Emerging issues for Southern Ocean vessel management
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Information Paper submitted by ASOC

Summary

This paper summarizes a number of developments relevant to Southern Ocean vessel management, including Polar Code implementation, the Arctic Council’s Polar Code Best Practice Forum, Phase 2 of the Polar Code and the IMO’s Marine Plastics Action Plan. ASOC recommends that the ATCM undertake further vessel management actions to protect the Antarctic environment, such as agreeing to collaborate meaningfully in the exchange of best practice with respect to the Polar Code, learning from experience in the Arctic, engaging fully in further negotiations on measures for non-SOLAS vessels at the IMO, applying CMS guidelines to reduce underwater noise, supporting the IMO’s actions on plastics, and exploring ways to further minimize whale strikes in the Southern Ocean.

Polar Code implementation – a preliminary study

The International Maritime Organization’s (IMO) International Code for Ships Operating in Polar Waters (Polar Code) has now been in effect for a little over two years, and work has commenced on considering mandatory and recommendatory safety measures for vessels not initially addressed by the Polar Code, including fishing vessels and pleasure yachts. Developing and adopting the Polar Code regulations was the first step. Implementation and enforcement of the Polar Code are now critical if it is to achieve the goal of providing for safe ship operation and the protection of the polar environment by addressing risks present in polar waters.

The Polar Code entered into force on 1 January 2017, and a new study by ASOC Member WWF aims to identify the flag SOLAS tonnages operating in both the Arctic and Antarctic polar areas during 2017 and 2018; the plans of those flag administrations to both enact and enforce Polar Code requirements on their fleets; and the activities for Port State Control to ensure the Polar Code.

The preliminary conclusions from the study based on responses to date are as follows:

The operational flags in both the Arctic and Antarctic were identified using data provided by IHS Markit, based on the monitoring of AIS broadcast. The criteria for the search were as follows: all SOLAS ships of 500GT and above, operational in the following areas during 2017 and 2018:

Arctic: North of 58 degrees

Antarctic: South of 60 degrees

All floating production storage and offloading units (FPSOs), non-propelled barges, fishing vessels, yachts and all government-owned ships were excluded from the study.

A large number of administrations had commercially operated SOLAS ships in the two polar areas during 2017 and 2018. A total of 34 flags had a total operational tonnage (unique vessels) of over 500,000 GT in the Arctic, and 15 flags had over 100,000 GT in the Antarctic, over this period.

All but a few respondent administrations have already enacted the Polar Code into their national legislation. The majority of flag respondents have indicated that they have out-sourced implementation of the Polar Code to their Recognised Organisations. It is unclear from these responses how administrations plan to identify ships operational in polar waters, and how they enforce requirements under the Polar Code.

On Port State Control (PSC), it is understood that if a vessel is due an inspection under a Memorandum of Understanding (MOU) scoring system and has or will undertake a voyage into polar waters, then the inspection would include Polar Code requirements. There remains a question: how the risk-based scoring systems of PSC MOUs will take account of a geographically specific requirements such as the Polar Code?

1 Lead authors Sian Prior and Trevor Downing, with additional input from Russell Leaper and Lindy Weilgart.
It is considered unlikely that a Concentrated Inspection Campaign (CIC) on the Polar Code will be undertaken in the near future.

A search of PSC databases shows that Tokyo, Paris and Black Sea MOUs have already been active in identifying deficiencies in ships under the Polar Code – the absence of ship certificates, or non-availability of the Polar Waters Operational Manual. A total of 9 ships were identified with deficiencies under the Polar Code during 2017 and 2018.

A total of seven foreign ships have been subject to a Polar Code examination as part of a PSC exam by the US Coast Guard. No deficiencies were issued.

