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COMMITTEE  
67th session  
Agenda item 2

MEPC 67/2/6  
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## HARMFUL AQUATIC ORGANISMS IN BALLAST WATER

### Measures to be taken to facilitate entry into force of the International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004

Submitted by ICS, IUMI, BIMCO, INTERTANKO, CLIA, INTERCARGO, InterManager, IPTA, IMCA, INTERFERRY, ITF, the Nautical Institute and WSC

#### SUMMARY

*Executive summary:* This document describes serious concerns with the implementation of the Ballast Water Management Convention. The main concerns are: the lack of robustness of the current *Guidelines for approval of ballast water management systems (G8)*, the criteria to be used for sampling and analysis of ballast water during port State control inspections and the subsequent actions that may be taken should any minor deviation from the strict efficacy standards be indicated. These genuine concerns, which need to be urgently addressed, have affected the confidence of stakeholders including IMO Member States and shipping industry alike. They have inhibited ratification of the Convention by some Governments and acted as a major disincentive to shipowners considering early installation of ballast water management systems that have been type approved (TA) under the current Guidelines (G8). This document discusses the need for a way forward and proposes that stakeholders are provided with a clear signal from the Committee of the Organization's intent to deliver a Ballast Water Management Convention that is fair and effective for all. This document includes a draft MEPC resolution which, if adopted, it is believed will deliver the necessary assurances to allow stakeholders to move forward with confidence in the Convention.

*Strategic direction:* 2

*High-level action:* 2.0.1

*Planned output:* 2.0.1.2

*Action to be taken:* Paragraph 18

*Related documents:* MEPC 66/2/11; MEPC 65/22, MEPC 65/WP.7/Rev.1; MEPC 64/2/17, MEPC 64/2/18, MEPC 64/WP.8; BLG 17/WP.4 and resolution MEPC.174(58)

## Background

1 The shipping industry recognizes the pragmatic and helpful nature of the decision at the twenty-eighth session of the Assembly to adopt resolution A.1088(28) *Application of the International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004*. The resolution answered calls to smooth and spread the application schedule specified in the International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004 (the Convention). This positive action is believed to have removed one major obstacle to the successful implementation of the Convention.

2 Document MEPC 66/2/11 (ICS et al.) described the outstanding shipping industry concerns and presented proposals, many of which were shared and supported by several Member States at MEPC 66 including, most significantly, Member States accounting for almost two-thirds of the tonnage of the States that have already ratified the Convention and the largest, in terms of registered tonnage, of the Member States yet to ratify. For easy reference, the main concerns raised in that submission were as follows: the robustness of the type approval procedure in Guidelines (G8); the ability of some type approved ballast water management systems to meet the strict stipulated efficacy standards at all times and under all environmental uptake conditions that may be encountered in normal operation of the ship; the introduction of the alternate type approval test protocols by the United States, which are generally accepted as somewhat more thorough than the current Guidelines (G8) demands and the continuing uncertainty that any current approved ballast water management systems purchased and installed now will not need replacing prematurely, with the consequent need to provide assurance to promote the timely installation of ballast water management systems by "grandfathering" first generation systems.

## Comments on the outcome of MEPC 66

3 The co-sponsors of document MEPC 66/2/11 were disappointed that the Committee did not consider there was enough support to agree to the proposal made by ICS et al. for the development of an MEPC resolution by the Ballast Water Review Group. The co-sponsors proposed the development of a resolution with an agreed way forward based on the submission MEPC 66/2/11 and addressing the concerns detailed in the document. The Committee instead agreed, based on the proposal of a Member State, to investigate through the Secretariat the feasibility of a study on the implementation of the ballast water performance standard described in regulation D-2 of the Convention (D-2 standard).

4 In relation to the study, the Committee requested the IMO Secretariat to consider funding and execution modalities and to submit a draft plan and terms of reference for consideration by MEPC 67. The Secretariat was also instructed to include in the study the aspects described in paragraphs 11 and 12 of the report of the Ballast Water Review Group (MEPC 66/WP.6). It was noted that the proposals set out in paragraph 11 of document MEPC 66/2/11 to amend Guidelines (G8) should be addressed in the study. The co-sponsors do not believe that the study will provide the necessary answers to allow confidence in the Convention quickly enough. The timeline for such a study to be agreed and completed will most likely extend well past the entry into force date of the Convention. Notwithstanding the views detailed above relating to the possible study, it is the opinion of the co-sponsors that the conduct of such a study and the proposals made in this document reflected in the draft MEPC resolution set out in the annex are not mutually exclusive.

