
NEWS RELEASE

World Ice Information Services Support Polar Shipping

Ottawa, Canada, October 28, 2016 – The International Ice Charting Working Group (IICWG) convened its 17th annual meeting October 24-28 in Ottawa. This year’s meeting was hosted by the Canadian Ice Service, a division of Environment and Climate Change Canada. The theme for the meeting was “From Models to Forecast Products for Sea Ice and Icebergs”.

Over 95 representatives from 13 countries met to discuss issues affecting sea ice and iceberg information for the maritime community. Major topics included the Polar Code’s impact on ice information needs and how new ocean-ice-atmosphere climate models can provide better forecasts. The meeting also featured a tabletop exercise to explore emergency response in ice-infested waters.



CRYSTAL SERENITY with her support ship RRS ERNEST SHACKLETON in the Northwest Passage Sept. 2016.
(Courtesy Justin Hoffman/Expedition Voyage Consultants)

While declining Arctic sea ice continues to demand media attention, interest by the shipping industry is starting to become more focused in a few key areas: transport of northern natural resources to southern markets, in particular, oil & gas from Russia’s Arctic seas and minerals from northern Canada; adventure tourism in increasingly larger cruise ships, especially in the North American Arctic as well as the Antarctic; and marine re-supply of growing Arctic communities. Interest has remained steady in the use of Arctic routes for transit shipping by bulk cargo carriers as they realize that the variability of the Arctic ice environment limits the attraction of shorter distances. Thus far, container shipping has shown no interest in Arctic routes.

The IICWG issued the following statement:

“Under the influence of amplified global climate warming, the Arctic Ocean is on a path to becoming seasonally ice-free during summer months, similar to conditions in the Baltic, Okhotsk or Labrador Seas. As interest in resources and new tourism experiences increases, timely and accurate forecasts of highly variable and dynamic ice conditions are critical for safe and efficient navigation. In the interest of maritime safety, the members of the IICWG are committed to continually improving their collective capabilities by sharing information and expertise.”

Significant events of 2016:

- The *maximum* Arctic sea ice extent that was reached in March was a record low and the thickness of the ice was significantly reduced, setting the stage for further diminished summer ice. September 2016 tied 2007 for the second lowest *minimum*

ice extent on record at 4.14 million square kilometres (National Snow and Ice Data Center).

- Ice remnants in the Laptev Sea plagued navigation on the Northern Sea Route (NSR) throughout the summer season.
 - Shipping levels on the NSR in 2016 were similar to the previous year. Russia remains committed to the NSR future through investment in infrastructure, including new types of nuclear icebreakers.
- While the southern route of the Northwest Passage became generally ice-free in September, the northern, deep water route remained congested with sea ice throughout the summer.
 - Adventure tourism in the Northwest Passage is increasing, including both large cruise ships and small yachts.
 - The CRYSTAL SERENITY, with 1620 passengers and crew, transited the Northwest Passage from west to east without incident. However, a high concentration of icebergs prevented one planned stop in west Greenland.
- Antarctic sea ice reached a maximum extent of 18.44 million square kilometres - slightly greater than the long term average.
 - Adventure tourism dominates Antarctic shipping - over 30,000 passengers visited the Antarctic on 50 different vessels in 2015/16 (International Association of Antarctic Tour Operators).
- After two years of exceptionally difficult ice conditions in the Great Lakes, the winter of 2015-16 had a near-record low ice cover.
- The Baltic Sea ice season in 2015-16 was considerably shorter than average. As in the previous year, the peak ice cover was reached exceptionally early, on 22 January, when ice covered an area of 110,000 km².
- In 2016, 687 icebergs entered the trans-Atlantic shipping lanes. Although this was only about half as many as in the previous two years, the distribution of icebergs was extensive, posing a significant threat to mariners. The Iceberg Limit extended as far south as New York City and eastward halfway across the Atlantic Ocean.
- Icebergs were observed in the north-western Barents Sea for the second year in a row, after many years with none observed. They are being calved from a rapidly advancing glacier on Nordaustlandet, another impact of the rapidly warming Arctic.

The IICWG was formed in 1999 to promote cooperation among the world's ice services on all matters concerning sea ice and icebergs. This year, the IICWG welcomed the Chilean Naval Weather Service as its newest charter member joining the operational ice services of Argentina, Canada, Denmark (Greenland), Finland, Germany, Iceland, Norway, Poland, Russia, Sweden, and the United States, as well as the British Antarctic Survey and the International Ice Patrol.

For more information, please see regional contacts on the IICWG web site: <http://nsidc.org/noaa/iicwg/>

For up to date information on Sea Ice Services in the world see: <http://wdc.aari.ru/wmo/docs/WMO574.pdf>

For more information on the IICWG, please contact:
Mr. John Falkingham, IICWG Secretariat, Ottawa, Canada
Tel: +1 613-355-4552 John.Falkingham@rogers.com

