



Arctic Regional Hydrographic Commission (ARHC)

Draft minutes of the ARHC 7th Conference in Ilulissat Greenland

23 - 24 August 2017

A. Opening Formalities

A.1 Opening of Conference



Denmark (DK), ARHC chair 2017 Director Pia Højgaard opened the Conference. She confirmed that a quorum of the following member states was present and noted:



Canada (CA),



Denmark (DK),



Norway (NO) and



United States of America (US).

Associate members



Finland (FI) and



Iceland (IC) also attended the meeting.

Absent



Russian Federation (RU) did not attend the meeting and had notified the Chair of this the previous week.



The IHO Secretariat was also present at the meeting.

Docs:

- ARHC7-A1 Participants
- ARHC7 List of Documents.

A.2 Welcome from the host country



Denmark (DK) as ARHC chair and host welcomed the delegations and presented the program for the meeting, along with some administrative information.

Docs:

- ARHC7 A2 ARHC7 Program

A.3 Adoption of the Agenda

The agenda was presented and adopted.

Docs:

- ARHC7 A3 Draft Agenda

A.4 Minutes and actions from ARHC6 and Minutes and actions from Special ARHC3



DK revised the list of actions arising from ARHC-6 and ARHC-special meeting-3 in Monaco.

The following action from ARHC 6 was identified to continue:

ACTION ARHC6 Action-17:



NO reported to have access to a historic AIS database covering the Arctic but lack access to ships register database that would allow for in depth sea traffic analysis to ship type. NO will present an AIS tool at ARHC-8.

ACTION ARHC6 Action-02: MS asked to review entries to IHO C-55, P-5 (Yearbook), and ECDIS back-up, at least annually.

-This is now a Permanent Action for ARHC MSs.

ACTION ARHC6-Action-03: Provide updates to S-11 Part B for INT Region N through the INTOGIS tool, as required.

-This is now a Permanent Action for ARHC MSs.

ACTION ARHC6-04: Report to the IHO Secretariat on the status and description of the ENC schemes in Region N.

-This is now a Permanent Action for ARHC MSs.

The following actions from *Special ARHC3 meeting* were identified to continue/discontinue:

ARHC-3-Special- action 4

Info on WEB portals action is discontinued.

ARHC-3-special-action 5



RU to provide status on CATZOC for the Russian region to Chair of OTWG.
ARHC chair to remind RU about the action to provide status on CATZOC.

ARHC-3-special-action 8

All member states have approved  Sweden as potential associate member of ARHC.

Four member states have approved  Italy as associate member of ARHC. One member state has not replied. See also item E.1.

Docs:

- ARHC7 A4a ARHC6 Final Minutes
- ARHC7 A4b Status of ARHC6 List of Actions
- ARHC7 A5 Special ARHC3 meeting Draft list of actions



B. International Hydrographic Organization (IHO) Work Programme 1-"Corporate affairs"

B.1 IHO Secretariat's Report

IHO secretariat gave a report with emphasis on the following subjects:

- IHO application as observer to the Arctic Council was declined. ARHC MS is invited to consider what actions could be taken (e.g. meet with their national Arctic Council reps) in order to make a later application for observer status accepted and advise the IHO secretariat on the way ahead.
- C-55 should be up dated with information on which areas are lacking information on CATZOC.
- UN letter to IHO Secretariat on noise in the ocean with special focus on low frequency acoustic transmitters encourages IHO to forward any studies on the subject to UN.
- From IHO Assembly Decision 18, MS are urged to consider SDB and risk methodologies in poorly charted areas.[E.g. the Arctic.]
- From IHO Assembly Decision 22b, MS are urged to adopt principles from and be more active with UN-GGIM.
- Item 5 in the report noted that the cautionary note on the status of charting in the Arctic prepared by ARHC is now on the ARHC website and was also sent to stakeholders.

