



The 5th Arctic Regional Hydrographic Commission Meeting 28-30 October 2015, Saint Petersburg, Russian Federation

Minutes

A. Opening of the Meeting.

- A1. The ARHC Chairman Captain Sergey Travin welcomed the participants of the Meeting on behalf of Vice Admiral Alexander Fedotenkov, Deputy Commander-in-Chief of the Navy of the Russian Federation.
- A2. The ARHC Chairman Captain Sergey Travin opened the 5th Arctic Regional Hydrographic Commission Meeting and welcomed delegates from member states (Denmark, Norway, Russian Federation and USA), the President of the IHO Robert Ward as well as the observers from Finland and Iceland.

He expressed regret the absence of the delegation of Canada and thanked Canada for input to the ARHC 5 Meeting.

He also thanked the Central Naval Museum staff for the thorough preparations and hosting the Meeting.

Captain Leonid Shalnov was entrusted the Chairman of the Meeting.

A3. Administration and logistics.

Reference document ARHC-5 Letter 4/2015 5 October 2015, Annex B.

The Chairman of the Meeting briefed on practical matters of the Meeting, visit to the Central Naval Museum as well as the evening's setting.

A4. List of Participants.

Reference document ARHC-5 Letter 4/2015 5 October 2015, Annex C.

The Chairman of the Meeting presented the List of Participants to be verified by the delegates.

A5. Adoption of the agenda.

Reference document ARHC 5-A5, rev. Oct. 27, 2015.

The Draft Agenda, rev. October 27, 2015, was used as guiding document for the progress of the Meeting.

The Agenda was adopted without any change.





B. IHO Work Program 1 – Corporate Affairs.

B1. The IHB Report.

Reference document ARHC 5.B1 rev 1.

The President of the IHO Robert Ward informed the delegates on certain activities involving the Secretariat of the IHO that may be relevant to the Arctic Regional Hydrographic Commission.

B2. Outcome of IRCC7 Meeting.

Because of absence of any reference documents the item B2 was not discussed.

B3. Status of Actions from ARHC 4 and ARHC Special Meeting. *Reference documents ARHC 5.B3, ARHC 4 List of Actions.*

ARHC 4-01.

Norway incorporated the conclusions from the discussions on the ARHC Strategic Plan at the ARHC 4 Meeting and circulated to members.

Action is done.

ARHC 4-02.

Norway prepared and circulated to members the one page communication paper.

Action is done.

ARHC 4-03.

Denmark, Norway and Russian Federation informed the US about access to documents and link web sites offering relevant voyage planning guide information.

Action is done.

ARHC4-04.

The US liaised with IHB for hosting a web site location for the Voyage Planning documents.

Action is done.



ARHC4-05.

The AICCWG proposals of framework and principles for ENC scheme and provision status were put into the AICCWG Report to the ARCH 5 Meeting.

Action is done.

ARHC4-06.

The AICCWG suggested an INT Chart coverage for the Arctic.

Action is done.

ARHC4-07.

The information on the OTWG cooperation with the IBCAO to come up with an overview of the availability of survey data was put into the OTWG Report to the ARHC 5 Meeting.

Action is done.

ARHC4-08.

Finland and Iceland were informed that they should request to apply for Associate Membership.

Action is ongoing.

ARHC4-09.

The Chair to send a letter to Sweden inviting them to apply for Associate Membership

Action is in progress.

ARHC4-10.

The OTWG Chair invited Finland and Iceland to become a member of the Working Group.

Action is done.

ARHC4-11.

Norway received the letter from the PAME to respond to the invitation before PAME I-2014.

Action is done.

ARHC4-12.

Canada clarified the possibility of supporting ARHC in its efforts to provide a working tool for an overview of hydrography and charting status in the Arctic based on input from all Member States and Iceland.

Action is done.



ARHC4-13.

Denmark provided a MSDI report form an Arctic Perspective.

Action is done.

ARHC4-14.

Denmark sent out an invitation to ARHC Member States for participating in a workshop related to nautical publications.

Action is done.

ARHC4-15.

Norway distributed the Arctic Council "Arctic Marine Strategic Plan 2015-2025" and requested the Member States to send comments to the Chair and Vice-Chair.

Action is done.

ARHC SM-01.

Denmark was elected to represent the ARHC to the IHO-EU Network Working Group.

