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WORK PROGRAMME

Elements for consideration for inclusion in a new output evaluating the implementation of the Polar Code

Submitted by WWF and Inuit Circumpolar Council

SUMMARY

Executive summary: This submission identifies elements that should be considered for inclusion in a proposal for a new output for the biennial agenda of the SDC Sub-Committee.

Strategic direction, if applicable: 1

Output: Not applicable

Action to be taken: Paragraph 38

Related documents: III 7/14/2, III 7/14/2/Add1; MSC 102/INF.21; MSC 104/17/7; MSC 106/18/4 and MSC 106/19

Introduction

1 During MSC 106, the Committee considered document MSC 106/18/4 (WWF) which provides details of a recent review published by WWF analysing gaps and challenges in the implementation of the Polar Code. During the discussion, the work was welcomed and the need for further discussion was acknowledged. The Committee invited interested Member States and international organizations to submit proposals for a new output on the implementation of the Polar Code to MSC 107 (MSC 106/19, paragraphs 18.37 and 18.38).

2 In developing a new output, a number of elements need to be considered including the need for the work and how urgently it is needed; how the work would fit with IMO's objectives, some analysis of the issue setting out why the work is needed; and the benefits of the work. Consideration should also be given to the consequences of the work in terms of costs and administrative implications; and whether any industry standards exist. This submission identifies elements which the co-sponsors believe should be considered for inclusion in a prospective new output on the Polar Code. It does not attempt to include all of the requirements for a new output.

IMO's objectives

3 A new output proposal must relate the proposed work to IMO's objectives. The mission of IMO is to "promote safe, secure, environmentally sound, efficient and sustainable shipping through cooperation". The mission statement emphasizes that these objectives are to be achieved through the highest practicable standards of maritime safety and security, efficiency of navigation and prevention and control of pollution from ships. IMO's Polar Code, chapter XIV of SOLAS and the polar amendments to MARPOL Annexes I, II, IV and V explicitly address the mission's application in the polar regions.

4 The implementation of the Polar Code, chapter XIV of SOLAS, and the polar amendments of MARPOL Annexes are of direct relevance to several of the eight strategic directions (SD) identified in the 2018 to 2023 Strategic Plan. SD 1 on improving implementation of IMO regulation is of relevance to considering challenges and gaps in the implementation of the Polar Code. New work on the Polar Code would also have relevance to SD 7 on regulatory effectiveness and SD 4 on engaging in ocean governance.

Need

5 A proposal for a new work output must address the compelling need for the work. In document MSC 86/23/9 (United States, Norway and Denmark) the need for work to develop a mandatory Polar Code was identified based on the growing interest of States and commercial entities in polar regions. The proposal identified that at the time there were no international regulations in effect for ships that addressed the safety and environmental concerns from operating in the polar regions, and that the adequacy of resources of search and rescue and emergency response should be evaluated due to the remoteness of these areas. While international regulations for ships operating in polar regions now exist in the form of the Polar Code, in a proposal for a new output the need to ensure that the highest practicable standards of maritime safety and security, efficiency of navigation and prevention and control of pollution from ships are implemented effectively through the Polar Code in line with IMO's mission should be highlighted.

6 Although there is no requirement for a formal review of the Polar Code, the guidance on methodologies for assessing the operational capabilities and limitations in ice which introduced the POLARIS system was issued as "interim guidance" to gain experience in its use. The intent, as set out in MSC.1/Circ.1519, was that the guidance would be reviewed four years after the entry into force of the Polar Code in 2017 "in order to make any necessary amendments based on experience gained." (MSC.1/Circ. 1519). Since it is now six years since the Polar Code took effect, it would be timely to review the POLARIS guidance and its application, and this could be highlighted in considering the need for a new output.

7 Following the adoption of the Polar Code, the Arctic Council's Protection of the Arctic Marine Environment's (PAME) Working Group developed an Arctic Shipping Best Practice Information Forum project, which aims "to promote effective implementation of and compliance with the Polar Code amongst all those involved in or potentially affected by Arctic marine operations". Between 2017 and 2021, it has met annually and following each meeting a summary report has been published.¹ The reports and the presentations given at the Forum provide a wealth of information on the implementation of the Polar Code and identify challenges and gaps in the implementation of the Code which are relevant to setting out the need for a new output.

