

Polar Water Operations Manual Guidance



International Chamber of Shipping

Shaping the Future of Shipping

&



A Voice for Safety

Chris Oliver - Nautical Director - ICS

Polar Water Operations Manual Guidance

Introduction

- A Polar Waters Operation Manual (PWOM) is required to obtain a Polar Ship Certificate, a requirement to trade in Polar waters.
- How a ship is operated in Polar waters, and especially in ice, is a critical aspect for safe operations.
- Before being able to operate in Polar waters the Polar Code requires;
 - An operational assessment
 - A PWOM
 - A Polar Ship Certificate
- This presentation is to introduce you to the guidance published to develop a PWOM suitable for ships, environmental conditions and operations.
- Following this presentation you will better understand why the guidance has been prepared and how to use it.



Polar Water Operations Manual Guidance

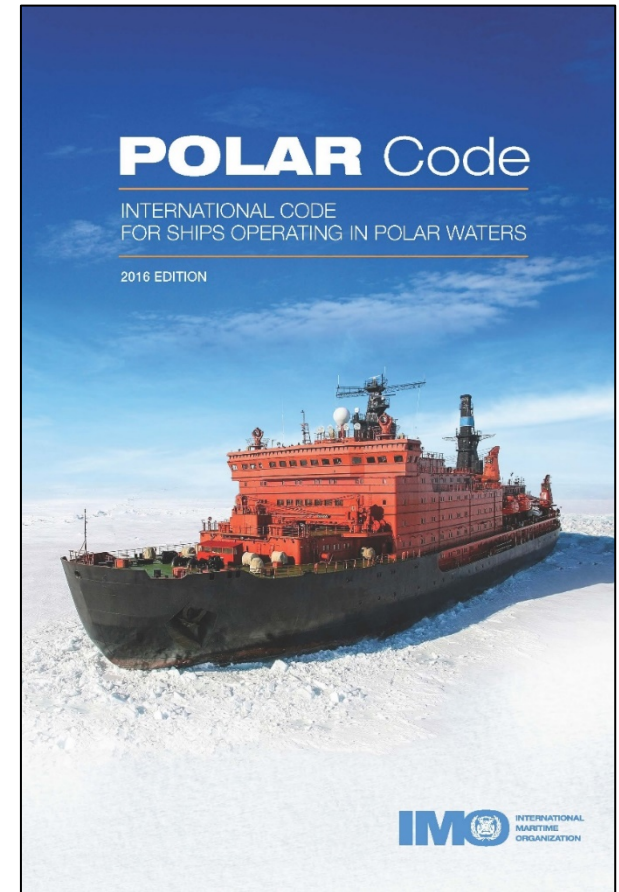
Background

The IMO Polar Code entered into force 1 January 2017.

Ships operating in polar regions are exposed to unique risks that challenge mariners;

- Frequent poor weather conditions.
- Extended periods of daylight and darkness.
- Up to date navigational information.
- Comms and navigation systems limitations.
- Remoteness to rescue and clean-up infrastructure.
- Extremely low temperatures

The PWOM should address these issues.



Polar Water Operations Manual Guidance

Preparing a PWOM

Polar Waters operations – a fundamental component of safe navigation.

The PWOM is a critical component in managing safety in Polar waters.

The Polar Code contains insufficient guidance to develop a quality PWOM.

