**IICWG-XIX**
**REVIEW OF POTENTIAL ACTION ITEMS**

16-5: Canvass captains of Antarctic ships to get an initial assessment of POLARIS as being applicable to Antarctic ice conditions. British Antarctic Survey to include their POLARIS feedback.

**Responsible:** Neal Young, Alvaro Scardilli, Roberto Diaz, Keld Qvistgaard, Marc deVos
**Due Date:** IICWG-XIX
**Status:** CLOSED. Alvaro has produced a brief summarizing comments from 8 Argentine captains who deploy every summer to Antarctica. Roberto provided additional comments from vessels in Punta Arenas. This is not a “one-shot” survey but should be continuing dialogue and should be the subject of a discussion/session at IICWG-XVIII.

17-1: ENAVIGATION: Promote the availability of ice charts in S-411 format with the ECDIS manufacturers.

**Responsible:** Jürgen Holfort
**Due Date:** IICWG-XIX
**Status:** At IICWG-XIX, this action was taken by the E-NAVIGATION Task Team.

17-5: Explore the idea of including Ice Service point of contact information as a required element of the Polar Code Polar Waters Operating Manuals. Prepare a recommendation for the IICWG to consider sending to the IMO.

**Responsible:** Dave Jackson
**Due Date:** Dec 31, 2017
**Status:** CLOSED. After a discussion with Transport Canada Marine Safety, it was suggested that, as all development on the Polar Code and its associated documents/guidelines etc. has been suspended for 4 years to allow maximum implementation and understanding by the marine community, this item be a feature of the “Arctic Shipping Best Practices Forum”.

17-6: Form an IICWG Task Group to participate in the continued development of POLARIS particularly with respect to its applicability in the Southern Ocean.

**Responsible:** Dave Jackson, Secretariat
**Due Date:** Dec 31, 2017
**Status:** CLOSED. All development on the Polar Code and its related documents has been suspended for 4 years to allow the marine community to understand and implement its requirements. This includes POLARIS. Given the discussion at the last 2 annual meetings of the IICWG it is well understood what initial issues the marine community will have with the implementation of POLARIS in Antarctic waters. Therefore, I would recommend the establishment of a permanent task group of IICWG members representatives, as well as those from Marine Safety and the associated scientific community to begin studying these requirements in depth and liaising with the developers of POLARIS to properly
**IICWG-XIX**

**REVIEW OF POTENTIAL ACTION ITEMS**

incorporate them. It is imperative that the IICWG ensure the stability and responsiveness of any group tasked with the development of POLARIS’ requirements wrt the Southern Ocean.

17-12: Produce a draft Strategic Vision document for the IICWG. As background, should consider strategic plans from individual ice services as well as the North American Ice Service and the European Ice Services. The vision should also include a strategy for engagement with all stakeholders.

Responsible: Dave Jackson, Ruth Lane, Kristen Serumgard, Andrew Fleming, Alvaro Scardilli

Due Date: When the draft is approved, this can be closed.

Status: CLOSED. A new Strategic Vision has been proposed.

18-1: Develop a briefing note for Tom Cuff so he can raise the issue of ice input for the ET-OOF Guide on Operational Ocean Forecasting at JCOMM-V (25-29 October 2017). Tom to report back to IICWG following JCOMM-V.

Responsible: Phil Reid, Secretariat, Tom Cuff

Due Date: Briefing note required by October 15

Status: CLOSED. A briefing note was sent to Tom on October 23. At JCOMM-5, it was determined that the Guide to Operational Ocean Forecasting Systems still required additional drafting and a follow-on review process. Also at JCOMM-5, Tom Cuff was elected as Chair of the JCOMM Services and Forecasting Systems Program Area, which oversees the activity of both the Expert Team on Operation Ocean Forecasting Systems (ETOOFs) and the Expert Team on Sea Ice (ETSI) , which is chaired by Vasily Smolyanitsky. As JCOMM Services chair, Tom will ensure that ETSI input is provided and, as appropriate, incorporated by ETOOFs in the draft document.

18-7: Develop software to transform ASPeCT code to SIGRID-3 code. Work with the Data Committee to share the code.