5 The Committee confirmed that, from a legal perspective, there is nothing precluding the revision of the *Guidelines for approval of ballast water management systems (G8)* and specifically that there is no requirement for the Convention to be in force before Guidelines (G8) may be revised.

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## Proposal for measures to build confidence in the Convention

6 The co-sponsors believe that amongst Member States there is a recognition that significant challenges need to be addressed in order to facilitate entry into force and effective implementation of the Convention. Furthermore, the co-sponsors believe it is now recognized by all stakeholders that there is genuine uncertainty for the consistent performance of type approved ballast water management systems that have been installed or are being considered for installation by shipowners to meet the precise D-2 standard under all operating conditions. There appears to be a common belief shared by Member States and the shipping industry alike of the need to strengthen Guidelines (G8). There is only a perceived difference in position concerning the timing of the review and implementation of revised guidelines in relation to entry into force of the Convention. The co-sponsors remain hopeful that there is a willingness on the part of the Organization to listen to the concerns voiced by the industry.

7 The industry is committed to the environmental goals of the Convention. To this end and in good faith, the co-sponsors submit a draft MEPC resolution (annexed to this document) that proposes the necessary steps to build the required confidence. Agreement to the proposed resolution with actions both prior to and after entry into force would be a clear demonstration of the will of all stakeholders to deliver a Convention that truly delivers its intended benefits. The proposed steps are described in more detail below.

8 The co-sponsors maintain that the legal changes needed to make the ballast regime globally applicable and fit for purpose – such as making Guidelines (G8) more robust, including its legal basis and agreeing a provision for considering first generation type approved ballast water management systems acceptable – are relatively straightforward. They can be agreed in principle by IMO Member States quickly and prior to entry into force of the Convention with commitment being made to the adoption of the necessary amendments to the Convention following its entry into force.

9 The co-sponsors propose that a comprehensive and exhaustive review of Guidelines (G8) should be undertaken by the Organization and that the review of Guidelines (G8) should commence as soon as possible and before the Convention enters into force. The review as a minimum should address the items detailed in points 1 to 6 of the annex to the draft MEPC resolution.

10 Noting that it is possible that the Convention may enter into force before the completion of the review of Guidelines (G8), Parties to the Convention should ensure the existing Guidelines (G8) are fully applied in their approved test facilities.

11 It is essential to avoid any discouragement to fit ballast water management systems before the carriage requirement becomes mandatory and therefore it should be agreed that "first generation" type-approved systems, installed in good faith prior to the Convention's entry into force and before Guidelines (G8) have been reviewed and the revised guidelines applied, shall be considered acceptable (grandfathered) for the life of the ship. For port State control purposes a new category of "gross non-compliance" should be defined for application to these systems in order to allow for some small variation in treatment efficacy during normal operation. "First generation" equipment should be recognized as such, valuing its contribution of important information relating to the operational performance of early installations. Such information is invaluable to facilitate improvements in the effectiveness of later generations of systems.

12 It is proposed that the agreement amongst Parties to the Convention to the effect that, as soon as the Convention has entered into force, the agreed "trial period" moratorium on non-compliance associated with the *Guidance on ballast water sampling and analysis for*

*trial use in accordance with the BWM Convention and Guidelines (G2) (BWM.2/Circ.42) shall be viewed as an experience-building phase and therefore penalties should be limited to instances of deliberate non-compliance.*

13 There is a need to recognize that the real intent of the Convention relating to inspection of ships is firstly that inspection for compliance should start with confirmation of the installation of type-approved ballast water management systems and the records of their correct operation. Only after clear grounds for non-compliance have been established should sampling of ballast water by port State control be necessary or appropriate. Therefore, it is proposed that Parties to the Convention, recognizing the nature of the perceived problems would, as soon as the Convention enters into force, commit to reviewing article 9 of the Convention "Inspection of ships" with a view to its amendment at paragraph 1(c) (the provision for sampling of the ship's ballast water during inspection) and with the objective of moving it under paragraph 2 of the same Article relating to actions determined following the establishment of "clear grounds".

