

**10<sup>th</sup> MEETING OF THE IHO INTER-REGIONAL COORDINATING COMMITTEE  
IHO-IRCC10  
India, Goa, 4-6 June 2018**

**ARCTIC REGIONAL HYDROGRAPHIC COMMISSION**

**ARHC report to IRCC10**

**1. Chair**

**Chair:** Ms. Birte Noer BORREVIK (Norway) from August 2017  
Ms. Pia Dahl HØJGAARD (Denmark) from October 2016

**Vice-Chair:** Mr. Sergey V. Travin, (The Russian Federation) from August 2017  
Ms. Birte Noer BORREVIK (Norway) from October 2016

**2. Membership**

Members: Canada, Denmark, Norway, The Russian Federation, United States of America

Associate member(s): Finland, Iceland, Italy

Observers: IHO Secretariat representative

**3. Meetings:**

Following [RHC] meetings have taken place:

Since last IRCC9 meeting the following ARHC conference has taken place:

- 7th Conference – Ilulissat in Greenland, 22-24 August 2017
- 2nd ARMSDIWG meeting, partly joint with Arctic SDI, Helsinki, 16-18 April 2018

**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):**

<b>N.</b>	<b>Action (Agenda item)</b>	<b>Responsible</b>	<b>Deadline</b>	<b>Status</b>
2	to engage with Member States in their regions to identify potential instructors to accompany MSI trainings in order to become MSI trainers and report back to IRCC	RHC Chairs	IRCC10	Ongoing
3	to consider using Trainer for Trainers (TFT) and e-learning methods to support the	RHC Chairs	IRCC10	Ongoing

N.	Action (Agenda item)	Responsible	Deadline	Status
	development of CB Phase 1 for developing coastal States and report back to IRCC			
4	to encourage the attendance of Member States and Observers at WWNWS-SC meetings, to highlight the use of the Joint Manual on MSI to ensure correct terminology and formats are used in MSI messages, to encourage closer engagement of the National MSI Coordinators of Member States with the relevant NAVAREA Coordinator(s) and report back to IRCC	RHC Chairs	IRCC10	Done
5	to encourage closer coordination between NAVAREA Coordinators and Regional CB Coordinators in planning and student selection for the CB MSI training courses	RHC Chairs	IRCC10	N/A
10	to invite Member States to investigate the possibilities of fund raising and engagement in CB via national organizations and report back to the IRCC	RHC Chairs	IRCC10	Ongoing
14	to encourage the Member States in the region to consider making all ENC data available through the RENCs (7)	RHC Chairs	December 2017	Done
15	to encourage the work of the IHO community to increase existence of ENC schemes at regional level (7)	RHC Chairs	December 2017	Ongoing
18	to encourage Member States in the region to nominate RHC MSDI Ambassadors to promote MSDI and to help Member States to prepare the national reports with respect to the status of MSDI (7)	RHC Chairs	IRCC10	Done
21	to encourage IHO Member States to release datasets or subsets into the public domain via the IHO DCDB (7)	RHC Chairs	September 2017	Done
22	to request IHO Member States to consider reviewing data gathering restrictions within their maritime areas of jurisdiction to enable CSB activities to be undertaken (7)	RHC Chairs	September 2017	Done
23	to encourage IHO Member States to support the CSB initiative with positive actions, such as requiring all research vessels collect bathymetric data for late uploading, when on passage or when it does not interfere with other research activities (7)	RHC Chairs	September 2017	Done
32	to encourage Member States in the region to consider using satellite derived bathymetry and risk assessment methodologies in uncharted or poorly charted areas in their respective regions as a way of developing survey priority areas as part of attracting donor funding and report back to IRCC (8)	RHC Chairs	IRCC10	Done
33	to encourage the use of satellite derived bathymetry and risk assessment methodologies for developing survey priority areas as part of	RHC Chairs	IRCC10	Done

