INTERNATIONAL MARITIME ORGANIZATION

E

MARINE ENVIRONMENT PROTECTION COMMITTEE
66th session
Agenda item 20

MEPC 66/INF.19
10 January 2014
ENGLISH ONLY

ANY OTHER BUSINESS

Formation of a Biofouling Management Expert Group under IMarEST to address biofouling management measures for sustainable shipping

Submitted by IMarEST

SUMMARY

Executive summary:	This document summarizes the main themes discussed at an Australia/New Zealand/Pacific (ANZPAC) workshop on Biofouling Management for Sustainable Shipping. The workshop culminated in the formation of the Biofouling Management Expert Group (BMEG) by IMarEST to assist and promote further discussions and international consultation on the development and implementation of practical, effective and globally consistent biofouling management measures for shipping.
Strategic direction:	7.1
High-level action:	7.1.2
Planned output:	No related provisions
Action to be taken:	Paragraph 10
Related document:	MEPC.207(62)

Background

1 In international shipping, the effects of biofouling on speed, manoeuvrability, operability and durability of vessels are well documented. In recent times biofouling is additionally recognized for its potential impact on the global environment by increasing greenhouse gas (GHG) emissions from ships and facilitating the transfer of invasive aquatic species. To address the latter, *Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species* were adopted by the Marine Environment Protection Committee (MEPC) of the International Maritime Organization (IMO) at its sixty-second session in 2011, in the form of resolution MEPC.207(62). The adoption of the Guidelines has proven challenging, due in part to the limitations of available preventive technology and uncertainty regarding the environmental risks of management methods, such as the use of biocidal antifouling paints or uncontrolled in-water hull cleaning. As a consequence, some authorities are proposing to implement unilateral measures in the form of mandatory biofouling management requirements on international shipping.

2 A four-day Australia/New Zealand/Pacific (ANZPAC) workshop on Biofouling Management for Sustainable Shipping took place in Melbourne, Australia, in May 2013. More than 100 delegates from 10 countries listened to presentations from 48 speakers and engaged in constructive debates/discussios on identifying, promoting and developing effective and practical biofouling management strategies.

3 The overall aim of the workshop was to ensure that shipping and other maritime industries in the region can continue to underpin trade, security and economic development with minimal environmental impact due to biofouling.

Workshop findings

4 The first two days of the workshop centred on risks, requirements and regulations with presentations on the regional perspectives surrounding the development and adoption of the IMO *Guidelines for the control and management of ships' biofouling*. This included the ongoing challenges and opportunities in achieving uptake of the Guidelines (adopted as international measures with voluntary application), measuring success and failure of different management approaches, and understanding the efficacy of biofouling management systems as a whole.

5 Representatives from national Governments (Australia and New Zealand) and State Governments of the United States (California and Hawaii) outlined the more stringent and mandatory measures proposed to address this threat in their jurisdictions, which are based on either biofouling "standards" or unwanted species lists to be enforced on vessels at the jurisdictional border.

6 Industry representatives called for consistency in regulation, policy and priorities across jurisdictions, preferably reflecting a global framework, and the recognition of the shortcomings of current antifouling technologies for achieving proposed standards. Such a framework needs to be researched and set, so that actual compliance is realistic and enforcement is practical.

7 The third and fourth days of the workshop were a symposium on the science and technology of biofouling, presenting the emerging scientific research on novel coatings and surfaces for biofouling prevention and control in the future. Twenty-one speakers from Australia, Germany, Japan, New Zealand, Singapore, the United Kingdom and the United States presented their latest research on biofouling and the creation of non-fouling surfaces. The talks were divided into four themed sessions chosen to present anti-biofouling technologies and how different aspects of biofouling research are intertwined with the regulations and requirements outlined in the first two days of the workshop. The sessions addressed:

.1 antifouling coating concepts: the latest research to improve existing technology and develop novel anti-biofouling strategies;

.2 biological assays: existing work conducted on biological assays and efforts to distinguish between short-term laboratory results and long-term field trials;

.3 local ecology issues: overview of ecological issues endangering local Australian waters and marine ecosystems; and

.4 *in-situ* measurements of biofouling: described novel methods to measure and understand the behaviour of marine organisms in biofouling and establish subsequent control mechanisms.

8 Research presented was from a wide variety of backgrounds and undertook a multidisciplinary approach. It was clear that much research investment has been put into new technologies that could revolutionise the marine coatings field. New disruptive technologies in particular, are in high demand due to foul-release coatings in current use being conceptually conceived nearly four decades ago, with no significant technological developments entering the market since.

9 The workshop initiated regional and international discussions on biofouling management. These will continue with the formation of the Biofouling Management Expert Group (BMEG) by the IMarEST which will utilize the Institute's various channels of international consultation and knowledge exchange to support and enhance ongoing discussions on the development and implementation of practical, effective and globally consistent biofouling management measures for shipping. This group will be open to all IMarEST members to join.

Action requested of the Committee

10 The Committee is invited to note the information on the workshop findings and the consequent formation of the Biofouling Management Expert Group (BMEG) under IMarEST.