

PAME II-2014 Agenda Item 4.6(a)
AMSA Recommendation II(D)
USA Views on Recommendations in
DNV Report on “Specially Designated Marine Areas in the Arctic High Seas”

References and Related Documents

- PAME I-2014 Record of Decision #6
- AMSA Report Recommendation II(D) (Specially Designated Arctic Marine Areas)
- Det Norske Veritas, *Specially Designated Marine Areas in the Arctic High Seas*, (Report No./DNV Reg No.: 2013-1442/I7JTM1D-26 (Rev. 2) (March 11, 2014)
- PAME (II) 12/4.5/a/IMO, *International Maritime Organization (IMO) Measures for Area-Based Protection*, by USA, Norway, Finland, Canada, Russia, Denmark and Sweden
- PAME (II) 13/4.5(c), *Report on IMO Established Routeing and Reporting Measures in the Arctic Region*, by USA, Denmark and Norway

Background

At PAME I-2014, member governments adopted a Record of Decision (ROD) stating:

PAME welcomes the valuable contributions of the final AMSA II(D) Report and requests the Secretariat to post it to the PAME website related to background documents. PAME invites member governments to submit to PAME II-2014 their views on the report recommendations. As part of these views, member governments are invited to indicate whether, and if so how, international protection for the high seas area of the Central Arctic Ocean might be pursued by Arctic States at IMO.¹

The referenced AMSA II(D) Report was prepared for PAME by Det Norske Veritas (DNV) under contract to Norway.² AMSA Recommendation II(D) provides:

That the Arctic states should, taking into account the special characteristics of the Arctic marine environment, explore the need for internationally designated areas for the purpose of environmental protection in regions of the Arctic Ocean. This could be done through the use of appropriate tools, such as ‘Special Areas’ or Particularly Sensitive Sea Areas (PSSA) designation

¹ See PAME-I 2014 Record of Decision #6, available at http://www.pame.is/images/02_Document_Library/Meeting_Reports/PAME_Report_2014_I_RoDs_final_version.pdf.

² The report is available at http://www.pame.is/images/03_Projects/AMSA/Specially_Designated%20Marine_Areas_in_the_Arctic/AMSA_Specially_Designated_Marine_Areas_in_the_Arctic_final_report_by_DNV_signed.pdf [hereinafter “DNV Report”]. The views expressed in the DNV Report are those of DNV and constitute advice from an independent consultant. They should not be seen as policy recommendations by PAME or any of its member governments. See DNV Report at p. 7.

*through the IMO and consistent with the international legal framework in the Arctic.*³

Member governments decided at PAME I-2012 to interpret this recommendation as applying exclusively to areas beyond national jurisdiction, *i.e.*, to the high seas area of the Central Arctic Ocean.⁴

Discussion

DNV's report has five main findings.⁵ First, current ship traffic in the high seas area of the Central Arctic Ocean is very limited and low by any standard. In 2012 (primarily in August and September), 18 vessels comprising one passenger vessel and 17 research/survey vessels entered the area, cumulatively spending 6,360 hours (0.7 ship years) there. Second, ship traffic in the area is expected to increase in the future although the size of the increase is uncertain and even the high end projection is quite modest (*e.g.*, 14.8 ship years, which is equal to approximately 950 transits).⁶ Third, the risk of shipping accidents is relatively low with an expected accident resulting in pollution of the marine environment estimated to occur every few hundred years.⁷ Fourth, the area's most prominent natural property is its globally unique drifting pack ice which is expected to change considerably in the coming decades due to climate change. Fifth, the vulnerability of the area to future international shipping activities is most pronounced for polar bears and two species of gull, with oil spills presenting the greatest risk, followed by the endangered bowhead whale with ship strikes and noise presenting a moderate risk.

The Report acknowledges that there are significant limitations to the present state of knowledge, that there is considerable uncertainty in some of its estimates, and that the assessment of expected accident frequencies is very crude (although this could result in either under reporting or over reporting of accident frequencies).⁸

The core of the Report is its assessment of IMO measures that member governments could pursue to protect the high seas area of the Central Arctic Ocean from the threat posed by international shipping activities. The Report discusses Special Areas under MARPOL Annexes I, II, IV and V as options but dismisses them as not warranting consideration given the nature of Arctic conditions, the pattern and volume of ship traffic, overlap with forthcoming requirements

³ The 2009 Arctic Marine Shipping Assessment (AMSA) Report is available at http://www.pame.is/images/03_Projects/AMSA/AMSA_2009_report/AMSA_2009_Report_2nd_print.pdf. Recommendation II(D) is found at p. 7.

⁴ See PAME I-2011 Record of Decisions; *see also* AMSA II(D) Project Description Annexed to the 2011-2013 PAME Work Plan, available at http://www.pame.is/images/01_PAME/Work_Plan/2011_2013.pdf.

⁵ DNV Report at p. 4.

⁶ DNV Report at pp. 11-18. The 14.8 ship years are calculated based on 400 transits by ice strengthened vessels across the pole and 560 transits along the peripheral high seas route close to the Russian EEZ. The composition of this projected ship traffic is diverse, with a strong mixture of ship types, including containers, bulk and tanker traffic, general cargo vessels, and research and tourism vessels.

⁷ DNV Report at pp. 19-24. Reflecting the very limited traffic in the area, DNV was unable to identify a single reported ship accident. But the DNV Report notes that "historic records for the area give little or no insight into the risk levels which may be expected under future traffic scenarios." DNV Report at p. 22.

⁸ *E.g.*, DNV Report at pp. 4, 16 & 24.