N.	Action (Agenda item)	Responsible	Deadline	Status
	attracting donor funding using the project rationale as presented in doc. IRCC9-08C (8)			
34	to encourage Member States to participate in the workshop on satellite derived bathymetry sponsored by Canada in March 2018 (8)	RHC Chairs	December 2017	Done
35	to invite Member States to provide technical resources to the DQWG and report back to IRCC (9)	RHC Chairs	IRCC10	Done
36	to note the list of events organized by other inter-governmental and stakeholders indicated in <i>doc. IRCC9-09B</i> , consider how the IHO might be represented in those events that are considered relevant and liaise with the IHO Secretariat for the appropriate and report back to IRCC (9)	RHC Chairs	IRCC10	Ongoing
37	to encourage Member States to support the establishment of the UN-GGIM Working Group on Marine Geospatial Information (WG-MGI) by working with their national representatives to the UN-GGIM to offer interventions in favor of the WG-MGI during the next UN-GGIM meeting (10)	RHC Chairs	June 2017	Done
38	to encourage Member States to attend the next UN-GGIM meeting and the UN-GGIM-MGI Side Event (10)	RHC Chairs	July 2017	Done
39	to promote the UN-GGIM in their regions (10)	RHC Chairs	Permanent	Done
43	to consider using the IHO Online Registration System for their meetings and report back to IRCC (11)	RHCs	IRCC10	Done
44	to invite Member States to review entries related to their region in IHO C-55 and P-5 (Yearbook) at least annually (11)	RHC Chairs	Permanent	Done

## 6. Agenda Items:

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

- Associate Members participating in ARHC
- Continued work on an Arctic Voyage Planning Guide for mariners
- Operational and Technical Working Group with an emphasis on Hydrographic Risk Assessment in the Arctic.
- Status Arctic International Charting Coordination Working Group
- Status 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

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

- Outreach to Arctic Council working groups:
  - o Updating Arctic chart adequacy report to PAME (Protection of the Arctic Marine Environment).
  - o Chair ARHC presented relevant work of ARHC at PAME Arctic Shipping Best Practise Information Forum, particularly in regard to the recently adopted IMO Polar Code.
  - o ARMSDIWG joined forces with Arctic SDI to improve access to marine geospatial information in the Arctic for 4 of the 6 Arctic Council WGs:
    - AMAP (Arctic Monitoring and Assessment Program)
    - CAFF (Conservation of Arctic Flora and Fauna)
    - EPPR (Emergency Prevention, Preparedness and Response)
    - PAME
- Engage with Arctic Marine users including cruise line industry, seismic companies and research vessel operators
- 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).
- Chair of ARHC7 organized the Arctic Science Forum during the day preceding the ARHC7 conference with stakeholder participation from local government of Greenland, shipping, cruiseship tourism, scientific institutions and industry

## 8. Difficulties encountered and challenges yet to be addressed:

- Large gaps in hydrographic data creating increased hydrographic data risk (see OTWG report)
- Increased interest in the Arctic and therefore increased marine traffic
- Whereas hydrographic data is largely lacking in the Arctic, many other thematic marine geospatial datasets are available but not easily accessible. There is an opportunity for Arctic HO's beyond the classical safety of navigation role and beyond the hydrographic data provider role but in the role as (M)SDI facilitator. This requires close cooperation with both other national (government) data owners and end-users.
- Finding methodologies for collecting and encoding traditional knowledge

## 9. Achievements and lessons learned Conclusions:

- ARHC is acknowledged by Arctic Council WG PAME as the regional hydrographic authority and regularly reports status of charting and survey.
- ARHC engages across the Arctic community to communicate the hydrographic and charting data situation
- ARHC MS actively engage and contribute to many of the IHO WG's and especially to those that support two of the IHO strategic pillars: MSDI and Crowd Source Bathymetry.
- ARHC has made great strides to improve our understanding of the hydrographic data environment and communicate this situation to a broad community of users.
- ARHC drafted and published a note entitled, "Caution required when using nautical charts of Arctic waters". The note is distributed to the secretariat of the Arctic Council, AECO, Cruise Line International Association, International Chamber of Shipping, Intercargo, Intertanko, International

Group of P&I Clubs, International Maritime Pilot Association and to the editors of: Hydro International, Lloyds List, The Maritime Executive

- The newly established Arctic Regional Marine Spatial Data Infrastructure Working Group (ARMSDIWG) is engaging with Arctic SDI to improve access to marine geospatial information for Arctic marine and ocean areas. Whereas modern hydrographic data is sparse in the Arctic, many other thematic datasets are available yet not easily accessible. HO's can play a role in being a geospatial coordinator, taking a holistic SDI-approach to making data easily accessible. Through our engagement with Arctic SDI, ARMSDIWG is making its first steps towards MSDI for the Arctic.

#### **10. Actions required of IRCC:**

The IRCC10 is invited to:

- a) take note of the ARHC report