The Polar Code came into effect on 1 January 2017.
Polar Water Operations Manual Guidance

Background

The Polar Code requires ships operating in polar waters to submit a Polar Water Operational Manual (PWOM) to obtain a Polar Ship Certificate.

Appendix II of the Polar Code provides a model PWOM and guidance notes.

ICS and OCIMF members consider that the operations in Polar Waters is a fundamental component of safe navigation and as such the PWOM is an important tool.

ICS and OCIMF members found the Polar Code contained insufficient information to develop a quality PWOM in order to obtain a Polar Ship Certificate.

ICS and OCIMF therefore advised IMO they would develop additional guidance to compliment Appendix II. and welcomed contributions.

Guidance by industry for industry and developed by;

ICS & OCIMF members with polar waters experience
Polar Water Operations Manual Guidance

Purpose and scope

To assist shipping companies and ship’s Masters develop a PWOM.

Generic guidance

Guidance notes to assist in developing a PWOM

A tailored PWOM is required

A PWOM must take into account;
• Ship type
• Environmental conditions
• Specific operational requirements

Guidance does not include the full text of a PWOM – not an off-the-shelf solution.

The operational assessment is key – undertaking an operational assessment and preparing a PWOM gives detailed insight into associated risks and understanding of the process.
Polar Water Operations Manual Guidance

Preparation of the PWOM

- Define the operating area
- Carry out a detailed operational assessment
  - Key for a quality PWOM and shall be completed before drafting the PWOM.
- Update procedures based on results of operational assessment as necessary
- Install / upgrade equipment or systems as necessary
- The operational assessment to be an appendix to the PWOM.
- Related to vessel type and the nature of the operation
- Reference the company Safety Management System (SMS)
  - Specific applicable SMS procedures should be reproduced in the PWOM.
- Pollution prevention should reference MARPOL docs, e.g. SOPEP, SMPEP etc
- Note – there is currently no consistent approach by validating organizations in this regard, therefore they should be consulted.
Polar Water Operations Manual Guidance

Format of guidance

- Guidance is based on the IMO Polar Code Appendix II text
  - highlighted in blue, with additional guidance provided by OCIMF & ICS, in black.
  - The numbering system has been adapted to provide clarity.
  - Content of IMO Polar Code Appendix II text fully covered

Example - Polar Code Appendix II – Safety Measures – section 1.2

Icebreaking capabilities

Guidance: The PWOM should provide information on the ice conditions in which the ship can be expected to make continuous progress. This may be drawn, for example from numerical analysis, model test or from ice trials. Information on the influence of ice strength for new or decayed ice and of snow cover may be included.

![Example images of ice conditions and ship.]
Polar Water Operations Manual Guidance

Format of guidance – example continued

The following should be considered:

- Ice class.
- Ice draught and displacement.
- Mode of operation (bow or stern first).
- Vessel characteristics, including hull form, propulsion and appendages.
- Ice conditions:
  - Type.
  - Thickness.
  - Age.
  - Pressure.
  - Concentration.
  - Air Temperature.
  - Snow cover.

The following topics should be addressed:

- Ship- specific operational capabilities for continuous progress in ice.
- Company- defined operational parameters for the vessel.
- Coastal State requirements.
Polar Water Operations Manual Guidance

Availability

Completion target – Q3 / 2019

INF paper to MSC 102

Free of charge – ICS and OCIMF websites

Upload to the Arctic Shipping Forum web-portal
Thank you

Any questions?