Responsible: Petra Heil, Jan Lieser

Due Date: July 2018

Status: OPEN.

18-8: Report on the JCOMM-5 outcome regarding the issue that GMDSS replacement is not addressing weather and ice information.

Responsible: Tom Cuff

Due Date: Nov 30, 2017

Status: CLOSED. GMDSS isn’t being replaced. WWMIDS is the new acronym of the working group responsible for it. WMO manual 558 and 471 are the ones of interest. Sea ice is now a part of the manual to guide the Metareas that don’t normally have ice hazard information. JCOMM-5 have accepted
IICWG-XIX
REVIEW OF POTENTIAL ACTION ITEMS

this addition in the manual. Ice services should reach out to their Metarea coordinators to help with ice information being disseminated.

18-9: Explore opportunities to collaborate with partners to address the challenges and opportunities of big data approaches to ice service operations.
Responsibility: Co-Chairs, Keld Qvistgaard
Due Date: IICWG-XIX
Status: MOVED to PARKING LOT.

18-10: Mariner Training- Initiate work to develop an international standard for Polar Code ice information products.
Responsibility: Keld Qvistgaard, Scott Graham, Jürgen Holfort, Caryn Panowicz
Due Date: IICWG-XIX
Status: At IICWG-XIX, this action was taken by the MARINERS TRAINING NEEDS Task Team.

18-11: Investigate ways to encourage expedition ships to provide ice observations on the Global Telecommunications System.
Responsibility: Nick Hughes, Lisa Kelley, Kirsten Serumgard
Due Date: April 2018
Status: CLOSED.

18-13: All ice services to ensure that operational ice charts include ice concentrations and stages of development that are required for the Polar Code risk assessment.
Responsibility: Ice Service Heads
Due Date: As soon as possible
Status: CLOSED as an On-going Requirement. The following services issue regular ice charts with concentrations and stages of development:
Argentina, Canada, Greenland (DMI), U.S. National Ice Centre and Russia (AARI). The FMI/SMHI jointly produced Ice Chart for the Baltic Sea lays outside Polar code area thus it is not directly under this action item.

18-15: Identify gaps in the PAME Arctic Shipping Best Practices Forum portal and suggest ways to address them, including an extension to the Antarctic and historical data.
Responsibility: Jürgen Holfort
Due Date: Dec 31, 2017
Status: OPEN. Marianne Thyrring presented the IICWG at the second meeting of the ASBP with which the Ice Logistic Portal was highlighted as an important node for the ASBP portal. At IICWG-XIX, this action was taken by the ARCTIC COUNCIL Task Team.

18-16: IICWG to prepare a formal response to the IACS/POLARIS committee recommending resolution of issues for use of POLARIS in Antarctic waters.
Responsibility: David Jackson and POLARIS Task Group
Due Date: July 2018
IICWG-XIX  
REVIEW OF POTENTIAL ACTION ITEMS

Status: MOVED to PARKING LOT. Given the state of flux of the IICWG working group to be set up to resolve these issues and the suspension of activities on the Polar Code and its associated documents, it is recommended that the IICWG establish a permanent working group for the next few years and once that is done, write this letter and commence work with the committee in charge of POLARIS development.

18-17: Report on trials/pilots to broadcast ice charts and/or information with the VHF Data Exchange System (VDES).
   Responsible: Mike Hicks
   Due Date: IICWG-XIX
   Status: MOVED to PARKING LOT.

18-19: Ice services to investigate the availability of historical ice concentration and stage of development data that could be put on the Arctic Shipping Best Practices Forum portal for use in Polar Code voyage planning and risk assessment.
   Responsible: Jürgen Holfort, Ice Service heads
   Due date: March 2018

18-20: All committees to look into the parking lot items and advise on what should be kept.
   Responsible: Committee co-chairs
   Due date: IICWG-XIX
   Status: CLOSED as an on-going action.

18-21: Send a formal letter to the Nautical Institute indicating that the IICWG is interested in working with the NI to pursue the idea of standardized ice information training for mariners. Our work on ice analyst competencies may fit well with what should be taught to mariners and NI can help to structure what it should look like.
   Responsible: Dave Jackson, Secretariat to draft letter for co-chairs
   Due date: Nov 30, 2017
   Status: At IICWG-XIX, the action was taken by the MARINER TRAINING NEEDS Task Team.