¹ <https://pame.is/first-meeting-of-the-forum>
<https://pame.is/second-meeting-of-the-forum>
<https://pame.is/third-meeting-of-the-forum>
<https://pame.is/fourth-meeting-of-the-forum>
<https://pame.is/fifth-meeting-of-the-forum>

8 The Paris MoU on Port State Control has launched a Polar Code inspection campaign.² The campaign looks at levels of compliance with the requirements of the Polar Code focusing on two periods during 2022, with the results due in May 2023.

9 In 2022, IMO and the Nautical Institute organized a Polar Maritime Seminar with over 30 presentations covering a wide range of issues relevant to the implementation of the Polar Code,³ with several presentations highlighting aspects of the Polar Code that are proving challenging in implementation.

10 Documents MSC 104/17/7 and MSC 106/18/42 presented information from a study undertaken by WWF's Arctic Programme investigating the perceived gaps and challenges in the implementation of the Polar Code based on a wide range of publicly available presentations, reports, and studies (including many mentioned in this submissions).⁴ During discussions, the work was welcomed and the need to consider fishing vessels, pleasure yachts not engaged in trade and small cargo vessels, amongst other issues, in any further development of guidance or amendments to the Polar Code was highlighted.

11 The Arctic Council's PAME Working Group has new projects relevant to the implementation of the Polar Code including a project on the interpretation of the Polar Code which aims to ensure the success of the Polar Code through facilitating consistent interpretation of the Code where needed.⁵

12 A wide range of information is available and more will become available in the coming months on which to base consideration of the need for a new output.

Analysis of the issue

13 A proposed new output could potentially include an evaluation of the successes, challenges and gaps in the implementation of the Polar Code; a review of existing guidance and guidelines; an assessment of progress in ensuring the safety of non-SOLAS vessels operating in polar waters; and the development of a plan of action to strengthen the implementation of the Polar Code. The analysis of the issue should recognize that a comprehensive approach to a new output would ensure that measures for ships operating in polar regions are delivering the highest practicable standards of maritime safety and security, efficiency of navigation and prevention and control of pollution in polar regions. A wide range of information is available to draw from in developing an analysis of the issue, a selection is set out in the following paragraphs.

14 Presentations on the POLARIS Guidance to the Arctic Shipping Best Practice Information Forum have reiterated the importance of the guidance but also noted that it was intended as interim guidance and due to be reviewed following four years of experience.⁶ Detailed next steps for reviewing the POLARIS guidance have already been developed which

² <https://www.parismou.org/polar-code-inspection-campaign-launched-paris-mou>

³ <https://www.imo.org/en/About/Events/Pages/-Polar-Maritime-Seminar.aspx>

⁴ <https://www.arcticwwf.org/newsroom/reports/policy-brief-strengthening-the-polar-code/>
<https://www.arcticwwf.org/newsroom/reports/review-of-perceived-gaps-and-challenges-in-the-implementation-of-the-polar-code/>

⁵ [PAME - Interpretation of the Polar Code](#)

⁶ https://pame.is/images/03_Projects/Forum/3rd_meeting/Presentations/1115_3_June-Rob_Hindley.pdf
https://pame.is/images/03_Projects/Forum/4th_meeting/Presentations/Session_4_-_POLARIS.pdf
https://www.pame.is/images/03_Projects/Forum/5th_meeting/Presentations/Session_9_-_POLARIS.pdf

set out what data should be gathered and evaluated; the need for conclusions to understand the effectiveness of the guidance as an operational tool; and the need to identify refinements.⁷ A concern has been raised that the guidance is being used by vessels such as yachts for which it was not designed.

