Developing a Mandatory Polar Code – Progress and Gaps
Summary

This Information Paper calls on the ATCM to adopt a Resolution on collaborative action to ensure that the Mandatory Polar Code provides appropriate safety and environmental protection standards for vessel operations in Antarctic waters.

This paper provides information on the progress of the development of a Mandatory Polar Code and identifies a number of issues in need of further consideration including a requirement for only polar class vessels to operate in waters where ice presents a hazard, application of the Code to existing vessels, the geographic application of the Code and the development of an environmental protection chapter for the Code. It elaborates ASOC’s concern that the mandatory Polar Code could have minimal relevance to vessels operating in Antarctic waters.

1. Background

The development of a Polar Code for shipping has been a long time coming. Over ten years ago, work was undertaken within the International Maritime Organization to develop a polar shipping code for both Arctic and Antarctic waters, but that work eventually resulted only in Guidelines for ships operating in the Arctic. In 1999, the Antarctic Treaty Consultative Parties (ATCPs) adopted a Decision on the need to develop Guidelines for Antarctic shipping and related activities. However, despite a meeting of Antarctic Treaty Experts in 2000, progress on developing Antarctic Guidelines was slow. In 2004, the Antarctic Treaty Consultative Meeting (ATCM) adopted a Decision on Guidelines for Ships Operating in Arctic and Antarctic Ice-Covered Waters and agreed to send these to the IMO with a view to amending the IMO Arctic Guidelines. Work to amend the IMO Guidelines took place in 2008 and 2009, and in December 2009 the IMO adopted new Guidelines covering both Arctic and Antarctic waters which took effect from 1 January 2011.

During this work it became apparent that there was strong support to develop a new mandatory and legally binding instrument, and in February 2010, the IMO began considering the drafting of a legally binding Polar Code to cover both the Arctic and Antarctic. It was expected that the work would take two to three years to complete. The need for mandatory requirements for ships operating in Antarctic waters was endorsed by ATCM.

2. Progress on Developing a Mandatory Polar Code

In February 2010, the IMO’s sub-committee on ship design and equipment (DE) commenced work on the “International Code of Safety for Ships Operating in Polar Waters” and established a correspondence group to work intersessionally. The work has progressed through a further two meetings of the DE sub-committee in October 2010 and March 2011.

Over the course of three DE meetings and the intersessional Correspondence Group, considerable effort has been focused on the development of a hazard matrix or hazard identification, which is intended to inform the development of the mandatory Polar Code. Work has also commenced on the elaboration of the draft mandatory Polar Code, and while much work remains to complete the Code, some initial decisions and progress have been made, including:

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• It should be risk-based with functional requirements supported by prescriptive provisions where appropriate.
• It will contain both mandatory and recommendatory components, although it has not been decided as yet which elements will be mandatory and which will be recommendatory.
• If necessary there will be separate requirements for the Arctic and Antarctic
• Work will focus initially on cargo and passenger vessels, however other non-SOLAS ships such as fishing vessels will be considered during the second phase of a two-step approach (although it isn’t clear when this might be),
• The Code will include an environmental protection chapter.

ASOC submits that the development of the Code offers an opportunity to consolidate measures relevant to the operation of vessels in polar waters, and to refine and fill gaps to ensure that the highest levels of safety and environmental protection are applied for vessels operating in Antarctic waters. While the full extent of the mandatory Polar Code is still the subject of negotiation, it is likely that as a minimum it will address areas covered by the existing Polar Guidelines, including construction provisions, on-board equipment, operational arrangements, and environmental protection.

3. Further issues for consideration in a Mandatory Polar Code

ASOC has identified a number of additional issues that should be considered by a Mandatory Polar Code, including the need for all vessels operating in Antarctic waters to be polar class vessels and for the Code to be applied as far as possible to all existing vessels as well as new vessels. Other issues that ASOC believes should be addressed within the Code include an extension to the geographic boundary of polar waters, a comprehensive suite of environmental protection issues and the development of an Antarctic vessel traffic monitoring and information system.9

3.1 Polar class vessels
There has already been considerable discussion on polar class vessels and ice conditions. ASOC submits where the presence of ice in the water could pose a hazard, only vessels with a minimum polar class standard10 should be permitted or licensed to operate. Higher ice classes would be required dependent on the anticipated nature and extent of ice.