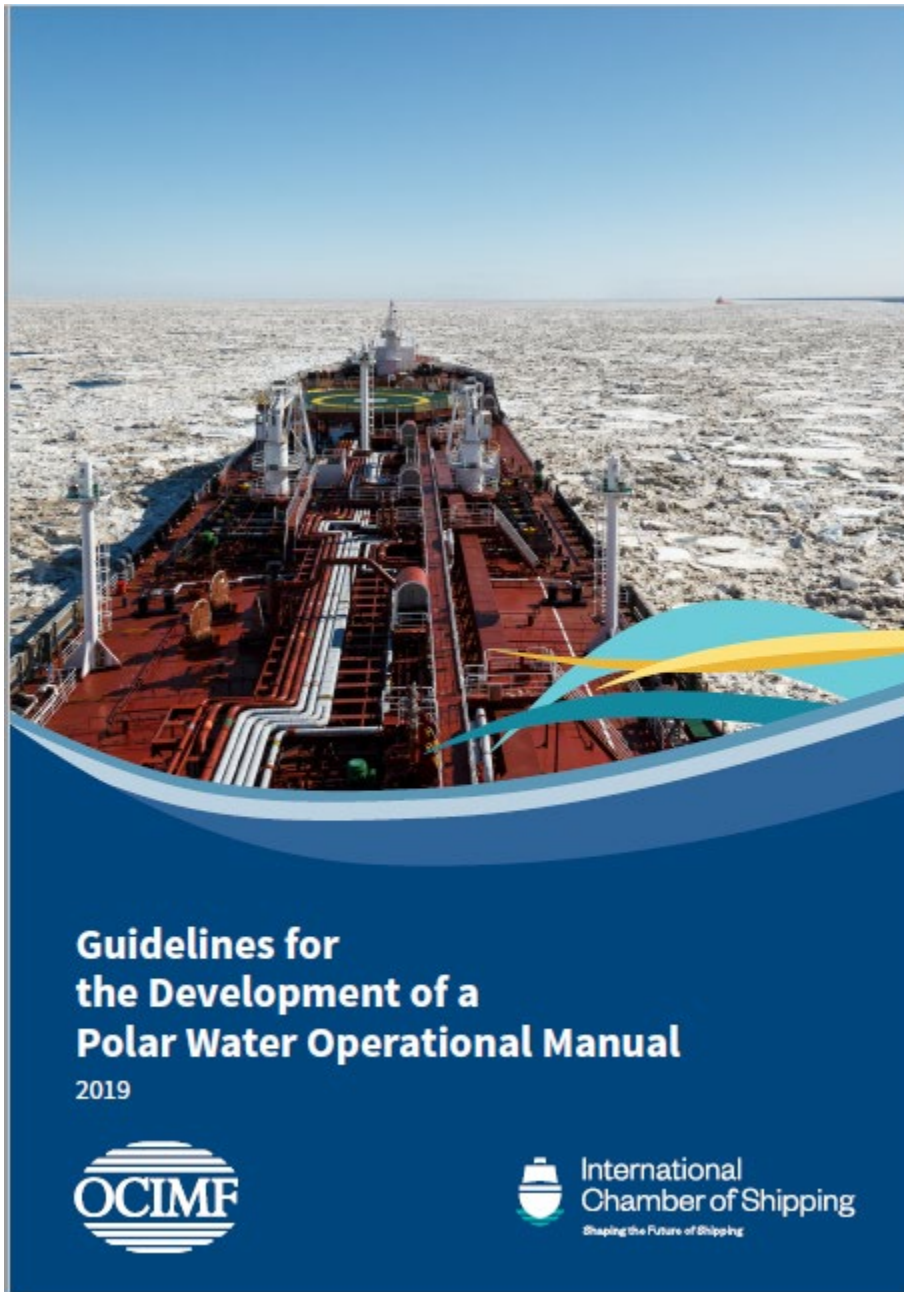
ICS / OCIMF advised IMO they would develop additional guidance to compliment the Polar Code Appendix II.

This is guidance by industry for industry.

Developed by ICS & OCIMF members.

Significant polar water experience.





Guidelines for the Development of a Polar Water Operational Manual

2019



International
Chamber of Shipping
Shaping the Future of Shipping



Polar Water Operations Manual Guidance

Purpose and scope

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

Generic guidance

Not an off-the-shelf solution

Guidance notes

A tailored ship specific PWOM is required

A PWOM must take into account;

- Ship type
- Environmental conditions
- Specific operational requirements



Polar Water Operations Manual Guidance

Operational assessment

The operational assessment is key

Undertaking an operational assessment and preparing a PWOM gives detailed insight into associated risks and understanding of the process.

- Define the operating area
- Carry out a detailed operational assessment
- To be completed before drafting the PWOM.
- Include the operational assessment as an appendix to the PWOM.



Polar Water Operations Manual Guidance

Preparation of the PWOM

Update procedures based on results of operational assessment.

Relate procedures 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

Install / upgrade equipment or systems as necessary.

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

- Based on the IMO Polar Code Appendix II text
 - Polar Code guidance highlighted in blue
 - Additional guidance in black.
 - The numbering system adapted to provide clarity.
 - 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.



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

Timeline & access

Published 5 November 2019

INF paper to MSC 102

Free of charge – ICS and OCIMF websites

<http://www.ics-shipping.org/docs/default-source/resources/guidelines-for-the-development-of-a-polar-water-operational-manual.pdf?sfvrsn=4>

Uploaded to the Arctic Shipping Forum web-portal



Polar Water Operations Manual Guidance

Summary & takeaways

A Polar Waters Operation Manual (PWOM) is required to obtain a Polar Ship Certificate, a requirement to trade in Polar waters.

The PWOM is a critical component in managing safety in Polar waters.

This is guidance by industry for industry, developed by ICS & OCIMF members with significant polar water experience.

A tailored ship specific PWOM must take into account;

- Ship type
- Environmental conditions
- Specific operational requirements

The operational assessment is key

Use the guidance to expand on the guidance provided in the Polar Code Appendix II, when preparing your PWOM.



Thank you



Any questions?