15 Five annual meetings of the Arctic Shipping Best Practice Information Forum have been held since 2017. These and the IMO/Nautical Institute Polar Shipping Seminar have highlighted and discussed successes and challenges in the Code's implementation. During these meetings, the need for additional guidance and, in some cases, unified interpretations of the Code has been highlighted. Even at the first meeting, only months after the Polar Code had taken effect, some challenges to the implementation of the Code had been identified. It was also noted that new pilotage and navigation rules and training to preserve experience and knowledge that went beyond the requirements of the Polar Code were being introduced in Denmark.⁸

16 By the second Forum meeting in 2018,⁹ experience and knowledge were growing, and a broader range of challenges was identified. The requirement for a Polar Ship certificate, the Polar Water Operational Manual (PWOM) and operational assessments were identified as key components of the Polar Code which would benefit from authoritative and reliable information, with the value of unified interpretations of the Code being emphasized. Several knowledge gaps were also identified including the need for better information of sea ice break-up/freeze patterns, and how to accurately determine ice thickness. Difficulties in identifying necessary information and dissemination of information to those needing it were also highlighted. Other issues recognized include the need for life-saving appliances to consider the need for people to remain on board for five days, guidelines for survival and first aid in polar conditions, competency standards for ice navigation, the need for harmonization of independent communication systems and data accessibility.

17 DNV-GL provided a chapter-by-chapter breakdown of experience and identification of issues based on 60 vessels that were in the approval process or had been approved for polar operation.¹⁰ A wide range of issues were identified, including the relationship between the operational assessment and the PWOM, the relationship between category A, B and C ships and ice class, and the definition of up-to-date information including ice information.

18 Documents III 7/14/2 and III 7/14/2/Add.1, submitted to the Implementation of IMO Instruments (III) Sub-Committee, identified challenges with respect to compliance issues citing confusion around the provision of polar ship certificates and the development of PWOMs not being ship or operation specific. Further difficulties encountered included obtaining mean daily low temperature data in areas not well covered by meteorological data and establishing operating limits for ships due to many variables.

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https://wwwcdn.imo.org/localresources/en/About/Events/Documents/Polar%20Maritime%20Seminar%202022%20presentations/Day%201/10_James_Bond-IMO%20POLARIS%20Update%20%20Current%20Usage%20and%20Status.pdf

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https://pame.is/images/03_Projects/Forum/ASBPIF_Meeting_Summary_5-6_June_2017_-_Final.pdf

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<https://pame.is/second-meeting-of-the-forum>
https://pame.is/images/03_Projects/Forum/London/Second_meeting/ASBPIF_-_2nd_Meeting_Summary_12_July.pdf

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https://pame.is/images/03_Projects/Forum/PDF/DNV_GL.pdf

19 Later Arctic Shipping Best Practice Information Forums and IMO and Nautical Institute Polar Shipping Seminar, held between 2019 and 2022, have reiterated many of the issues previously identified and continued to expand the list, including challenges associated with new requirements for voyage planning in polar regions; understanding the relationship between ice conditions and category C ships; ice accretion and damage stability; the need for suitable measures for non-SOLAS vessels; provisions on maximum expected time of rescue; survivability in polar regions; concerns with inexperienced operators; the need for up-to-date and properly interpreted knowledge of weather conditions.^{11,12}

20 Presentations given during the Arctic Shipping Best Practice Information Forums have identified some areas not currently addressed by the Polar Code but which are considered important if the Code is to ensure that ships deliver the highest practicable standards. One presentation focused on the implementation, compliance, and enforcement, noted a number of primarily environmental issues not addressed by the Code including air emissions from ships, marine plastic litter, grey water and underwater noise.¹³

21 Another recognized gap was the omission of non-SOLAS vessels. When the work to develop the Polar Code commenced, some Member States were keen to consider non-SOLAS vessels, but it was considered expedient to focus initially on SOLAS vessels. Subsequently, guidelines on safety measures for fishing vessels and pleasure yachts have been approved while mandatory measures on navigation and voyage planning are expected to be adopted in 2023. However, the guidelines on safety measures for non-SOLAS vessels are not comprehensive, with work outstanding on pleasure yachts of 300 gross tonnage and upwards but less than 500 GT engaged in trade and cargo ships of 300 gross tonnage and upwards and less than 500 gross tonnage.