**Arctic Council’s Polar Code Best Practice Forum**

To assist in effective implementation of the Polar Code in 2017, the Arctic Council’s Working Group on the Protection of the Arctic Marine Environment (PAME) established an Arctic Shipping Best Practice Information Forum, along with a public web portal which was launched in May 2018. The Forum is open to participation by Arctic States, Arctic Council Permanent Participants, Arctic Council Observers and any widely recognised professional organization dedicated to improving safe and environmentally sound marine operations in the Arctic. Following the Arctic Council Ministerial meeting in early May 2019, the Chair’s Statement notes with satisfaction the operationalization of the Arctic Shipping Best Practice Information Forum and encourages further efforts for harmonized implementation of the Polar Code.

ASOC recommends that ATCPs and the Antarctic Treaty Secretariat note the operationalization of the Arctic Shipping Best Practice Information Forum and agree to collaborate meaningfully in the exchange of best practice, both contributing to lessons and learning from experience in the Arctic.

**Safety measures for non-SOLAS vessels**

In an earlier submission to ATCM XL, ASOC identified that the safety provisions of the IMO’s Polar Code are likely to be relevant to under half the vessels operating in the Antarctic Treaty area on an annual basis. The safety provisions of the Polar Code, as implemented through the International Convention for the Safety of Life At Sea (SOLAS), primarily apply to cargo ships of 500 GT or larger and to all passenger ships. Early in the process of negotiating the Polar Code, it was envisaged that a second phase of work would be required to identify measures that should be made applicable to those vessels not covered by the Polar Code, including fishing vessels, small cargo ships (<500GT), and pleasure yachts. The consideration of safety measures for these so-called “non-SOLAS” vessels is now an agenda item for the IMO’s Maritime Safety Committee (MSC).

The Maritime Safety Committee (MSC) is to consider the feasibility and consequences of applying the requirements of chapter 9 (Safety of Navigation) and chapter 11 (Voyage Planning) of the Polar Code to non-SOLAS vessels operating in polar waters. Secondly, a technical sub-committee is developing recommendatory measures covering all aspects of maritime safety for fishing vessels and pleasure yachts operating in polar waters.

Since approximately two-thirds of the vessels operating in the Southern Ocean on an annual basis qualify as non-SOLAS vessels, ASOC calls on ATCPs to engage fully in the negotiations at the IMO to ensure that any recommendatory or mandatory provisions adopted are “fit for purpose” in the Antarctic Area (south of 60°S).

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Underwater noise pollution

There is widespread agreement that effective action is needed to address the existing underwater noise produced by a range of sources including commercial vessels and seismic airgun surveys, as well as preventing increasing noise in the future. The effects are global and affect life at the ecosystem level5.

Many international and regional bodies have examined the problem of underwater noise, including the 73rd meeting of the United Nations General Assembly Resolution A/RES/73/124 which “notes that ocean noise has potential for significant impacts on marine resources” and “calls upon states to consider appropriate cost effective measures and approaches” to reduce anthropogenic underwater noise. The International Whaling Commission, the Commission for the Convention on the Protection of the Environment of the North-East Atlantic, and Parties to the Convention on Migratory Species (CMS), the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and contiguous Atlantic area and the Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas have all considered the impacts of underwater noise on cetaceans. In addition, the General Fisheries Commission for the Mediterranean and Ocean Care co-hosted a workshop on anthropogenic underwater noise and impacts on fish, invertebrates and fish resources.

There is also growing awareness among the general public of the impacts of underwater noise. A petition launched by WWF, urging Arctic states to adopt a precautionary approach to hold underwater noise to current levels, has received nearly 75,000 signatures from over 100 countries.

Despite the IMO developing guidelines to reduce underwater noise from commercial shipping to address the adverse impacts on marine life6, underwater noise continues to pose a credible risk, and further urgent action is necessary. Regrettably, due to time constraints, the latest underwater noise submissions to the IMO’s Marine Environment Protection Committee (MEPC) were not considered at last month’s meeting (May 2019), however it is anticipated that a new output on work to mitigate underwater noise and/or an action plan will be proposed at MEPC 75 in 2020. It is important that all quieting options be fully considered and appropriate measures be introduced to address this ubiquitous and pressing concern.

