

EXPERT TEAM ON SEA ICE – FIFTH SESSION

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STEERING GROUP FOR THE PROJECT
GLOBAL DIGITAL SEA ICE DATA BANK (GDSIDB) –
THIRTEENTH SESSION

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REPORT FROM THE INTERNATIONAL ICE CHARTING WORKING GROUP (IICWG)

Summary and Purpose of Document

This document provides a summary update of activities of the International Ice Charting Working Group (IICWG).

ACTION PROPOSED

The Team is invited to:

- (a) review and advise on the activities of the IICWG meeting.

References:

1. IICWG website: <http://nsidc.org/noaa/iicwg/>
2. IICWG-XIV Meeting Report at <http://nsidc.org/noaa/iicwg/meetings.html>

Appendices: A) Update on Activities of the International Ice Charting Working Group (IICWG)

DISCUSSION

Update on Activities of the International Ice Charting Working Group (IICWG) in 2013

1. **IICWG-XIV:** The 14th meeting of the International Ice Charting Working Group (IICWG) was held in Reykjavik, Iceland, October 21-25, 2013. The University of Iceland and the Icelandic Meteorological Office co-hosted the meeting at which sixty-five attendees representing 34 organizations from 14 countries participated. The theme of the meeting was “Ice Information for Marine Safety and Security”. Plenary sessions were devoted to Antarctic Ice Information and Integrating Ice Information. Breakout groups discussed the Role of Ice Services in Emergency Response (both Search-and-Rescue and Environmental) and Trans-Arctic Shipping.
2. **Interaction with EC-PORS:** The IICWG discussed its relationship with EC-PORS, noting that several individuals participate in both groups. It was noted that it would be useful for the IICWG to propose projects for the EC-PORS research and observations committees to influence the work that EC-PORS supports. The IICWG Applied Science and Research Standing Committee was asked to suggest research projects to EC-PORS in time to influence decisions on resource allocations.
3. **Climate Services Products and Overlap with EC-PORS:** In the course of a discussion on long range (seasonal) ice forecasts and modeling, Diane Campbell, Meteorological Service of Canada, proposed to investigate the possibility of obtaining EC-PORS or other climate services funding for a student to produce some experimental seasonal ice forecast products to help in the discussion with users. In this context, there followed a short discussion on how we might resolve any overlap in modeling activities between EC-PORS and IICWG. A letter in this regard was sent from the IICWG co-chairs to the EC-PORS co-chairs on January 9, 2014.
4. **Ice in Electronic Navigation Charts:** For many years, the IICWG has been working actively with the JCOMM Expert Team on Sea Ice and the International Hydrographic Organization to further the availability of ice information in Electronic Navigation Charts (ENCs). Under the leadership of Jürgen Holfort, the German Ice Service of the Bundesamt für Seeschifffahrt und Hydrographie made significant progress over the past year in developing technical specifications for ice information in S-10x format. A nearly complete draft product specification, including feature catalogue, XML schemas, portrayal and test data sets was presented to the Working Group for review and approval over the coming months.
5. **Joint Antarctic Ice Chart Production:** Building on initiatives from the previous meeting, Russia’s Arctic and Antarctic Research Institute, the U.S. National Ice Center and the Norwegian Ice Service agreed to commence a pilot project to undertake joint production of ice charts for Antarctic waters. The technical ability to integrate ice charts from multiple sources has been well demonstrated and the three organizations will now work on implementing policies and procedures to ensure that ice information for marine safety in the Antarctic will remain paramount while achieving efficiencies through joint production.

6. **Engaging Southern Hemisphere Ice Services and Users:** The IICWG has been trying, with limited success, to engage the ice services of the southern hemisphere in an effort to improve the availability of ice information in the Southern Ocean in the interest of marine safety. In a significant development, the group enthusiastically accepted the invitation of the Meteorological Service of the Chilean Navy to host the next IICWG. The meeting will focus on ice information in Antarctic waters with a view to engaging both producers and users. In a parallel development, Andrew Fleming of the British Antarctic Survey assisted by Jürgen Holfort will prepare a working paper informing about IICWG initiatives to be presented at the May 2014 meeting of the Antarctic Treaty Consultative Meeting.
 7. **Role of Ice Services in Emergency Response:** The meeting participants determined that ice services could often have a significant role in marine Search-and-Rescue and Environmental Emergency Response operations taking place in the vicinity of ice. However, those response organizations are often not aware of the ice services or how to involve them. Actions to better inform the response agencies about the capabilities of the ice services were initiated and mechanisms by which the ice services could assist one another when necessary were discussed. In a significant development to make it easier for response organizations to engage ice services in an emergency, the U.S. National Ice Center offered to serve as an initial point of contact to direct response organizations to the appropriate ice service for support to an operation. The Canadian Ice Service will contact authorities to see how ice services can support the 2014 Search-and-Rescue Exercise (SAREX-2014).
 8. **Role of Ice Services in Trans-Arctic Shipping:** With interest in trans-Arctic shipping growing and non-Arctic nations beginning to contemplate the use of new Arctic routes in future, the meeting participants discussed how ice services might enhance marine safety in the international and multi-national waters of the Arctic. While no commitments were made, these discussions marked an initial step towards exploring how information, beyond the basic ice edge delineation currently provided, could be produced and delivered in the Arctic METAREAs.
 9. **International Maritime Organization (IMO) Mandatory Polar Code:** Under the leadership of David Jackson, Director of the Canadian Ice Service, the IICWG has investigated the implications of a mandatory Polar Code for the national ice services. At this meeting, the Working Group agreed to submit a list of recommendations on “Ice Navigator Skills and Knowledge Requirements for the Polar Code” to the IMO.
 10. **IICWG News Release:** At the 2014 meeting, the IICWG issued a news release recognizing the striking increase in marine activity in the Arctic. The release contained the statement that “While the extent of the Arctic ice pack re-bounded somewhat this year from the record minimum set in 2012, this should not be taken as a sign that the trend of diminishing Arctic sea ice has stopped. This is an illustration of the extreme inter-annual variability that is to be expected. The long term trend remains toward a seasonally ice-free Arctic Ocean.”
 11. **Next Meeting:** The 15th meeting of the IICWG will be held in Punta Arenas, Chile during October 20-25, 2014 hosted by the Chilean Navy Meteorological Service.
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