14 The Organization should re-enforce, through an appropriate MEPC circular, that the port State control regime is intended to monitor diligent application of the Convention and that it is not the intention of the Convention to penalize owners and ships' crews which in good faith have fitted and conscientiously operated type-approved ballast water management systems correctly.

15 The industry firmly believes that the actions proposed above would facilitate the entry into force and effective application of this unique Convention that will then be instrumental in controlling any real threat of cross boundary biological invasions through the ballast water vector.

16 The co-sponsors are aware that, in addition to the issues addressed in this document, there are additional implementation difficulties to be faced by ships trading in limited local areas (short sea shipping) and that these will have to be addressed by Contracting Governments.

17 The co-sponsors further believe that such agreement would provide the necessary confidence building to assure the most effective implementation of the Convention by the vast majority of stakeholders. The greater good for environmental protection will undoubtedly be achieved by facilitating the Convention's entry into force in the practical manner proposed above. If there are occasions when the D-2 standard is not fully met, there will nevertheless remain a net benefit to environmental protection and the control of invasive risk. This will be a far preferable situation to that currently existing.

#### **Action requested of the Committee**

18 The Committee is invited to:

- .1 consider the contents of this document and the proposals made in conjunction with the draft MEPC resolution on Measures to be taken to facilitate entry into force of the International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004; and
- .2 to take action as deemed appropriate.

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**ANNEX**

**DRAFT MEPC RESOLUTION**

**MEASURES TO BE TAKEN TO FACILITATE ENTRY INTO FORCE OF THE  
INTERNATIONAL CONVENTION FOR THE CONTROL AND MANAGEMENT OF SHIPS'  
BALLAST WATER AND SEDIMENTS, 2004**

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee conferred upon it by the international conventions for the prevention and control of marine pollution,

RECALLING ALSO that the International Conference on Ballast Water Management for Ships held in February 2004 adopted the International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004 (the Convention) together with four conference resolutions,

NOTING that regulation D-3 of the Annex to the Convention provides that ballast water management systems used to comply with this Convention must be approved by the Administration, taking into account guidelines developed by the Organization and that regulation D-2 of the same Annex defines the performance standard for ships' ballast water management,

NOTING ALSO resolution MEPC.174(58) by which the Committee adopted the *Guidelines for approval of ballast water management systems (G8)*,

NOTING IN PARTICULAR that, by resolution MEPC.174(58), the Committee agreed to keep Guidelines (G8) under review in the light of experience gained,

NOTING FURTHER that provision is made for the inspection of ships, detection of violations and control of ships and the undue delay to ships in Articles 9, 10 and 12 of the Convention, respectively,

RECOGNIZING the concerns of the shipping industry that where, in good faith, ships are fitted with and operate ballast water management systems that have been type approved in accordance with the Guidelines, then they should receive reasonable protection and not be subject to criminal action, detention or being required to replace such type-approved systems,

BEING CONSCIOUS of the need to provide certainty and confidence in the application of the Convention, thereby assisting shipping companies, shipowners, managers, ships' crews and operators, as well as the shipbuilding and equipment manufacturing industries, in the timely planning of their operations; and the need to encourage the early installation of ballast water management systems,

HAVING CONSIDERED, at its sixty-seventh session, the recommendation made by the Ballast Water Review Group,

1        AGREES that a comprehensive and exhaustive review of Guidelines (G8) should be undertaken by the Organization and the review of Guidelines (G8) should commence as soon as possible and before the Convention enters into force. The review as a minimum should address the issues contained in the annex to this resolution;

2 AGREES to consider the legal status of the future revised *Guidelines for approval of ballast water management systems (G8)*, including identifying requirements for mandatory application and prepare for the needed legal actions by the Parties to the Convention;

3 AGREES that the existing Guidelines (G8) should continue to apply until the adoption of revised Guidelines (G8), following completion of the review, and Parties to the Convention should ensure the Guidelines are fully adhered to by their approved test facilities;