- MS who are members of the IHO Council should be preparing for this meeting by monitoring the IHO Web site.
- IHO Resolution 1/2017, and the Seabed 2030 project was also brought to the attention of the ARHC by the Secretariat.

The IHO report resulted in the following actions:

- Chair ARHC to take up the subject of noise in the oceans on the agenda for ARHC8.
- US to provide a status paper on their studies on marine noise before the next ATCM meeting in March 2018.

Docs:

- *ARHC7 B1 IHO Secretariat's Report to ARHC*

B.2 National Report of Canada

CA gave a presentation of the report and thanked John Lowell (NGA) for his contribution with a front page photo in the Arctic Volume CA tide tables.

CA reported on changes in the Canadian organization and particularly its commitment to Marine Spatial Data Infrastructure (MSDI) implementation, Crowd-Source Bathymetry (CSB) and Satellite-Derived Bathymetry (SDB) for the Arctic and remote areas.

For further details see: doc. *ARHC7 B2.1 CA National Report Canada*.

-CA will be hosting a satellite-derived bathymetry (SDB) workshop in Ottawa 20-22 February 2018. More details to follow.

ARHC-8 took note of the report.

Docs:

- *ARHC7 B2.1 CA National Report Canada*

- *ARHC 7 B2.2 CHS Arctic details 2016-18*

B.3 National Report of Denmark

DK presented the report with emphasis on the status and progress on the work with personnel recruitment and training.

The following discussion resulted in the action:

All MS to include in their national report to ARHC 8, any experience on the exchange of personnel between HO's.

Docs:

- *ARHC7 B3 DK National Report Denmark*

B.4 National Report of Norway

NO gave a presentation of the report with emphasis on “Arktis 2030” project on access to arctic geodata.

There was a short discussion on standards of hydrographic surveys.

Other notes:

-All NHS charts are available for POD. NO does not print charts anymore.

-S-102 project. Upload and download service finished (by PRIMAR)

ACTION:

NO to make available presentations of their proposed use of S-102 data and products. ASAP.

ACTION:

All MS with members of the IHO HSPT to raise the question of implementation of alternative standards to the ones needed for safety of navigation.

Docs:

- ARHC7 B4 NO National Report Norway

B.5 National Report of Russian Federation

Docs:

- ARHC7 B5 RU National Report Russian Federation

RU did not attend the meeting. The national report is as delivered.

ACTION:

Chair ARHC to make contact to RU delegation regarding ARHC input to the first IHO council meeting.

B.6 National Report of United States of America

US gave a presentation of the report with emphasis on:

- Engaging native communities with the aim of cooperation.
- National charting plan.
- NGA Arctic GEO INT service (Public data service)

Docs:

- ARHC7 B6 US National report United States of America

B.7 National Report of Finland (Associate Member)

FI presented their national report with emphasis on:

- New depth database system
- Studies of S-102 products.

Docs:

- ARHC7 B7 FI National Report Finland

B.8 National Report of Iceland (Associate Member)

IC presented the report with emphasis on:
Status and plans for surveys in Iceland.

Docs:

- ARHC7 B8 IC National Report Iceland

B.9 Contribution to the preparation of the IHO Council

ARHC chair addressed the commission and asked the chair of IHO Council RADM Smith



US to conduct the session.

RADM Smith encouraged the ARHC members to consider how the individual MS would see the role of the council on the short term and on the longer term.

The actions from the IRCC report to the council, was reviewed. The ARHC identified the following items as significant:

b. Endorse the proposal for increasing the capacity building

c. Endorse the dealing with ENC overlap

The same procedure was taken on the report from HSSC to the Council. No items were identified as controversial. Hence ARHC had no comments to this report.

There was some discussion on the subject of the procedure of the revision of the  IHO strategic plan and election procedure for IHO Secretary General and Directors. No conclusions were made.