(especially those contained in the Polar Code), and current industry standards applicable to ships operating in the Arctic.⁹

PSSAs, however, are identified in the Report as a feasible option providing additional protections beyond those to be provided by the Polar Code. The Report states that the high seas area of the Central Arctic Ocean “embodies several of the attributes required for PSSA designation; both with regard to ecosystem uniqueness and rarity, vulnerability to degradation and for scientific and educational significance. In addition, it is vulnerable to damage by international shipping activities; primarily by acute pollution, but also from disturbance and elements of air emissions....”¹⁰

Adoption of at least one associated protective measures (APMs) is a prerequisite to the designation of a PSSA and the Report finds that areas to be avoided (ATBAs) and ship reporting systems (SRS) could be relevant, the former to direct traffic away from certain areas posing particular risk or containing particular environmental elements, and the latter to increase knowledge of ship movements and the risk picture, and potentially facilitating a response to developing maritime emergencies.¹¹

Based on this assessment, the Report identifies three options that could be pursued at the IMO to protect the area from international shipping activities:¹²

Option #1: pursue a Particularly Sensitive Sea Area (PSSA) for the entire high seas area of the Central Arctic Ocean with a Vessel Traffic System (VTS), a Ship Reporting System (SRS) and dynamic area to be avoided (ATBAs);

Option #2: pursue a PSSA for the entire high seas area of the Central Arctic Ocean with a VTS and an SRS; and

Option #3: pursue a PSSA for one or more core sea ice areas within the high seas area of the Central Arctic Ocean with ATBAs.¹³

The Report advances Option #3 as the option that strikes the best balance between the need for protection and the burden imposed, thus being the most politically feasible. More specifically, the Report states that “[option #3] ensures protection of an increasingly important core area, but will likely not impede movement on the high seas which is a major principle in international law. On a final note, the establishing of a PSSA has the additional benefit of being used as a framework for possible new measures, in case of unexpected increases in activity and need for

⁹ DNV Report at pp. 50-53. Although not identified as an option or suggested approach, the DNV Report notes that air emissions from ships, in particular black carbon, sulphates and other aerosols, merit attention as they contribute to accelerated melting of ice and may have regional climate forcing impacts. The DNV Report further states that DNV considered stricter regulation of air emissions under a MARPOL Annex VI Emission Control Area (ECA) designation of potential significance but recommended that further action await the outcome of ongoing IMO work on black carbon formation and mitigation. DNV Report at pp. 52-53.

¹⁰ DNV Report at p. 54.

¹¹ DNV Report at pp. 54-55.

¹² DNV Report at p. 58.

¹³ DNV Report at pp. 56-58.

protection. Such an approach is well harmonized with IMO's emphasis on the precautionary principle."¹⁴

USA Views on the DNV Report Recommendations

The United States believes that protection of the globally unique drifting multi-year ice pack from the threat posed by international shipping activities in the high seas area of the Central Arctic Ocean is an important goal. In light of the limitations noted by the DNV Report to the present state of knowledge and the considerable uncertainty in some of its assessments, in particular with regard to expected accident frequencies, the United States is of the view that it is premature to pursue action now at IMO on DNV's recommended Option #3. The United States is supportive of additional study and analysis that would aim to bolster the knowledge contained in the DNV Report and to reduce the identified uncertainties in several of its estimates. The United States can envision the benefits that one or more ATBAs may convey but recognizes that vessel traffic at present is extremely modest by any standard and that most vessels sailing in the area are likely to avoid thick, multi-year pack ice for navigational safety reasons. An additional factor is that traditional IMO-approved ATBAs are static. That is, they are established with a fixed radius, polygon or distance from a baseline.¹⁵ Consideration would be necessary of whether, and if so, how, ATBAs could be adapted to be dynamic and suit mobile or migratory environmental elements such as pack ice, birds and animals.

The United States is open to further analysis regarding the establishment by IMO of one or more emission control areas under MARPOL Annex VI in the Arctic and supports potential future studies at PAME (and at other appropriate fora) to better assess the costs and benefits of any potential ECA in the high seas area of the Central Arctic Ocean. While work remains to be done at IMO on black carbon, the United States also supports the future regulation of black carbon under MARPOL.

Recommendations

The United States recommends that:

- PAME obtain the most recently available satellite AIS data for the high seas area of the Central Arctic Ocean to ascertain the current level of shipping traffic and assess whether there is a year-over-year upward trend;
- PAME consider supplementing the DNV Report to refine its estimates (*e.g.*, of expected accident frequencies) and rectify any inaccuracies or errors that member governments identify;

¹⁴ DNV Report at p. 58. We note that on 15 September 1995 IMO's Marine Environment Protection Committee adopted the "precautionary approach," not the "precautionary principle," in Resolution MEPC.67(37), titled *Guidelines on the Incorporation of the Precautionary Approach in the Context of Specific IMO Activities*. The Resolution is available on the IMO website at [http://www.imo.org/blast/blastDataHelper.asp?data_id=15641&filename=67\(37\).pdf](http://www.imo.org/blast/blastDataHelper.asp?data_id=15641&filename=67(37).pdf).

¹⁵ A number of IMO-approved ATBAs are seasonal, for example the seasonal ATBA "In the Great South Channel" off the east coast of the United States. See SN.1/Circ. 272 (10 December 2008), available at http://www.greateratlantic.fisheries.noaa.gov/shipstrike/doc/GSC_ATBA_IMO_circular.pdf.

- PAME explore the feasibility of initiating a project to evaluate the costs/benefits of the establishment by IMO under MARPOL Annex VI of one or more emission control areas in the high seas area of the Central Arctic Ocean; and
- PAME explore other possible means to alert mariners to the globally unique and ecologically significant drifting multi-year ice pack in the high seas area of the Central Arctic Ocean, such as non-enforceable NAVAREA warnings and high seas notices to mariners.