22 Many of the areas identified in the "scope of the proposal" originally submitted by the United States, Norway and Denmark in 2009 (MSC 86/23/9), were addressed by the adoption of the mandatory Code, however it was proposed that the work should include a review of older ships. The review would determine whether it would be appropriate to maintain grandfathering in polar regions given the harsh operating conditions and the potential impact on safety of life or the protection of the environment. Another area highlighted was search and rescue including the lack of search and rescue resources in remote polar regions. The submission highlighted that search and rescue, and environmental response capability are inadequate in the polar regions and that emergency response is critically limited by the lack of infrastructure, distances to travel, weather and harsh operating conditions. The possibility of ships serving as search and rescue resources for each other, and passenger ships being required to only operate in locations where adequate search and rescue resources are available were highlighted in the proposal, but not addressed by the Polar Code.

23 Since the Polar Code came into effect in 2017, questions have been raised around the boundaries to which the Code applies, particularly with respect to the Arctic in both the north Pacific and north Atlantic oceans and areas of high traffic density and subject to ice conditions.¹⁴

¹¹ <https://www.arcticwwf.org/newsroom/reports/review-of-perceived-gaps-and-challenges-in-the-implementation-of-the-polar-code/>

¹² [Forum_report_final_29_August.pdf \(pame.is\)](#)
[4th_Forum_Meeting_Summary_Report.pdf \(pame.is\)](#)
[Forum_5th_Meeting_Summary_final_14_Jan.pdf \(pame.is\)](#)

¹³ https://pame.is/images/03_Projects/Forum/4th_meeting/Presentations/Session_2_-_Piotr_Graczyk.pdf

¹⁴ https://pame.is/images/03_Projects/Forum/PDF/WMO.pdf
Polar Code application areas in the Arctic. Karahalil, M., Ozsoy, B. and Oktar, O., 2020. WMU Journal of Maritime Affairs. <https://doi.org/10.1007/s13437-020-00200-4>

24 In documents MSC 104/17/7 and MSC 106/18/4, WWF has provided details of a review analysing gaps and challenges in the implementation of the Polar Code. The analysis identifies a range of issues, based on numerous studies, reports and presentations from a wide range of actors, which are broadly determined to be governance and regulatory challenges, operational and knowledge challenges, and gaps in the Polar Code. Although some of the challenges and/or gaps have been considered further since the Polar Code came into effect, document MSC 106/18/4 proposes that further consideration be given to the need for additional guidance and possibly amendment of regulation to ensure that all shipping in polar regions meets the highest possible standards of safety and environmental protection, in line with IMO's Mission.

25 All of the sources and issues identified in paragraphs 13 to 24 will be valuable in presenting a thorough analysis of the issue.

Analysis of implications

26 A proposal for a new output should consider if there are cost or administrative implications for the maritime industry and include a completed checklist. It is difficult to predict the outcome of a review of existing regulation and associated guidance and guidelines, but it is possible that if the outcome involved amendment of the Polar Code the administrative requirements could change. If the outcome included additional guidance or unified interpretation which assisted implementation of the Polar Code, there could be administrative benefits.

Benefits

27 The benefits of a new output must be identified. The original proposal for a MSC output to develop the Polar Code identified the establishment of mandatory requirements correcting a gap in existing regulations for ships operating in polar regions (MSC 86/23/9). Since the Polar Code came into force in 2017, this gap has been addressed; however, considering the significant experience gained since the Code entering into force, some challenges and potential gaps have been identified. Addressing these challenges and gaps will facilitate shipping in polar regions meeting the highest possible standards of safety and environmental protection as envisaged by the Code.

28 In addition, since the Polar Code was adopted, Inuit Circumpolar Council (ICC) has applied for and been granted provisional consultative status at IMO. The inclusion of an Arctic Indigenous perspective in reviewing, updating, and communicating revisions to the Polar Code will be valuable and necessary to more comprehensively account for Arctic community views within the Code. Shipping is an essential service for many Arctic communities and ensuring safe, responsible, clean and low impact operations is important for community well-being and survival.