Docs:

- (https://www.iho.int/mtg_docs/council/C1/C1Docs.html)

- ARHC7 B9a Red Book

- ARHC7B9b Report and proposals from HSSC

- ARHC7 B9c Report and proposals from IRCC

- ARHC7 B9d Review of the Strategic Plan

- ARHC7 B9e Proposal to evaluate status, requirements and options to integrate the IHO Strategic - Plan/Performance Indicators, budget and work program activities

- ARHC7 B9f Proposed IHO Work Program for 2018

- ARHC7 B9h Proposed IHO Budget for 2018

C. IHO Work Programme 2 - "Hydrographic Services and Standards"

C.1 Operational and Technical Working Group Report



US presented the report of the OTWG with emphasis on the 2nd edition of a chart adequacy assessment with the aim of reporting to PAME.

The report resulted in the following actions:

- ARHC MS are encouraged to provide up dated information to US for a revised chart adequacy assessment.
- ARHC Chair to present the assessment to PAME upon completion of the assessment.
- OTWG to report the status of the development of the use of autonomous vehicles in the Arctic.

Docs:

- ARHC7 C1.a Report of the Operations and Technology WG
- ARHC7 C1.b OTWG Autonomous Vehicles

C.2 Arctic International Charting Coordination Working Group Report



NO presented the work of AICCWG.

ARHC noted the presentation and agreed on the following action:

AICCWG is tasked with preparing a graphic overview of existing coverage of paper charts and ENC's including known national ENC production plans.

C.3 Arctic - Marine Spatial Data Infrastructure Working Group Report



US presented the report of the *Arctic MSDIWG*.

ARHC noted the report and approved the proposed way ahead.

ACTION:



DK as ARHC chair to send ARMSDIWG white paper to PAME for information, prior to November 2017.

Docs:

- ARHC7 C3a Arctic MSDIWG report NGA
- ARMSDIWG_WorkPlan_2017_2020.pdf
- Note_C_ARMSDIWG_ARHC_IHO_A1.pdf
- ARMSDIWG_WhitePaper_VI_1.pdf
- 20170306 MSDI Proposal OGC.PDF
- ARHC7 C3b IHO MSDIWG report Denmark

C.4 Outreach-Arctic Council/PAME/ARHC Report

- Arctic Shipping Best Practice Information Forum and future cooperation with PAME



US suggested that ARHC is represented in PAME *Arctic Shipping Best Practices Forum meetings*.



CA suggested offering a link to the ARHC section on the IHO web page to PAME.

ARHC agreed for US to contact PAME *Arctic Shipping Best Practices Forum* and propose to consider cooperation with ARHC on Hydrographic issues.

The following actions were agreed:

- All MS to contact national PAME rep. and inform about ARHC offer to support.
-  US to propose to PAME *Arctic Shipping Best Practices Forum* to adopt a link to ARHC section on the IHO web page.

Docs:

ARHC7 C4 ARHC report to PAME

ARHC7 C4b Arctic Shipping Best Practices Forum Update

C.5 Outcome of WENDWG



NO reported the outcome of the WEND WG 6 meeting.

ARHC noted the report.

C.6 WEND Overlapping ENC

ARHC agreed that there is no significant ENC overlaps in the ARHC region. However it was decided to task the AICCWG to investigate the matter and report their findings at ARHC-8.

The following action was agreed:

AICCWG to investigate the matter of ENC overlap in the ARHC area of responsibility and report their findings at ARHC-8.

Docs:

ARHC7 C6 ARHC Overlapping ENC Letter from IC-ENC

ARHC7 C6 ARHC Overlapping ENC

C.7 Discussion on autonomous vehicles vis-à-vis Arctic application

Docs:

ARHC7 C7.1 US_OCS_Strategy

ARHC7 C7.2 Autonomous Systems Strategy - June 2017

ARHC7 C7.3 Executive-Summary-OCS0-Autonomous-Systems-Roadmap

C.8 Presentation of the establishment of a-ENC's



DK presented their work on producing Arctic ENC's.

