

SUB-COMMITTEE ON POLLUTION
PREVENTION AND RESPONSE
6th session
Agenda item 12

PPR 6/12/3
14 December 2018
Original: ENGLISH

**DEVELOPMENT OF MEASURES TO REDUCE RISKS OF USE AND CARRIAGE OF
HEAVY FUEL OIL AS FUEL BY SHIPS IN ARCTIC WATERS**

**Combined methodology to analyse impacts of a ban on heavy fuel oil use
and carriage as fuel by ships in Arctic waters**

**Submitted by Finland, France, Germany, Iceland,
Netherlands, Norway, Sweden, Spain and United States**

SUMMARY

Executive summary: Wide support for two proposed impact assessment methodologies (documents MEPC 73/9/1 and MEPC 73/9/2) led to combining the two approaches, as there were no inherent conflicts. This document presents the combined approach and a plan of action for its use

Strategic direction, if applicable: 6

Output: 6.11

Action to be taken: Paragraph 13

Related documents: MEPC 73/9/1 and MEPC 73/9/2

Introduction

1 The purpose of proposing this combined impact assessment methodology is to facilitate the work at the sixth session of the Sub-Committee on Pollution, Prevention and Response (PPR) on the policy options that were approved as part of its scope of work during MEPC 72. During the discussion of one policy option, the proposed mandatory heavy fuel oil (HFO) ban, the Committee discussed the need for an analysis of impacts on Arctic communities, and further, the Committee requested proposals of impact assessment methodologies.

2 At MEPC 73, the impact assessment methodology proposals contained in document MEPC 73/9/1 (United States) and document MEPC 73/9/2 (Finland), both received wide support. The authors of these documents have determined that the two methodologies are complementary and not in conflict. Document MEPC 73/9/2 provides a five-step framework

of an impact assessment approach commonly used to assess environmental impacts. The methodology proposed in document MEPC 73/9/1 provides specific guidance for elements to consider during the assessment of impacts of an HFO ban. Specifically, the methodology proposed in document MEPC 73/9/1 would fulfil the fourth and fifth steps of the five-step assessment approach outlined in document MEPC 73/9/2.

3 Impact assessments should not be used to delay, but instead, to inform the development of policy options for measures to reduce impacts of the use and carriage as fuel of HFO by ships in Arctic waters. To this end, the co-sponsors present the following combined impact assessment methodology. The co-sponsors further recommend that Member States that propose incorporation of other factors into the HFO ban, as suggested in document MEPC 73/9/1 (paragraphs 18 and 19), provide results of an impact assessment following this combined methodology to support such proposals.

Combined impact assessment methodology

Step 1: Defining the problem

4 Broadly stated, the problem has been defined as the risk of HFO spills by ships that use HFO as fuel in Arctic waters. The Arctic Council's Protection of the Arctic Marine Environment (PAME) Working Group has previously concluded that "...the most significant threat from ships to the Arctic marine environment is the release of oil through accidental or illegal discharge...", and that using distillates instead of HFO as fuel would mitigate this risk. The PAME Working Group has worked to address the risks associated with the use and carriage of HFO by vessels in the Arctic for several years with progress summarized in the Arctic Council's Status on Implementation of the AMSA 2009 Report Recommendations published in 2011, 2013, 2015 and 2017. A summary of the work undertaken by PAME can be found in document MEPC 72/INF.14 (Canada et al).

Step 2: Defining policy objectives

5 Based upon these and other documents, document MEPC 71/14/4 (Canada, Finland, Germany, Iceland, Netherlands, Norway and the United States) affirmed the compelling need for a new output to be included in the work programme of MEPC, especially due to the increased spill risk that will accompany the anticipated increase in future vessel traffic in Arctic waters. The urgent need for measures to reduce the risk of an HFO spill was agreed upon during discussions at MEPC 71 and prior sessions that led to the establishment of a new work output. Therefore, the policy objective was defined when the Committee agreed that the risk of an HFO spill in the Arctic warranted a new output, namely, the development of measures to reduce risks of use and carriage of HFO as fuel by ships in Arctic waters.