Action is done.

B4. National Reports.

B4.1. National Report of Canada.

Reference document Canada's input to ARHC 5/ October 22, 2015.

The ARHC Member States could familiarize with National Report of Canada on the IHO web site.

The report was noted by the ARHC 5.

B4.2. National report of Denmark.

Reference document ARHC 5-B4.2.

Jens Peter Weiss Hartmann and Lars Hansen presented the Danish national report.

The Danish Geodata Agency is now a part of the Danish Ministry of Energy, Utilities and Climate. The Ministry consists of the Department, the Geological Survey of Denmark and Greenland, the Danish Meteorological Institute, the Danish Energy Agency, the Danish Geodata Agency, the Danish Energy Regulatory Authority and Energinet.dk.



On September 1, 2015, the Danish Geodata Agency (DGA) changed it organization and a new internal structure was implemented.

The Danish Geodata Agency works closely together with the Danish Maritime Authority, which is responsible for issuing of Notices to Mariners, List of Lights. Tide tables and operational tide gauges are the responsibility of Danish Meteorological Institute.

As a part of the new government's plan "Better balance – Governmental institutions closer to citizens and businesses" it is decided to divide the current Danish Geodata Agency into two separate agencies – the Agency for Data Supply and Efficiency with a location in Copenhagen and the Danish Geodata Agency with a new location in Aalborg, in the northern part of Jutland.

The surveys on the West Coast of Greenland were carried out in the archipelago and near coastal zone, in order to allow safe access to major ports and to locate sheltered coastal fairways. A prioritized program for the resurvey of Greenland waters is in force. The main emphasis is placed on the most populated areas on the West Coast.

In addition to the prioritized program on the west coast, there has been made survey trials on the east coast with the navy arctic patrol vessel "Ejnar Mikkelsen".

The report was noted by the ARHC 5.

B4.3. National report of Norway. *Reference document ARHC 5-B4.3*.

Evert Flier presented the Norwegian national report.

The Norwegian Hydrographic Service (NHS) NHS moved to new premises outside Stavanger city centre in June 2015. NHS is now co-located with the Petroleum Directorate and the Petroleum Safety Authority.

A part of the University of Stavanger (UiS) and some research institutions affiliated to UiS are located in the same area.

The Norwegian Mapping Authority (NMA) has over the last year discussed goals and strategy based on international trends, expectations from its "owner" and internal goals.

A project called Destination 2025 involved all divisions of NMA. Related to the outcome of the project NHS has initiated an Organizational Development (OD) activity, aiming at adjusting the organization to underpin the main strategic goals.





Two survey launches equipped with EM2040 dual RX have been operating for 10 weeks in Svalbard in the period July-September both in 2014 and 2015.

As part of the Mareano project, some surveying has taken place along the agreed delimitation line between Norway and the Russian Federation and in the central/western Barents Sea during 2015.

Three similar survey launches were delivered by Swede Ship Marine, Sweden, during the period December 2013 – May 2014. Two of the launches have been in full time operation as part of ordinary survey capacity. The third one has served the needs for the Coastal Administration (contracted surveying).

A small modification to the hulls was implemented to reduce air bubbles (disturbing the data quality) at low speed. Under favourable conditions, surveying has been done at a maximum of 12 knots.

Some important areas in Svalbard and Northern Norway are updated with new surveys and are published as New Editions of the existing ENC's.

Coastlines and ice-fronts are updated as New Editions of the existing ENC's for Isfjorden.

11 new approach ENC's are produced for areas in which they previously had data coverage in harbour and coastal usage bands only.

The Norwegian Pilots Guide "Den norske los" is to be revised and more customized for the professional users.

A new research is under construction and is scheduled for delivery last half of 2017. The vessel to be owned by the Norwegian Polar Institute but operated by the Institute of Marine Research. The area of operation will be Arctic and Antarctic.

The vessel is built for icebreaker class PC-3, equipped with moonpool, crew of 15-17 persons, 35 scientists, 65 days operation cruising speed, length 100m and width 21m.

The report was noted by the ARHC 5.

B4.4. National report of the Russian Federation. *Reference document ARHC 5-B4.4*.

Leonid Shalnov presented the Russian national report.

The basic directions of activity of the Department of Navigation and Oceanography of the Ministry of Defence of the Russian Federation were presented.