29 Inclusion of Indigenous Knowledge and achieving higher standards of safety and environmental protection can be identified as benefits for a new output reviewing the Polar Code's implementation and the associated guidance and guidelines.

Industry standards

30 Consideration of the existence of industry standards in a proposal for a new output should acknowledge that the Polar Code is the global industry standard. Additional guidance has been developed by the shipping industry and also by environmental groups to support the global standard and is identified in paragraphs 30 to 32.

31 The PAME Arctic Shipping Best Practice Information Forum has created a Web-portal pulling together information on the Polar Code.¹⁵ It includes explanations of each chapter of the Code and links to a variety of information from many sources, including industry. While most of the information contained in the Forum relates to operations in the Arctic, some information is relevant to the Antarctic. Classification societies have provided supporting information to the Forum, including an American Bureau of Shipping IMO Polar Code Advisory,¹⁶ DNV-GL's advice on Training Requirements for Ships Operating in Polar Waters,¹⁷ and Lloyd's Register's A regulatory interpretation guide.¹⁸

32 ICS and OCIMF have prepared guidance for ship operators and masters in the development of ship-specific Polar Water Operation Manuals to meet the environmental and operational requirements for planned voyages in polar waters as required by the Polar Code.¹⁹

33 It could also be acknowledged that other guidance is available from sources analysing the implementation of the Polar Code from an environmental perspective, such as WWF's Western Arctic Mariner's Guide (2018).²⁰

Output

34 Elements under consideration for inclusion in a new output could include reviewing the POLARIS Guidance (MSC.1/Circ.1519); evaluating successes, challenges and gaps in the implementation of the Polar Code; assessing progress on measures for non-SOLAS vessels and identification of further requirements; and developing a proposal for a plan of action to ensure that ships operating in polar regions are implementing the highest practicable standards.

Urgency

35 In considering the urgency of a new output on the Polar Code, trends in shipping in the polar regions should be considered. For example, in the Arctic between 2013 and 2019, there has been a 75% increase in the distance sailed by ships, alongside a 25% increase in the numbers of ships operating in the region.²¹ The numbers of vessels operating in the Antarctic is also increasing. Following two quieter seasons due to the global pandemic, over 100,000 passengers are anticipated to visit the region during the 2022-23 summer season;²² this compares with over 44,000 in the 2003-2004 season (MSC 86/23/9).

36 The fact that the POLARIS Guidance was issued as "interim guidance" with a view to gaining experience, and the intention it would be reviewed and, if necessary, amended based on experience gained four years following the entry into force of the Polar Code should be included in setting out the urgent need for a new output.

¹⁵ <https://pame.is/arcticshippingforum>

¹⁶ https://ww2.eagle.org/content/dam/eagle/advisories-and-debriefs/ABS_Polar_Code_Advisory_15239.pdf

¹⁷ [IMO Polar Code - DNV](#)

¹⁸ [Polar Code resources \(lr.org\)](#)

¹⁹ <https://www.ocimf.org/publications/information-papers/guidelines-for-the-development-of-a-pwom>

²⁰ https://pame.is/images/03_Projects/Forum/4th_meeting/Presentations/Session_6_-_Sam_Davin.pdf

²¹ <https://pame.is/arcticshippingforum>

²² ATCM XLIV IP 42 IAATO Overview of Antarctic Tourism: 2021-22 Season and Preliminary Estimates for 2022-23 Season.

37 A new work output reviewing experience with the implementation of the Polar Code would contribute to ensuring that the highest practicable standards of maritime safety and security, efficiency of navigation and prevention and control of pollution from ships are implemented effectively through the Polar Code and should be acknowledged in considering the urgency.

Action requested of the Committee

38 The co-sponsors request that the Committee note the information and invite additional feedback and possible input for a proposal for a new MSC output focused on the implementation of the Polar Code.