6 There are two elements inherent to this policy objective that all viable policy options must meet. First, the policy option(s) must reduce the risk of an HFO spill from ships in Arctic waters. Second, due to the urgent need to protect fragile Arctic environments and in light of the likely increase in Arctic shipping, the policy option(s) must reduce risk in the near term. Therefore, policy options must be assessed not only for their impacts, but also for how well they meet policy objectives to solve the defined problem within an appropriate timescale.

Step 3: Development of policy options

7 The scope of work stated in document MEPC 72/17 (paragraph 11.9) contains the policy options that MEPC has approved for work at the PPR Sub-Committee. Policy options that have been identified are:

- .1 establish the HFO ban proposed in document MEPC 72/11/1 (Finland et al.). It should be noted that establishing an HFO ban would not preclude work on other measures proposed in MEPC 72/11 (Russian Federation) if deemed appropriate by the Sub-Committee; and,
- .2 develop guidelines for some or all measures proposed in document MEPC 72/11.

Step 4: Analysis of impacts

8 Analysis of impacts of an HFO ban follows the methodology presented in document MEPC 73/9/1, which represents a balanced approach to assessing both costs and benefits of an HFO ban to communities and industries in the Arctic. This methodology considers ships' costs for ban-compliant fuel, and ship modifications and debunkering if either are necessary, among other costs. This analysis attempts to clarify and if possible quantify the relationship between ships' costs and the cost of goods that are supplied by ships to Arctic communities. This part of the analysis is balanced by accounting for impacts to communities from HFO spills that could occur if a ban is not established, including the costs of spill response and clean up. While the impact analysis relies upon public sources for costs, we also acknowledge that some impacts from HFO spills in the Arctic cannot be exactly expressed monetarily, most notably, the loss of coastal and marine natural resources and the effects of such losses on culturally important subsistence activities.

9 To recap the analysis of impacts proposed in document MEPC 73/9/1, the first three steps presented in document MEPC 73/9/1 are:

- .1 determination of the study area;
- .2 assessing costs to Arctic communities and industries; and
- .3 assessing the benefits of an HFO ban to Arctic communities.

10 As proposed in the fourth step described in document MEPC 73/9/1, if an HFO ban would result in unacceptable adverse impacts, Member States could propose that other factors be incorporated into the ban. Examples of other factors include delayed implementation of the ban for certain ship types or ships routinely making specific voyages, or adjustments to the HFO phase-out schedule.

Step 5: Comparison of policy options and recommendation of preferred option(s)

11 The PPR Sub-Committee has been directed to "on the basis of an assessment of the impacts, develop a ban on HFO for use and carriage as fuel by ships in Arctic waters, on an appropriate timescale" as stated in document MEPC 72/17 (paragraph 11.9.3). Policy options that were identified in step 3 of this combined methodology above would result in choosing one of the following options:

- .1 establish a mandatory HFO ban as proposed in document MEPC 72/11/1 and create guidelines for further reducing risk using some or all of the measures proposed in document MEPC 72/11; or

- .2 establish a mandatory HFO ban with other factors incorporated, and create guidelines for further reducing risk using some or all of the measures proposed in document MEPC 72/11.

12 As stated in paragraph 6 above, the option that is chosen as preferred must reduce the risk of an HFO spill from ships in Arctic waters, and reduction of risk must occur in an appropriate timescale.

Action requested of the Sub-Committee

13 The Sub-Committee is requested to agree that the combined five-step approach presented is an appropriate impact assessment methodology. Further, the co-sponsors request that all Member States wishing to have other factors for specific impacts considered for incorporation into a mandatory HFO ban by the PPR Sub-Committee should provide to the Sub-Committee, in a timely fashion, an impact assessment using the combined methodology outlined in this paper.