Five areas of new surveys in 2014-2015 were shown.





48 ENCs were updated in 2014-2015.

42 paper charts were published in 2014-2015.

The current base of Print-On-Demand Chart System contains more than 900 charts.

The report was noted by the ARHC 5.

B4.5. National report of the USA. *Reference document ARHC 5-B4.5.*

Gerd Glang presented the US national report.

The U.S. domestic and international hydrographic services are primarily conducted by three government agencies: The National Oceanic and Atmospheric Administration's (NOAA) Office of Coast Survey (OCS), the National Geospatial-Intelligence Agency (NGA), and the Commander, Naval Meteorology and Oceanography Command (COMNAVMETOCCOM) and Hydrographer of the Navy. NOAA provides nautical charts and related hydrographic information within the nation's Economic Exclusion Zone (EEZ). COMNAVMETOCCOM conducts oceanographic, bathymetric, and hydrographic surveys worldwide to satisfy U.S. Navy requirements. NGA is the mapping and charting authority for the U.S. Department of Defence and commercial mariners worldwide, building a global suite of nautical products and services for the U.S. Navy and commercial mariners in areas the U.S. is considered to be the charting authority.

As an Arctic Nation, the United States has broad and fundamental interests in the Arctic Region. The strategic approach is governed by the National Strategy for the Arctic Region, which focuses on three lines of effort: advance United States security interests, pursue responsible Arctic region stewardship, and strengthen international cooperation.

The U.S. considers information a strategic asset to the U.S. Federal Government, its partners and the public. In order to ensure the U.S. Federal Government is taking full advantage of its information resources, agencies are directed to increase operational efficiencies, reduce costs, improve services, support mission needs, and increase public access to valuable government information.

The U.S. Arctic Nautical Charting Plan (2015) provides information about existing, recently added, and proposed new raster (paper) and ENC coverage in U.S. Arctic waters.

The U.S. (NOAA) maintains 1,134 ENCs in U.S. domestic waters.

At the annual meeting of its steering committee in September 2015, the International Centre for Electronic Navigational Charts (IC-ENC) agreed to accept NOAA as a member of its organization and to establish an IC-ENC regional office, "IC-ENC North America." The agreement between IC-ENC and NOAA is expected to be finalized in early 2016.

In October 2014, the U.S. and Canada resolved their ENC overlaps in the Beaufort Sea.

There are currently several overlapping ENCs within the U.S. and Russian usage bands 2, 3, and 4 coverage. The U.S. and Russia are continuing discussions to resolve the overlaps.

In 2015, the U.S. produced the first version of a U.S. Arctic Voyage Planning Guide to assist mariners and the public access and acquire information relevant to maritime transit in the U.S. Arctic Waters.

The NOAA Office of Coast Survey is providing financial support for an IHO-initiated project to develop a global database for crowdsourced bathymetry hosted by the IHO Data Centre for Digital Bathymetry (IHO DCDB).

The report was noted by the ARHC 5.

B5. Proposed Rules and Procedures for Selection to the IHO Council.

B5.1. Proposed Procedure for RHCs to Designate their Representatives to the IHO Council.

Reference document IHB Letter S1/6200, October 7, 2015.

The President of the IHO Robert Ward informed the delegates on a preliminary process for the determination of the number of seats on the Council allocated to each Commission (Annex A to the IHB Letter S1/6200, October 7, 2015) and on a set of generic rules that RHCs may wish to use as the basis of a procedure for the designation of the representatives of each Commission in the Council (Annex B to the IHB Letter S1/6200, October 7, 2015.).

B5.2. Proposal for Rules and Procedures for ARHC Selection to the Council. *Reference document ARHC_Council_Issues Paper, October 21, 2015.*

The U.S. presented for consideration Proposal for Rules of Procedures for ARHC Selection to the Council.

The ARHC Members discussed the rules of procedures and the prospects and timeline for attaching Council Selection Procedures as an Annex to the ARHC



Statutes and Rules of Procedure to ensure ARHC does have its process set appropriately before the tentative 1st Session of the IHO Assembly which may occur as early as April 2017.