18-22: Form a task group to develop a roadmap for IICWG engagement with the Arctic Council. Consider issuing a global challenge for Ice Services relating to big data/data processing for improving future ice charts to interest the large NGO foundations to help the Ice Services.
   Responsible: Shanna Pitter, Secretariat
   Due date: Dec 31, 2017
   Status: CANCELLED. We have been advised that the Arctic Council role does not include issuing global challenges. A new action is proposed to provide input to Iceland chair for the next Council meeting.
IICWG-XIX
REVIEW OF POTENTIAL ACTION ITEMS

19-x: Form a task group to provide input to Iceland’s Arctic Council chairmanship related to sea ice and icebergs and emerging issues.
Status: Taken by the ARCTIC COUNCIL INTERACTION Task Team.

19-x: The IICWG should consider writing to the EC, ESA and the Polar Space Task Group (PSTG) expressing support for the CIMR mission in time for the 2nd Arctic Science Ministerial on 25-26 October 2018.
Status: Taken by the ROSE-L Task Team.

19-x: Explore ways to work with the Nautical Institute and Marine Training Institutes to improve the training of ice navigators with respect to ice.
Status: Taken by the MARINER TRAINING NEEDS Task Team.

19-x: Form task group to provide input for the ArcRCC sea ice outlook semi-annually.
Status: Taken by the RCC CONTRIBUTIONS Task Team.

19-x: Ice Services need to provide stage of development as well as ice concentration to support detection of melt onset period and for Polar Code Risk Assessment.
Status: MOVED to PARKING LOT

19-x: Provide advice on what to do with the Sentinel-1 C/D – increased coverage for Southern Ocean.
Status: MOVED to PARKING LOT

19-x: IICWG to provide endorsement for Copernicus Polar High Priority Candidate Missions.
Status: Taken by the ROSE-L Task Team.

19-x: Develop a common set of data and observation requirements for communicating Ice Service needs to space agencies.
Status: MOVED to PARKING LOT

19-x: Develop strategy and actions to address the lists of items, presented by Duke Snider, Bjorn Kay and Jarmo Teränen at IICWG-XIX, needed to improve mariner training.
Status: Taken by the MARINER TRAINING NEED Task Team

19-x: Investigate why ice charts “vary quite a lot different from service to service” – are we not following the common standard?
Status: Taken by the MARINER TRAINING NEED Task Team

19-x: Investigate how to prevent the accidental use of old information (in the context of ECDIS charts and imagery).
Status: Taken by the E-NAVIGATION Task Team

19-x: Formalize the IICWG-ArcticRCC relationship.
Status: MOVED to PARKING LOT
19-x: Establish a formal definition for Iceberg Limit and get incorporated into WMO Nomenclature.  
Status: MOVED to PARKING LOT

19-x: See if the NWS Alaska Region could produce ice charts with standard coding and colours.  
Status: Tom Cuff to investigate.

19-x: Ensure that the Ice Logistics Portal is kept up to date and investigate the possibility of providing more content.  
Status: Jürgen Holfort to investigate.

19-x: IICWG to get more involved in the Service Component of Copernicus to promote Arctic services.  
Status: Discarded

19-x: Secretariat to schedule quarterly teleconferences of the Co-Chairs Coordinating Group – mid November, February, May, August.  
Status: John Falkingham to action.

19-x: Task Teams Leads to draft work plans prior to first Coordinating Group teleconference.  
Status: Task Team Leads to complete by November 14, 2018.

19-x: IICWG to send letter to European Commission Copernicus program conveying our support to both the ROSE-L and CIMR missions with a priority for ROSE-L should a choice become necessary.  
Status: John Falkingham to draft letter for co-chairs signatures in consultation with Dierking, Hughes, Helfrich, Co-Chairs

19-x: Provide Jürgen Holfort with a list of links to web sites containing historical ice information suitable for mariners. Jürgen to add to the Ice Logistics Portal.  
Status: John Falkingham to action.