ASOC recommends that ATCPs acknowledge the problem of underwater noise from a range of sources and commit to:

- applying the CMS Guidelines on Environmental Impact Assessment for Marine Noise-generating Activities in relation to all noise-generating activities7, and
- collaborating internationally to support urgent and effective action through the IMO to mitigate the threats to Antarctic marine wildlife from ship-sourced underwater noise.

Marine plastics action plan

Recognising the global concern about the levels of plastic pollution in the oceans, in 2018 the IMO adopted an IMO Action Plan to address the threat posed by plastic litter from ships. The action plan is focused on both enhancing existing regulations and introducing new measures to further reduce marine plastic litter from shipping, and includes:

- Reducing marine plastic litter generated from, and retrieved by, fishing vessels,
- Reducing shipping’s contribution to marine plastic litter,
- Improving the effectiveness of port reception facilities and treatment in reducing marine plastic litter,
- Enhancing public awareness, education and seafarer training,
- Improving understanding of the contribution of ships to marine plastic litter,
- Improving understanding of the regulatory framework associated with marine plastic litter from ships,

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5 See summaries in MEPC 72/INF.9 and MEPC 73/INF.23.
• Strengthening international cooperation, and
• Targeted technical cooperation and capacity-building.

In May 2019, the IMO’s Marine Environment Protection Committee developed terms of reference for an IMO study of marine plastic litter from ships which focused around two areas of information collection – information on the contribution of all ships to marine plastic litter and information of storage, delivery and reception of plastic waste from and collected by ships. The terms of reference for the study will include estimating the contribution to marine plastic litter, including both macro and microplastics, by all ships including fishing vessels. In addition, the IMO Secretariat is to develop a regulatory framework matrix as an up-to-date resource. Ahead of the next MEPC meeting in 2020, work will continue to develop and finalise an IMO Strategy to address marine plastic litter from ships. (See also IP 133 from ASOC on the mitigation of microplastic pollution in the Southern Ocean.)

ASOC calls on ATCPs to support urgent and effective action through the IMO to address the threats to the oceans from ship-sourced marine plastics.

**Voyage planning and marine mammal avoidance**

In 2018, ASOC submitted an Information Paper on the Polar Code and Marine Mammal Avoidance Planning which is included in the voyage planning requirements of the Polar Code. Work to increase awareness of the need for mariners to consider marine mammal avoidance during voyage planning is ongoing, along with the identification of available information on marine mammal populations. ASOC welcomes the recent announcement by IAATO of the introduction of mandatory measures, either a 10kn speed restriction or an extra watchman on the ship’s bridge to reduce the risk of ship/whale strikes.

ASOC recommends that ATCPs explore ways to further minimize the likelihood of ship/whale strikes in the Southern Ocean.

**Conclusion and summary of recommendations**

Although the Polar Code has taken effect, there are still additional measures needed to reduce environmental risks from shipping activity. ASOC recommends that the ATCM undertake the following actions:

• Note the operationalization of the Arctic Shipping Best Practice Information Forum and agree to collaborate meaningfully in the exchange of best practice, both contributing to lessons and learning from experience in the Arctic.
• Engage fully in the negotiations at the IMO to ensure that any recommendatory or mandatory provisions adopted for non-SOLAS vessels are “fit for purpose” in the Antarctic Area (south of 60°S).
• Acknowledge the problem of underwater noise from a range of sources and commit to applying CMS guidelines in relation to all noise-generating activities and collaborate internationally to support action through the IMO on shipping underwater noise.
• Support urgent and effective action through the IMO to address the threats to the oceans from ship-sourced marine plastics.
• Explore ways to further minimize the likelihood of whale/ship strikes in the Southern Ocean.