ARHC noted the presentation.

C.9 Presentation of the Scalgo-project



DK presented their work on automated depth contours. The SCALGO project. ARHC noted the presentation.

C.10 Presentation of Norwegian pilot guide project



NO presented their work on the Norwegian pilot guide project.

ARHC noted the presentation.

C.11 Presentation about the US work on routes in the Bering Strait.



US presented their experiences in connection with establishing a navigation route in the Bering Strait.

ARHC noted the presentation.

C.12 Norwegian socio-economic study of the benefits of increased access to marine geospatial data.



NO presented a study of the benefits of increased access to marine geospatial data.

ARHC noted the presentation.

D. IHO Work Program 3 - "Inter Regional Coordination and Support"

D.1 Outcome of IRCC9 meeting



DK presented the actions arising from IRCC9. Some of the action items were discussed. No items were identified as critical for the ARHC. No actions emerged. US proposed for the ARHC chair to distribute the IRCC list of actions to MS in advance of the ARHC meeting in order to allow for member states to consider their response.

Docs:

- ARHC7 D1 IHO IRCC9 Report
- ARHC7 D1 IHO IRCC9 Actions

D.2 Outcome of HSSC8 meeting

DK presented the actions arising from HSSC-8.
No actions for the ARHC were identified.

Docs:

- ARHC7 D2 IHO HSSC8 Report
- ARHC7 D2 IHO HSSC8 Actions

D.3 Status of IHO-EUNetwork



DK informed that funding for Arctic survey activities may be able through the EU SEDNA project for EU member states of the ARHC.

ACTION:



DK to ask at the next IHO-EU-Network meeting for funding for Arctic surveying.

ACTION:



CA and  DK to investigate the possibilities to take part in the SEDNA project.

Docs:

- ARHC7 D3 DK Report of IHO-EU Network

D.4 Coordination and liaison



CA presented the inf. Paper “Notice on caution in the Arctic” and the possibilities to bring this information to the attention of the IMO Sub Committee on Navigation, Communications and Search and Rescue (NCSR) in February 2018.



CA encouraged ARHC member states to promote the paper at relevant fora.

ACTION:



IHO Secretariat to consider the inclusion of the inf. Paper “Notice on caution in the Arctic” in their report to IMO sub. committee on navigation and Search and Rescue (NCSR) in February 2018.



DK informed that they will participate in the IALA Seminar on ARCTIC NAVIGATION, November 9-10, 2017 at the IALA Headquarters, St Germain en Laye and encouraged ARHC member states to participate.

WOC collaboration with IHO and national agencies on "Crowd Source" bathymetric data collection. The World Ocean Council Sustainable Ocean Summit in Halifax in November 2017



CA informed about the summit and stated that CA intends to give a presentation of the ARHC work on CSB.

An updated project proposal by Finland and the Russian Federation. Agenda Item 5 AMSA I (B). Title: Harmonized implementation of the Polar Code.

ACTION:

FI to consult the Finnish maritime authorities to look at the proposal and if assistance from the ARHC member states is needed. Report back to ARHC chair.

Docs:

Updated Project proposal by Finland and the Russian Federation

European Space Agency (ESA) and Status of Arctic Hydrography and Nautical Charting.



CA informed about the initiative from ESA to use satellites to further improve safety of navigation in the Arctic.

ACTION:

OTWG to investigate the issue and report their findings at ARHC-8

Docs:

ESA MEGA-CONSTELLATION PROJECT:ENABLERS FOR ARCTIC MARITIME TRANSPORT

UN-GGIM (NOAA)



US informed on the activities in the UN-GGIM. A discussion on the role of the IHO

member states in the UN-GGIM followed.  CA informed of its intention to offer to host future UN-GGIM meetings and its willingness to contribution to this priority.

