meeting (November 2012)</b> <i>[This is the Action which was inadvertently dropped from the Action List]</i>			
12	Venezuela and UK to review limits for INT 4102. Venezuela indicated that they are happy to work with the UK on this issue. Lee Truscott agreed to follow-up with Venezuela. To be followed up in Cartagena, Colombia.	UK/Venezuela (Lee Truscott)	<b>On-going</b> <del>Jan 2016</del> July 13 <del>Oct 12</del> April 2019

<b>New UN-GGIM Actions</b> from the November 28, 2018 Meeting			
#	Action	Who	Status
	No New Actions		

<b>"New" ENC Actions</b> from the November 28, 2018 Meeting			
#	Action	Who	Status
11.3	MICC Participants to consider the requirement on a Regional ENC Scheme and agree on a way forward, considering the requirements of S-11.	All MICC Participants	April 2019
<b>Outstanding ENC Actions</b> from the July 11, 2018 Conference Call			
7.4	Mexico to provide further details on their planned ENC revisions.	Leonardo Tun- Mexico	<del>Oct 24</del> <b>On-Going</b> April 2019

## Meso American &amp; Caribbean Sea Hydrographic Commission

## MICC Meeting Attendees

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ANNEX C – WORK PLAN MILESTONES 2019

DELIVERY DATE (2019)	ACTIONS	
	Electronic Chart Activities	INT Chart Activities
Jan 1 – Feb 29	Member States to provide updates based on discussions, and consideration of the individual Ports Analysis presented at the Nov 28, 2018 MICC meeting on plans to address gaps in ENC coverage within their area.	Member States to provide updates based on discussions, and consideration of the individual Ports Reports presented at the Nov 28, 2018 MICC on plans.
Feb 26 - 28	Represent MACHC at WEND WG	
March 27	In preparation for the quarterly Conference Call, Member States to provide updates to: <ul style="list-style-type: none"> <li>the list of available ENCs</li> <li>resolutions of any gaps/overlaps identified.</li> </ul>	In preparation for the quarterly Conference Call, Member States to forward INT Chart metadata and shapefiles for “planned” INT Charts. Member States to propose additional coverage/adjustments for S-11, section B
April 10	Hold quarterly conference call to assess status and next steps.	
May 2	Complete follow-up activities from Conference Call. Member States to provide all additional information identified during conference call.	
June 12	In preparation for the quarterly Conference Call, Member States to provide updates to: <ul style="list-style-type: none"> <li>the list of available ENCs</li> <li>resolutions of any gaps/overlaps identified.</li> </ul>	In preparation for the quarterly Conference Call, Member States to forward INT Chart metadata and shapefiles for “planned” INT Charts. Member States to propose additional coverage/adjustments for S-11, section B
July 10	Hold quarterly conference call to assess status and prepare information as needed for subsequent communication to IRCC and IHB.	
July 24	Complete follow-up activities from Conference Call. Member States to provide all additional information identified during conference call.	
Aug 28	Investigate and/or track issues regarding consistencies and availability of ENCs and the corresponding INT (paper) Charts if problems persist.	
Sept 11		MS to forward S-11 updates to MICC technical coordinator for inclusion for Region B, S-11.
Sept 18		MICC technical coordinator to forward S-11 updates to IHB, to include Pacific INT scheme.

DELIVERY DATE (2019)	ACTIONS	
	Electronic Chart Activities	INT Chart Activities
Oct 10	<p>In preparation for the quarterly Conference Call, Member States to provide updates to:</p> <ul style="list-style-type: none"> <li>the list of available ENCs</li> <li>resolutions of any gaps/overlaps identified.</li> </ul>	<p>In preparation for the quarterly Conference Call, Member States to forward INT Chart metadata and shapefiles for “planned” INT Charts.</p> <p>Member States to propose additional coverage/adjustments for S-11, section B</p>
Oct 23	Hold quarterly follow-up conference call to update/review and discuss MS input in preparation of 16th MACHC.	
Nov 9	Complete follow-up activities from Conference Call. Member States to provide all additional information identified during conference call.	
Nov 15	Provide all updates, to the Technical Coordinator for the MICC Report to 20 <sup>th</sup> MACHC.	
Dec 2019	Provide update on 2019 MICC activities/accomplishments	