

**9th MEETING OF THE IHO INTER-REGIONAL COORDINATING COMMITTEE
IHO-IRCC9
Paramaribo, Suriname, 12-14 June 2017**

ARCTIC REGIONAL HYDROGRAPHIC COMMISSION

ARHC report to IRCC9

1. Chair

Chair: Ms Pia Dahl HØJGAARD (Denmark) from October 2016
Mr Denis HAINS (Canada) from October 2015

Vice-Chair: Ms Birte Noer BORREVIK (Norway) from October 2016
Ms Pia Dahl HØJGAARD (Denmark) from January 2016

2. Membership

Members: Canada, Denmark, Norway, Russian Federation, United States

Associate member(s): Finland, Iceland

Observers: IHO Secretariat representative

3. Meetings:

Following [RHC] meetings have taken place:

Since last IRCC8 meeting there has been two ARHC meetings:

- 6th Conference – Iqaluit, Nunavut, Canada (3 and 6 October 2016)
- Special ARHC meeting – Monaco (26 April 2017)

Next meeting will be in Ilulissat in Greenland, 22-24 August 2017.

4. Current [RHC] Working Groups:

- a) ARHC Strategic Planning Working Group (SPWG) [Dormant]
- b) ARHC Operations and Technologies Working Group (OTWG)
- c) Arctic International Charting Coordination Working Group (AICCWG)
- d) Arctic Regional Marine Spatial Data Infrastructure Working Group (ARMSDIWG)

5. Status of IRCC actions (relevant for the ARHC):

No	Action (Agenda item)	Responsible	Deadline	Status
4	present updates to the IHO WP for those that have not done so (5)	RHC Chairs	1 Jul 2016	Done
6	encourage the attendance of Member States and Observers at WWNWS-SC meetings (7b)	RHC Chairs	Permanent	Done

7	raise awareness of the impact of e-navigation on the provision of MSI in the respective regions and to highlight the use of the Joint Manual on MSI to ensure correct terminology and formats are used in MSI messages (7b)	RHC Chairs	Permanent	Done
8	encourage closer engagement of the National MSI Coordinators of Member States with the relevant NAVAREA Coordinator (7b)	RHC Chairs	RHC Chairs	Ongoing
9	encourage closer coordination between NAVAREA and Capacity Building Coordinators in planning and student selection for the CB MSI training courses (7b)	RHC Chairs	RHC Chairs	Ongoing
13	work to reduce overlaps by applying the WEND Principles in defining approve ENC schemes (7d)	RHC Chair	Permanent	Done
21	invite Member States to provide following information in the National Reports to RHC meetings: the status of MSDI; plans for involvement in MSDI; and challenges facing the HO (7e)	RHC Chair	Permanent	Done
30	invite Member States to provide scanned version of any of the missing sheets, that that they may have in their archives, to the IHB for inclusion in the online digital archive (7i)	RHC Chair	31 Aug 2016	Done
31	in coordination with Member States, to 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 (8)	RHC Chair	Permanent	Ongoing
32	invite Member States to send updated information to the Secretariat with respect to the IHO Publications C-55 and P-5 on an annual basis (10)	RHC Chair	Permanent	Ongoing
34	submit additional input to the revision of the SP2009 to the Secretariat (11.1)	IRCC Members	10 Jun 2016	DONE
37	send to the IHB a copy of their regulations regarding the designation of Member States to occupy the seats on the IHO Council allocated to their Commission (12)	RHC Chair	23 Jan 2017	Done

6. Agenda Items:

The main subjects dealt with during the reporting period were the following:

- Associate Members participating in ARHC
- Approval of the Rules and Procedures for ARHC representation on the IHO Council
- Establishing an Arctic Voyage Planning Guide for mariners
- Operational and Technical Working Group with an emphasis on Hydrographic Risk Assessment in the Arctic.
- Arctic International Charting Coordination Working Group
- Established Arctic Regional Marine Spatial Data Infrastructure Working Group

- Communicate Arctic activities to associated IHO Working Groups
- Investigate potential of remote sensing and satellite-derived bathymetry (SDB)
- Investigate potential of crowd-sourced bathymetry for use within the Arctic community
- MIO-services

MIO-services.

At the Special ARHC meeting in Monaco 26 April 2017 the ARHC MS discussed the development of MIO's and the progress of the decisions taken.

At IRCC8 decision 14 the following was recommended based on the input from the WENDWG: *to endorse the recommended actions from WENDWG concerning Marine Information Overlays (MIOs) as follows:*

Taking into account the report of WENDWG6 concerning the situation where a Marine Information Overlay (MIO) is used to assist in drawing attention to any differences between a published paper chart and the corresponding ENC or to assist in displaying T&P notices for an ENC recommends:

- a. All parties concerned with producing the respective MIO, paper chart and ENC should agree on the promulgation of the MIO for the relevant sea area concerned.*
- b. In such circumstances, and mindful of serving the best interests of the mariner, those producers of the MIO and related paper chart and/or ENC should work together bilaterally.*
- c. Production of the MIO should be carried out in close cooperation of producers of both the paper chart and the ENC*

As seen from the ARHC MS it is not the IRCC8 decision 14 about MIO's nor the inputs from WEND about MIO's that is the challenged but how do we as MS ensure that other MS meets the decision 14 stated by IRCC8 and how can IHO/IRCC enforce the decision about MIO's.

The ARHC MS agreed at the special ARHC meeting to include this in the ARHC report to IRCC9 and recommend to IRCC9 to discuss this topic and take actions as deemed appropriate.

7. [RHC] cooperation with stakeholders (organizations, industry, etc.):

- Outreach to Arctic Council and Subcommittee's including the Protection of the Arctic Marine Environment (PAME) and Conservation of Arctic Flora and Fauna (CAFF)
- Engage with Arctic Marine users including cruise line industry
- Participate with the Arctic SDI/Open Geospatial Consortium (OGC) Arctic Spatial Data pilot project
- ARHC is represented in the IHO-EU Network Working Group. The IHO-EU Network Working Group (IENWG) has been established by the Inter-Regional Coordination Committee (IRCC) to monitor and deal with the activities and processes related to hydrographic aspects under the aegis of the European Union (EU).

8. Difficulties encountered and challenges yet to be addressed:

- Large gaps in hydrographic data creating increased hydrographic data risk (see OTWG report)
- Increasing marine traffic
- Increasing need for improved data and navigational products
- Finding methodologies for collecting and encoding traditional knowledge

9. Achievements and lessons learned Conclusions:

- ARCH has positioned itself as the Regional Hydrographic Organisation that deals with regional hydrographic and charting issues in the Arctic
- ARHC engages across the Arctic community to communicate the hydrographic and charting data situation
- ARHC has made great strides to improve our understanding of the hydrographic data environment and communicate this situation to a broad community of users.
- Establish an Arctic Regional Marine Spatial Data Infrastructure Working Group (ARMSDIWG)

10. Actions required of IRCC:

The IRCC9 is invited to:

- a) take note of the ARHC report
- b) discuss the challenges with MIO's and to take actions as deemed appropriate.