Arctic Regional Hydrographic Commission (ARHC)













Arctic Council's Protection of the Arctic Marine Environment (PAME) Working Group

PAME II – 2014: Whitehorse, Yukon Territory – Canada September 16th, 2014

SUMMARY & PARTICIPATION REPORT

2014 ARHC's Vice-Chair Denis Hains from Canada represented and presented to PAME II – 2014. Special thank you to the Operational and Technologies Working Group, Michael Gonsalves, NOAA-OCS and his team for compilation, analysis and preparation of the presentation for PAME.

ARHC Participation Objectives at PAME II-2014:

- 1- At PAME's invitation, presents the status of hydrography and nautical charting in the Arctic.
- 2- Points to Register & Desired Outcomes:
 - a. Hydrography & Charting Matters
 - b. ARHC is the Expert Group actively conducting Arctic Hydrographic-related science & analysis

September 15th, 2014 (11:00-17:00) – Participation at the Shipping Expert Group (SEG) Pre-Meeting:

Co-Chairs: Peter Oppenheimer, USA – NOAA & Drummond Fraser, Canada- Transport Canada

Denis Hains participated in the PAME Shipping Expert Group (SEG) Pre-Meeting before the beginning of the PAME II-2014. During the Pre-meeting, D. Hains presented the role and objectives of ARHC and contributed to the discussions of the SEG. The 2 Co-Chairs reviewed the PAME II Agenda in order to facilitate efficient discussion during the week representing the main Shipping issues (see Annex 1).

September 16th, 2014 (08:30-10:30) - PAME II-2014 Plenary Session:

Chair: Hugi Olafsson, Iceland for PAME secretariat.

Based on the thorough and excellent methodology and analysis made by USA's NOAA-Coastal Survey Office for ARCH with the input of Members States of ARHC, Denis Hains made a 20 minute Presentation (Power Point Presentation available) on the Status of Arctic Hydrography and Nautical Charting immediately after the opening and introduction remarks at the plenary session.

About 60 participants followed carefully and with interest the presentation. About 20 minutes of Questions and Answers period followed. 5 different groups of interest asked questions (see Annex 2).

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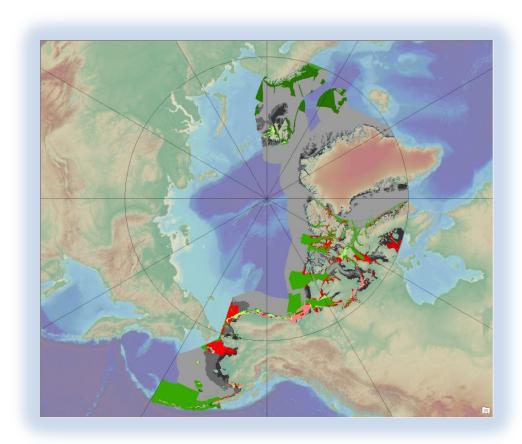




CONCLUSION / RECOMMENDED ACTIONS:

The ARHC participation at PAME was positive and met the 2 objectives originally set. D.Hains recommends ARHC Member States the following actions:

- 1- Respond to the upcoming call for comments for the 2015-25 Arctic Marine Strategic Plan to ensure that Hydrography and Charting and the ARHC Objectives are embedded within the Arctic Council's 10 year plan.
 - a. Include more specifically the requirements related to Horizontal and Vertical Datums, Tides, Currents, Water Levels + Oceanographic and Circulation Modelling in the Arctic.
- 2- Engage in an ongoing relationship with PAME to continue participating and updating on the Hydrographic Challenges and status in the Arctic



Source: ARHC - OTWG, Sept. 2014

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ANNEX 1

1- Review of Arctic Marine Strategy Assessment (ASMA) II:

- a. **THEME I** Enhancing Marine Safety:
 - i. Linking with International Organizations such as: IMO, IHO, WMO, IMSO
 - ii. Uniformity of Marine Shipping
 - iii. Arctic Search & Rescue
- b. THEME II Protecting Arctic People and Environment
 - i. Survey of Arctic Indigenous Marine Use
 - ii. Engagement with Arctic Communities
 - iii. Areas of Heightened Ecological and Cultural Significance
 - iv. Specifically Designated Arctic Marine Areas
 - v. Protection from Marine Invasive Species
 - vi. Oil Spills Prevention
 - vii. Addressing Impacts on Marine Mammals
 - viii. Reducing Air Emissions
- c. THEME III Building Marine Infrastructure
 - i. Addressing the Infrastructure Deficit
 - ii. Arctic Marine Traffic System
 - iii. Circumpolar Environmental Response Capacity
 - iv. Investing in Hydrographic (ARHC), Meteorological and Oceanographic Data

2- Arctic Marine Strategic Plan (AMSP) Final Draft discussed:

- a. ARHC made interventions about the Hydrographic Surveys important gaps and inadequate charting;
- **b.** SEG invited ARHC to submit suggestions to add to the new 2015-25 AMSP to be adopted at the next Ministerial Arctic Council. It is seen as important to highlight the lack and gap of modern and adequate Hydrographic and Marine Charting. **ACTION for ARHC** good timing for ARCH a new call for comments will be sent by the end of October to reply by end of November 2014...
- 3- Polar Code...

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ANNEX 2

- 1- **Transport Canada** (<u>Drummond.Fraser@tc.gc.ca</u>) asked to elaborate on the notion of collaborative work in the Arctic. *D.Hains confirmed the critical importance of collaboration in the Arctic given the harsh environment requiring icebreaking capabilities, challenges precise positioning & telecomm. etc ...*
- 2- National Oceanic and Atmospheric Administration (NOAA) USA (Peter.Oppenheimer@noaa.gov) asked about:
 - a. Clarifying the level of confidence used in the Methodology and analysis of Hydrographic data. D. Hains explained the quality of measuring equipment, age of data, survey technique, etc...
 - b. The notion of Hydrographic Crowd Sourcing *D.Hains elaborated on the opening and willingness for HOs to incorporate data from different Sources ensuring some QC and QA...*
- 3- Aleut International Association (AIA) Alaska, USA (<u>aia@alaska.net</u> Gamble James) asked about the information used in the Methodology and if it would be possible to use additional layers of information in the priority model such as environmental sensitive areas. *D.Hains indicated that the primary role of HOs is Safe and Efficient Navigation, so this layer is predominant, however more layers of information may be added to the priority model & weighted factor for areas of interests...*
- 4- **European Union** (<u>joseph.casanovas@ec.europa.eu</u>) Maritime Transport & Logistics Mobility Transport asked about:
 - a. Relationship of this study with previous numbers provided by IHO at IMO's meeting indicating that less than 10% of the whole Arctic covered with adequate Hydrographic Surveys and Nautical Charting; D.Hains mentioned that different numbers are being used but they are pretty consistent and demonstrate important lack/gap of Surveys and Charting in the Arctic...
 - b. The issue of Cruise Ships navigating in uncharted areas the risk and role of ARHC and HOs... D. Hains indicated that the role and mandate is to offer proper Nautical Charting Publications and information for safe and efficient navigation in waterways. Main Shipping Corridors are targeted as priorities. Uncharted areas are not recommended different authorities have to be contacted by Cruise Ships prior to entering in uncharted waterways HOs would not recommend going in uncharted areas.
- 5- International Union for Conservation of Nature (IUCN) (jean.thie@ecoinformatics.com) commented on the importance of a solid Arctic Marine Spatial Data Infrastructure (Arctic MSDI) to have a complete view of the complexity and different components adding to Hydrographic Surveys as the primary infrastructure for navigation in the Arctic. D.Hains concurred with this point of view...