

ATTACHMENT ONE
to the
CHARTER
of the
INTERNATIONAL ICE CHARTING WORKING GROUP

International Ice Charting Working Group Terms of Reference

Adopted October 7, 1999, amended October 26, 2007

Recognizing the ongoing interest of the nations influenced by ice covered seas in the use and protection of these seas; and further recognizing the value and economics of cooperative activities in operational ice services supporting maritime navigation; the ice charting nations of the world hereby form the International Ice Charting Working Group.

The International Ice Charting Working Group provides a forum for coordination of ice matters, including icebergs, acts as an advisory body for the relevant international sea organizations and programs, in particular, WMO/IOC JCOMM, CLiC, GCOS and IHO, and offers non-binding recommendations to senior management as appropriate, working under the following Terms of Reference:

Data and Product Exchange

- Coordinate ice information, data exchange, supporting research, and communications for operational analysis and forecasting of sea ice and icebergs.
- Propose, and establish procedures for, data and product exchange agreements for the enhancement of services at all ice centers.
- Coordinate collection, maintenance, and distribution of archived sea ice and iceberg information, including climatological information, and recommend common practices where appropriate.

Terminology, Data and Mapping Standards

- Identify established standards at ice centers governing data and product format, data transfer, metadata, and other geographic information such as attributes and coastlines.
- Recommend adoption of common methodologies among ice centers where practical.
- Develop recommendations for possible changes to standards for forwarding to appropriate international organizations for consideration.

Operations and Customer Support

- Develop an understanding of each ice center's unique customer base and its impact on operations.

- Monitor customer requirements for ice services and make recommendations for generic strategic development that will allow ice centers to meet evolving customer needs.
- Identify and provide a mechanism for coordinating customer feedback to the operational process.
- Examine information dissemination processes within the ice centers and recommend efficiencies and new technologies where appropriate.
- Recommend the establishment of customer education initiatives that serve to enhance the ice centers' collective operational effectiveness.

Training

- Encourage exchange of technical knowledge through shared training initiatives, personnel exchange programs, and the loan of applicable equipment and tools.

Technology for Analysis and Forecasting

- Monitor development and implementation of advanced information technology as applied to new digital sea ice analysis and production techniques.
- Identify technology applications supporting efficient dissemination and exchange of data, products, and ice information services.
- Recommend areas of potential common interest for technology sharing.
- Identify emerging capabilities supporting sea ice and iceberg analysis and forecasting and recommend their integration into operations as appropriate.

Applied Science, Research and Development

- Identify research priorities for improved analysis and forecasting capabilities, and communicate and promote these priorities within national and international funding agencies.
- Identify research technologies available for transition to operations, and coordinate efforts to encourage their transition and validation through funding, logistical support, and cooperative verification and validation processes.
- Report on operational initiatives, and research and field programs, of broad interest across the ice charting community.
- Encourage and facilitate coordinated efforts in supporting ice research and development, including numerical ice prediction models, remote sensing applications, and digital image processing capabilities.