

SUB-COMMITTEE ON POLLUTION  
PREVENTION AND RESPONSE  
13th session  
Agenda item 5

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**DEVELOPMENT OF A LEGALLY BINDING FRAMEWORK FOR THE CONTROL  
AND MANAGEMENT OF SHIPS' BIOFOULING TO MINIMIZE THE TRANSFER  
OF INVASIVE AQUATIC SPECIES**

**Proposal for submittal of data on biofouling management to support the development  
of a legally binding framework**

**Submitted by BEMA**

**SUMMARY**

<i>Executive summary:</i>	This document proposes the need to request data on specific topics in order to support the development of a legally binding framework for the control and management of ships' biofouling and outlines the rationale for such submissions.
<i>Strategic direction, if applicable:</i>	7
<i>Output:</i>	7.16
<i>Action to be taken:</i>	Paragraph 8
<i>Related documents:</i>	MEPC 83/14/1; resolution MEPC.387(80) and MEPC.1/Circ.918

**Background**

1 The eightieth session of the Marine Environment Protection Committee (MEPC 80) adopted the *2023 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species* (hereinafter referred to as the "2023 Biofouling Guidelines"), and MEPC 83 approved the *Guidance on in-water cleaning of ships' biofouling* (herein after referred to as the "In-Water Cleaning Guidance").

2 Following consideration of a proposal in document MEPC 83/14/1 (Canada et al.), MEPC 83 agreed to include in its post-biennial agenda a new output to develop a legally binding framework to minimize the transfer of invasive aquatic species via biofouling and assigned it to the Sub-Committee on Pollution Prevention and Response (PPR), with agreement to complete discussions within four sessions, from 2026 to 2029.

3 During MEPC 83, some delegations expressed the view that more experience with the recently developed 2023 Biofouling Guidelines and In-Water Cleaning Guidance was needed prior to the development of a mandatory instrument on biofouling. MEPC 83 agreed to proceed with the development of a mandatory instrument on biofouling but also welcomed additional information as it became available to help inform the development of the mandatory instrument.

### **Key questions ahead of the development of a mandatory instrument**

4 To support the development of a legally binding framework for biofouling management, BEMA reviewed the 2023 Biofouling Guidelines and In-Water Cleaning Guidance to identify specific questions or gaps which would benefit from the submission of data, reports, models, and validation studies.

5 In particular, BEMA notes that the process of developing the mandatory instrument would benefit from continued data development and information gathering based on the following seven areas:

- .1 identifying the different types of technologies, products and best practices which currently exist to prevent biofouling accumulation on ships, including marine growth prevention systems, alternative types of coatings and biocides, UV, ultrasonic and similar types of protection systems, and improvements to hull designs to eliminate or reduce niche areas;
- .2 scientifically examining the aquatic invasive species risks from microfouling, including examining the makeup of microfouling, assessing microfouling in different regions and ports, and exploring the source of human pathogens in microfouling;
- .3 identifying the risks of cleaning microfouling without capture, including assessing the risks of release of coating materials during proactive cleaning of microfouling, examining the impacts to the viability of microfouling organisms and spores during removal, assessing the effectiveness of tools to render microfouling organisms harmless during cleaning, and assessing the risks and benefits of frequent cleaning of hard coatings against those of self-polishing hull paints;
- .4 identifying the best technologically achievable capture rates for cleaning systems and developing protocols for assessing capture rates and standardized measurements of capture efficiency;
- .5 developing scientific methods to evaluate compatibility between hull coatings and cleaning systems using a standardized methodology to assess the effect of proactive and reactive cleaning on hull coating performance and lifecycle in different fouling management programmes;
- .6 examining the scope of equipment and numbers of divers, support personnel and designated geographic cleaning areas that will be needed to meet demand based on the future required frequency of cleanings and inspections; and

- .7 identifying the compliance monitoring tools and equipment which are currently available to analyse hull fouling condition, as well as studying what technologies for inspection, performance monitoring and assessing compliance with the provisions of the mandatory instrument currently exist, are being developed, or will need to be developed to implement the mandatory instrument.

6 BEMA has launched a project to provide data and information to address these seven key areas under its Biofouling Research and Data Development (BRADD) Project. Available data is being gathered through BEMA members, and BEMA welcomes all interested Member States and international organizations who want to participate in this project, which will support the development of a mandatory instrument that is scientifically and technologically based, and practical for industry to implement, to reach out directly to BEMA at [techdirector@bwema.org](mailto:techdirector@bwema.org) to find out how to participate. This multi-year project will provide data to support addressing these areas and other emerging topics that can be used to inform the Sub-Committee's work on biofouling, and can help all interested stakeholders.

### **Proposal**

7 Noting that the breadth and scope of available information, data, technology, reports, scientific research and models which may be useful to help inform the development of the mandatory instrument will progress throughout the timeline of the development of the mandatory instrument, BEMA proposes the encouragement by the Sub-Committee of the submission of data to future sessions based on the identified areas of developing areas of interest discussed in paragraphs 5.1 to 5.7.

### **Action requested of the Sub-Committee**

8 The Sub-Committee is invited to encourage the submission of data on the topics outlined in paragraphs 5.1 through 5.7, as proposed in paragraph 7, in the context of discussions on the development of a legally binding framework for biofouling management.

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