Docs:

https://www.iho.int/mtg_docs/circular_letters/english/2017/CI47.pdf



US reminded member states about the “Shallow Survey” conference in St. John’s CA in OCT 2018 and encouraged member states to participate. <http://www.shallow-survey.com/Home/>



CA informed the ARHC MS that this venue will be hosted by the Vice Chair of the Canadian Ocean Mapping Research & Education Network (COMREN), the Marine Institute of Memorial University.

D.5 Capacity building

ARHC member states reported on their CB activities. No actions were identified.  CA indicated the Canadian Ocean Mapping Research & Education Network (COMREN) will become more involved and visible into international CB with 2 of the 8 Institutions members of COMREN) being Certified CATB.

D.6 Any issues for IRCC10 and HSSC 9?

HSSC9 to be held in Ottawa Canada 6-10 November 2017.

No new issues were identified.

E. Any other business

E.1 Status applications for associate membership of ARHC (Sweden, and Italy)

Discussions regarding applications for Associate Member status to the ARHC started with confirmation of the decision from ARHC1 that “Proposals for Associate Membership from States who are members of the Arctic Council would be viewed favorably, should they provide a proposal in accordance with Article 3 c) of the ARHC Statutes.” There was confirmation by the ARHC Member States at ARHC7 that Sweden, as a full member of the Arctic Council, would be approved as Associated Member should they submit their full application to the ARHC for consideration.

ACTION:

The Chair 2018  NO will contact Sweden to understand their intent regarding Associate Member status of the ARHC, and assist them with the application process should they request it.

An application, as per Article 3 c) of the ARHC Statutes, for Associate Membership to the Commission was also received from Italy on March 16, 2017. This application was distributed to ARHC Member States prior to the extraordinary meeting of the ARHC in Monaco in April 2017 where it was discussed by all Member and Associate Member States. The Member States agreed that when the ARHC was established in 2010, time was needed to develop a well-functioning Commission. Once the Commission was running smoothly, expansion with Associate Member States would be considered. Seven years into the operation of this commission there is agreement that we are now well established as a regional hydrographic commission and can therefore allow for expansion on a case by case basis. The Italy application was moved to vote by correspondence as per ARHC Statutes, Article 10 c) with responses requested by May 31, 2017. Four member states  CA,  DK,  NO and  US replied positively, and no dissenting position was received. As such, the Commission reviewed the application process and confirmed the positive acceptance of the application reached by the consensus correspondence vote after the Special ARHC meeting held in Monaco in April 2017.

ACTION:

Chair 2018  NO to notify  Italy of the positive ARHC acceptance of the application for Associate Member.

The AHRC discussed Article 10, decision process, and how it should be applied to Article 3, applications for Associate Membership. General agreement was reached that Article 10 decision process was followed, but for Associate Membership status decisions, the preference is to reach decision at ARHC Conference providing that Quorum is present.

E.2 New EU Research Aims to Improve Arctic Safety

The EU research initiative to improve Arctic safety was brought to the attention of ARHC.

Docs:

ARHC7 New EU Research Aims to Improve Arctic Safety

F. Election of new Chair and Vice-Chair



NO was elected as Chair of ARHC 2018 starting at the end of ARHC7.



RU was elected as Vice-Chair of ARHC 2018 starting at the end of ARHC7.

ARHC confirmed the chairmanship and vice chairmanship of the subordinate WG's:

- OTWG
- AICCWG.

G. Place and date of the next ARHC8 Conference



NO informed their intention to host ARHC 8 in Longyearbyen (78°13'23.5"N, 015°37'36.1"E), Svalbard, Norway (11-13 September 2018). Dates are to be confirmed.

H. Review of ARHC7 List of actions

The list of actions was reviewed and amended accordingly.

Docs:

- *ARHC7 List of Actions*

I. Closing the Conference

The participants thanked  DK for good leadership and for the successful conduction of the ARHC7 meeting.

Pia Højgaard officially closed the meeting.