The ARHC Members were invited to review the rules of procedures for ARHC selection to the Council (Annex B to the ARHC_Council_Issues Paper, October 21, 2015.) and provide feedback to the Chair of the ARHC no later than 26 February 2016. The ARHC Chair has to coordinate by electronic means or a conference call with ARHC Member States by 31 March 2016 to consider the final adoption of the necessary Annex to the ARHC Statutes.

C. IHO Work Program 2 – Hydrographic Services and Standards.

C1. The Strategic Planning Working Group Report.

Evert Flier presented the SPWG Report to the ARHC 5.

The report was noted by the ARHC 5.

C2. The Operational and Technical Working Group Report. *Reference document ARHC 5-C2*.

Jonathan Justi presented the OTWG Report to the ARHC 5.

ARHC Member States were invited to consider this report and offer direction and guidance to the Working Group on future activities. Member States were also invited to provide updates to membership list.

The report was noted by the ARHC 5.

C3. Arctic Voyage Planning Guide Working Group Status Report. *Reference document ARHC 5-C3*.

The U.S. presented the AVPGWG Status Report to the ARHC 5.

The IHO ARHC site will provide a convenient hyperlink for internet users interested in the work of ARHC allowing access to specific sites managed directly by the members of the ARHC.

A concept of a portal presented at ARHC-4 was offered for formal consideration at ARHC-5 for the purposes of launching the service.



The portal would be maintained by the IHB on their ARHC website and provide links to member state managed arctic voyage planning guides.

Each member state is responsible for maintaining the content of their respective site.

The IHB maintains the link on the ARHC meeting site and the AVPG Portal.

ARHC Member States were invited to note the report and discuss and consider appropriate actions related to launching, improving, and maintaining the AVPG information service for mariners contemplating navigation in the Arctic.

The report was noted by the ARHC 5.

C4. The Arctic International Charting Coordination Working Group Report. *Reference document ARHC 5-C4*.

Noralf Slotsvik presented the AICCWG Report to the ARHC 5.

It was noted to be important to keep this report up to date, as this would be a very useful tool for reporting of status of charting in the Arctic to the WENDWG and others.

The working group is not yet properly established and the expected progress has not taken place. There are several reasons for this: the group is not fully manned, the five countries have very different approach to publishing charts as INT-charts and the region is to a great extent within national waters of the Member States.

It was also noted that the AICCWG intended to focus on the tasks of establishing a complete group, developing an international chart scheme for the region and making a decision on how to organize the maintenance and updating of the scheme.

In cooperation with IHO, a numbering scheme has been established for INT Paper charts in the Arctic region. This numbering scheme was described in the last report and has been used for the current INT charts in Region N.

No responses for status, plans and comments were received.

The ARHC Member States were invited to note the report and create a plan for the publishing of INT Charts in their respective areas for the next few years (if relevant).

The Russian Federation nominated Sergey Egorov as a delegate to the AICCWG.

The report was noted by the ARHC 5.





D. International Cooperation.

D1. Progress of WEND Working Group.

The Inf. papers were not presented and included just for information exchange.

D2. The Arctic Council/PAME/ARHC Report.

*Reference document ARHC 5-D2_Arctic Council_PAME II-2015_Inf
Paper.

The U.S. presented the Information Paper providing the ARHC Members with reference documents related to PAME-ARHC interactions in 2015 and opportunities for future collaboration.

It was noted that the PAME requested closer dialogue during intercessional periods between its Shipping Expert Group and the ARHC.

PAME also addressed a series of important engagements related to safety of navigation that may also be of interest to the hydrographic offices of the ARHC.

The ARHC Members were invited to discuss next steps of engagement with PAME (if any) and efforts the ARHC could take to aid PAME in taking steps to improve navigation safety and marine environmental protection in the Arctic.

The report was noted by the ARHC 5.

D3. The IHO-EU Network Working Group Status Report. *Reference document ARHC 5-D3*.

Lars Hansen presented the IENWG Status Report to the ARHC 5.

As a representative of the ARHC to the IENWG he informed the ARHC Members on the IENWG meetings and representatives.

It was noted that the meetings were open for any IHO member state to participate in.

The ARHC Members were informed on ongoing topics in the IENWG.

It was recommended the ARHC to continue to monitor the ongoing work within the EC through participation in the future IENWG.

Noting the Denmark's willing to continue to represent the ARHC the Commission confirmed Denmark as the ARHC representative in IENWG.