ASOC believes that it will be fundamental to the success of the Code for there to be clear and unambiguous definitions of ice-covered waters, open water and ice-free waters and for there to be clarity over the appropriate class of vessel. Currently it is unclear whether or not non-ice class vessels will be acceptable in Antarctic waters at some times of the year, and what level of ice in the water will require only polar class vessels be allowed to be present. Until this is resolved it is difficult to make meaningful progress on elaborating the Polar Code.

ASOC calls for ATCPs to agree that only polar ice class vessels should be permitted or licensed to operate in Antarctic waters where ice could pose a hazard. If this is not the case, ASOC fears that the Code could have limited application in Antarctic waters.

3.2 Application of the Code to existing vessels
ASOC submits that the provisions of the mandatory Polar Code should, as far as practicable, be applied to all existing vessels as well as to new builds. A number of vessels that currently operate in polar waters have been converted from other uses for polar service, and assuming that this trend continues it could be many years before the Code had any impact on vessels operating in Antarctic waters if it only applied to new

9 See ASOC submission to ATCM XXXIV: An Antarctic Vessel Traffic Monitoring and Information System.
10 The International Association of Classification Societies (IACS) Unified Requirements for Polar Ships are applied to ships constructed of steel and intended for navigation in ice-infested polar waters. Ships which comply with structural and machinery requirements can be allocated to one of seven polar classes, each linked to type of ice conditions and timing of operation e.g. year-round operation in moderate multi-year ice conditions (PC2) or summer / autumn operation in thin first-year ice which may include old ice inclusions (PC7).
vessels. A number of provisions, for example, on crew training, life-saving equipment and environmental protection should be applicable to all existing vessels.

3.3 Geographic area of application
ASOC members co-sponsored a paper\(^{11}\) to the IMO’s DE sub-committee on the geographic boundaries for application of the mandatory Polar Code. Biologically an extension to the existing Antarctic Special Area, to conform to the Antarctic Polar Front, would support an ecosystem-based approach and aid in ecosystem-based management in the Southern Ocean. ASOC submits that the area to which the mandatory Polar Code applies should encompass all waters south of the Antarctic Polar Front and that for consistency and ease the boundaries be described as for the Convention on the Conservation of Antarctic Marine Living Resources.

3.4 Environmental protection chapter
ASOC submits that the mandatory Polar Code should include provisions which comprehensively address the required levels of environmental protection for vessels operating in Antarctic waters, including for example more stringent provisions on the discharge of sewage, grey water, food wastes, and air emissions. While a number of papers have been presented to IMO’s DE sub-committee on possible elements of an environmental protection chapter of the mandatory Polar Code,\(^{12}\) there has so far been little time available for detailed consideration of an environmental protection chapter. Subjects addressed in the range of papers presented include oil and chemical spills, sewage and related discharges, grey water, black carbon, underwater noise, ballast water discharges, antifouling systems, and voyage planning and operations to avoid interaction with cetaceans. Further work is anticipated on the environmental protection chapter, and currently a number of the papers submitted to the DE sub-committee have been sent to other IMO Committees and sub-committees that have expertise in these areas.

4. Conclusion
ASOC submits that development of a mandatory Polar Code is an important opportunity for the future management of all vessels operating in Antarctic waters. Since development of the Polar Code is being taken forward through the IMO, all flag states have the opportunity to be involved in the discussions and can be part of the consensus-building and decision-making process. If the mandatory Polar Code is to meet the needs of vessel operations in Antarctic waters, it is imperative that ATCPs ensure that due regard is given to the needs of the Antarctic environment with respect to vessel operations, the potential for environmental consequences from shipping activities, and the safety of shipping in the region.

Negotiation of a mandatory Polar Code is an opportunity to ensure that the highest levels of safety and environmental protection are provided for all vessels operating in the Southern Ocean. In order to achieve this it is essential that the Code:

- Encompasses all vessels operating in these remote areas and extreme conditions – both existing and new, and all types of vessels.
- Requires that only polar ice class vessels operate where ice poses a hazard.
- Provides comprehensive safety and environmental protection.

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It is increasingly clear that the IMO’s original 2012 target for completing negotiation of a mandatory Polar Code will not be met, however the work is making progress and can be completed in 2013. Concerted action is required by Antarctic Treaty Parties to ensure that the Polar Code meets the needs of Antarctic vessels operations. Failure to do so could result in a Code that has minimal relevance to vessel operations in Antarctic waters.

ASOC calls on the ATCM to adopt a Resolution on collaborative action to ensure that the mandatory Polar Code provides appropriate safety and environmental protection standards for vessel operations in Antarctic waters.