4 AGREES that "first generation" type-approved ballast water management systems, installed in good faith prior to the Convention entering into force and before the Guidelines (G8) have been reviewed and revised Guidelines (G8) adopted, should be considered acceptable (grandfathered) for the life of the ship, and for port State control purposes a new category of 'gross non-compliance' will be defined for application to these systems, in order to allow for some variation in treatment efficacy during normal operation;

5 AGREES that the agreed "trial period" moratorium on non-compliance penalties associated with the *Guidance on ballast water sampling and analysis for trial use in accordance with the BWM Convention and Guidelines (G2) (BWM.2/Circ.42)* should be viewed as an experience-building phase and, therefore, during the agreed fixed period moratorium, associated penalties should be limited to instances of deliberate non-compliance;

6 AGREES, as soon as possible following entry into force of the Convention, to review Article 9 "Inspection of ships" with respect to paragraph 1(c) concerning the provision for sampling ship's ballast water during inspection and to consider its relocation under paragraph 2 of the same Article relating to actions determined following "clear grounds". Noting that such a review and possible amendment is intended to demonstrate the real intent of the Convention relating to inspection of ships is firstly that inspection for compliance should start with the type approval of the ballast water management system and records of its correct operation and that only after "clear grounds" for non-compliance have been established should sampling of ballast water by port State control be necessary or appropriate;

7 AGREES to re-enforce through the issuance of an appropriate MEPC circular that the port State control regime is intended to monitor the diligent application of the Convention provisions and it is not intended to penalize owners who in good faith have fitted and conscientiously operated type-approved equipment correctly.

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## ANNEX

### **Review of the Guidelines (G8) - Minimum issues to be addressed**

1 **Testing being performed using fresh, brackish and marine waters** – noting the present requirement is for testing to be performed with two test waters with a salinity differential of at least 10 PSU and in effect this means that testing in fresh water can be avoided. Noting also that certain freshwater organisms, such as copepods, can be more resistant to some treatment processes now commonly applied in ballast water management systems than marine water organisms, the need is therefore for the full range of salinities, which are commonly encountered during normal ship trading, to be represented to provide assurance that the system will continue to work correctly in waters of all salinities.

2 **Testing considering the effect of temperature in cold and tropical waters on operational effectiveness and environmental acceptability** – noting that BWMS have been withdrawn from the market due to residual toxicity in cold water, which was not detected during the type approval (TA) testing conducted with temperate water. The possibility of residual toxicity following a chemical treatment in cold waters cannot be discounted and therefore should be considered in the review. Additionally the efficacy of operation in both cold and tropical waters needs to be verified.

3 **Specification of standard test organisms for use in testing** – test organisms shall challenge the treatment process. A serious concern is that some test facilities, for convenience due to test site location, select organisms with either a high natural mortality or low resistance to disturbance. It is essential that the treatment efficacy is sufficiently challenged to provide a real life operating scenario.

4 **Challenge levels set with respect to suspended solids in test water** – noting challenge levels shall be realistic, consideration of levels of clay silt and the content of Total Suspended Solids (TSS) in the test water and the need for levels to be increased needs to be taken into account. Noting further that it has been found in practice that some filtration systems forming an integral part of the BWMS cannot cope with conditions prevalent in a number of areas, particularly where heavily contaminated river estuaries are also port locations. Considering many BWMS inherently rely on the efficiency of the filtration for efficacy of treatment, the filtration phase shall be realistically challenged under conditions reflecting the worst case real life scenarios that may be encountered.

5 **TA testing discounting test runs in the full-scale testing that do not meet the D-2 standard and the results of test runs being "averaged"** – Currently permitted, both practices should cease. If a system under test fails the treatment efficacy requirements at any time, then it should not be granted TA noting that this is a root cause of concern as the present allowances provide an opportunity for systems that cannot reliably maintain the D-2 efficacy requirements to gain TA. Application of the same requirements to test runs that fail the efficacy criteria that are discounted due to not meeting the control water validity criteria should also be considered during the review.

6 **TA testing realistically representing the flow rates the system is approved for** – Testing should include the verification of continued effectiveness during low ballast water flow rates as a BWMS will be required to operate effectively at both full flow and reduced flow rates the latter being the case typically when topping off ballast tanks and fine adjusting the ballast condition en route.