The report was noted by the ARHC 5.

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D4. Associate Members and Observers.

*Reference document ARHC 4 List of Actions, Action 8.

The Chairman of the Meeting informed the ARHC Members on the current status of the Action 8 of the ARHC 4 List of Actions.

It was noted the necessity of taking in attention the ARHC Statutes Article 3c.

The Russian Federation was invited to distribute Application for an Associate Membership to ARHC of Finland to Member States for consideration.

E. Marine Spatial Data Infrastructure (MSDI).

E1. The Marine Spatial Data Infrastructure Working Group Report. *Reference document ARHC 5-E1*.

Lars Hansen presented the MSDIWG Report to the ARHC 5.

He informed the ARHC Members on the work group's findings, status and the planned next steps.

The ARHC Members were invited to discuss the implication of MSDI from a Hydrographic Office perspective and how Member States can benefit from a regional approach.

The report was noted by the ARHC 5.

F. Any other international activities in nautical charting and hydrographic surveying.

F1. New Danish National ENC Service for Leisure Craft Users. *Reference document ARHC 5-F1*.

Denmark made a presentation called "New national ENC service for leisure craft users".





F2. Electronic Nautical Charting and Problems in the adjustment of marine spatial data in the Arctic.

The Russian Federation made a presentation called "Electronic Nautical Charting and Problems in the adjustment of marine spatial data in the Arctic".

G. Any other Business.

G1. World Round Cruise of "Admiral Vladimirskiy" Oceanographic Research Vessel.

The Russian Federation made a presentation called "World Round Cruise of "Admiral Vladimirskiy" Oceanographic Research Vessel".

G2. U.S. Arctic Nautical Charting Plan.

Reference document ARHC 5-INF1_US_Arctic Charting Plan INF
Paper.

Colby Harmon presented the U.S. Arctic Nautical Charting Plan.

G3. The Water Area of the Northern Sea Route. Organization of Navigation. Navigational and Hydrographic Support.

The Russian Federation made a presentation called "The Water Area of the Northern sea route. Organization of Navigation. Navigational and Hydrographic Support".

H. Election of next ARHC Chair and Vice Chair.

H1. Canada's Proposal to stand the next ARHC Chairman. Reference documents:

Canada's input to ARHC 5, October 22, 2015;

ARHC 5-H1,2, I1_Draft decisions.

Canada was elected the next ARHC Chairman.





H2. Proposed Order of ARHC Meetings in 2016-2020.

Reference documents:

Denmark's paper for ARHC 5, October 22, 2015;

ARHC5-H1,2, II_Draft decisions.

Denmark informed the ARHC Members that the ARHC 3 Meeting decided to change the order of future meetings due to the experience of unnecessary logistic and administrative difficulties, with the practice of having the chair and the host from two different member states. Due to the potential time differences between member states, it was decided to host future meetings in the country which also provides the chair. This procedure was proposed to be effective from the ARHC 5 Meeting.

The Commission noted the schedule of meetings 2016-2020 as clarified by Denmark in its paper for ARHC 5.

H3. Canada's Proposal to update ARHC Statutes Articles 7b and 7d. Reference document Canada's input to ARHC 5, October 22, 2015.

The ARHC Members confirmed the nessecity to update the ARHC Statutes Articles 7b and 7d.

I. Time and Venue for next ARHC Meeting.

I1. Canada's Proposal to Host the ARHC 6 Meeting in Canada in October, 2016.

Reference documents: Canada's input to ARHC 5, October 22, 2015; ARHC 5-H1,2, I1_Draft decisions.

The Commission noted the offer of Canada to host the 6th meeting of the ARHC in October 2016.

The Commission invited Canada to notify all Members and Associate Members of the Commission of the specific dates and the proposed venue for the 6th meeting and to issue formal letters of invitation to all Members and Associate Members no later than 1 March 2016 so that each Member could confirm its attendance by 1 May 2016.





J. Review of ARHC 5 List of Actions.

The ARHC 5 List of Actions was reviewed and noted.

K. Closing formalities.

The ARHC Chairman expressed his appreciation with the course of the ARHC 5 and thanked all concerned for their contributions to a very successful meeting.

The President of the IHO Robert Ward thanked the Russian Federation for hosting the meeting and wished everyone a safe return journey.