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DISCLAIMER

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**CONSIDERATION AND ADOPTION OF AMENDMENTS
TO MANDATORY INSTRUMENTS**

Report of the Drafting Group on Amendments to Mandatory instruments (Part II)

INTRODUCTION

1 The Drafting Group on Amendments to Mandatory Instruments (Part II) met on Thursday, 14 July 2011 to address the first part of its Terms of Reference and on Friday, 15 July 2011 the second part, under the Chairmanship of Dr. Phillip Belcher (Bahamas).

2 The Drafting Group was attended by delegates from Antigua and Barbuda, Australia, Brazil, Canada, Chile, China, Cook Islands, Denmark, France, Germany, Japan, Malta, Marshall Islands, New Zealand, Netherlands, Norway, Panama, Poland, Russian Federation, Saudi Arabia, Singapore, South Africa, Sweden, United Kingdom, the United States, Vanuatu, European Commission (EC), BIMCO, International Association of Classification Societies (IACS), International Chamber of Shipping (ICS), Oil Companies International Marine Forum (OCIMF), Community of European Shipyards' Associations (CESA), Society of International Gas Tanker and Terminal Operators Limited (SIGITTO), International Parcel Tankers Association (IPTA), and Clean Shipping Coalition (CSC).

TERMS OF REFERENCE, PART I

3 The Drafting Group was instructed to consider the drafting issues addressed in documents MEPC 62/6/5, MEPC 62/6/12 and MEPC 62/6/26, taking into account comments and decisions made in plenary, and to:

- .1 review and finalize the specific paragraphs of MEPC 62/6/3 referenced to it in documents MEPC 62/6/5, MEPC 62/6/12 and MEPC 62/6/26 referred to it by the plenary for the proposed amendments to MARPOL Annex VI (inclusion of regulations on energy efficiency for ships); and
- .2 submit a written report to plenary on Friday, 15 July 2011.

TERMS OF REFERENCE, PART II

4 The Drafting Group was instructed to, using MEPC/WP.11/Add.1 as a basis, make the following changes:

- .1 include the issues raised by Vanuatu in document MEPC 62/6/23 and ICS in document MEPC 62/6/24 on the review period;
- .2 delete the insertion made in MEPC/WP.11/Add.1 in Regulation 19.4 as proposed in document MEPC 62/6/12 by CESA; and
- .3 insert the paragraphs of MEPC/WP.16 into the draft proposal amendments set out in annex to MEPC/WP.11/Add.1.

WORK OF THE DRAFTING GROUP

Thursday, 14 July

5 Working strictly in compliance with the group's terms of reference, the specific paragraphs referred to it by the plenary were finalised, as detailed in the annex. It should be noted that the group did not work on any other issues which had not been referred to it.

6 With respect to the amendments proposed in document MEPC62/6/26 (Germany), the group identified some consequential amendments to the definitions. Consequentially, the group finalised the definitions. Similarly, when reviewing the major conversions, a consequential minor amendment was identified within Regulation 5. The group agreed to this minor change.

7 Two issues relating to the paper MEPC62/6/5 (Australia et al) should be highlighted:

- .1 in relation to issue 14 Equivalence, the group were of the view that there was no need for a direct reference to be made to regulation 21 as Regulation 4 implicitly allowed for such equivalences, to the extent applicable; and
- .2 with regard to issue 15 Clarification of the term "substantially", the group believed that it did not have enough guidance from the plenary for it to progress this item.

Friday, 15 July

8 The group discussed the text contained within MEPC/WP.11/Add.1 and agreed that no changes should be made to how the phased dates (on or after X years and X months) are referenced in regulation Regulations 19.1, 19.2, 19.3 and 19.4. It should be noted that some delegations were of the opinion that for clarity, the Secretariat would be able to amend the text by inserting a calendar date at a later stage.

ACTION REQUESTED OF THE COMMITTEE

9 The Committee is invited to approve the report in general, take action as appropriate and in particular, to consider with a view to adoption the draft amendments to MARPOL Annex VI on inclusion of a new Chapter 4 on energy efficiency of ships (annex to this document).

ANNEX

DRAFT AMENDMENTS TO REGULATIONS ON ENERGY EFFICIENCY FOR SHIPS OF THE REVISED MARPOL ANNEX VI

Additional proposed amendments to draft regulatory text in documents submitted to MEPC 62

CHAPTER 1

GENERAL

Regulation 2

Definitions

2 Paragraph 21 is amended as follows:

"21 *Tanker* in relation to regulation 15 means an oil tanker as defined in regulation 1 of Annex I or a chemical tanker as defined in regulation 1 of Annex II of the present Convention."

3 The following is added at the end of regulation 2:

"For the purpose of Chapter 4:

22 "Existing ship" means a ship which is not a new ship.

23 "New ship" means a ship:

.1 for which the building contract is placed on or after [1 January 2013]; or

.2 in the absence of a building contract, the keel of which is laid or which is at a similar stage of construction on or after [1 July 2013]; or

.3 the delivery of which is on or after [1 July 2015].

24 "Major Conversion" means in relation to Chapter 4 a conversion of a ship:

.1 which substantially alters the dimensions, carrying capacity or engine power of the ship; or

.2 which changes the type of the ship; or

.3 the intent of which in the opinion of the Administration is substantially to prolong the life of the ship; or

- .4 which otherwise so alters the ship that, if it were a new ship, it would become subject to relevant provisions of the present Convention not applicable to it as an existing ship; or
- .5 which substantially alters the energy efficiency of the ship and includes any modifications that could cause the ship to exceed the applicable required EEDI as set out in regulation 21.
- 25 "Bulk carrier" means a ship which is intended primarily to carry dry cargo in bulk, including such types as ore carriers as defined in SOLAS Chapter XII, regulation 1, but excluding combination carriers.
- 26 "Gas tanker" means a cargo ship constructed or adapted and used for the carriage in bulk of any liquefied gas.
- 27 "Tanker" in relation to Chapter 4 means an oil tanker as defined in MARPOL Annex I, regulation 1 or a chemical tanker or an NLS tanker as defined in MARPOL Annex II, regulation 1.
- 28 "Container ship" means a ship designed exclusively for the carriage of containers in holds and on deck.
- 29 "General cargo ship" means a ship with a multi-deck or single deck hull designed primarily for the carriage of general cargo. This definition excludes specialized dry cargo ships, which are not included in the calculation of reference lines for general cargo ships, namely livestock carrier, barge carrier, heavy load carrier, yacht carrier, nuclear fuel carrier.
- 30 "Refrigerated cargo carrier" means a ship designed exclusively for the carriage of refrigerated cargoes in holds.
- 31 "Combination carrier" means a ship designed to load 100% deadweight with both liquid and dry cargo in bulk.
- 32 "Passenger ship" means a ship which carries more than 12 passengers.
- 33 "Ro-ro cargo ship (vehicle carrier)" means a multi deck roll-on-roll-off cargo ship designed for the carriage of empty cars and trucks.
- 34 "Ro-ro cargo ship" means a ship designed for the carriage of cargo transportation units.
- 35 "Ro-ro passenger ship" means a passenger ship with roll-on-roll-off cargo spaces.
- 36 "Attained EEDI" is the EEDI value achieved by an individual ship in accordance with regulation 20 of Chapter 4 .
- 37 "Required EEDI" is the maximum value of attained EEDI that is allowed by regulation 21 of Chapter 4 for the specific ship type and size."

CHAPTER 2

SURVEY, CERTIFICATION AND MEANS OF CONTROL

Regulation 5

Surveys

5 Paragraph 1 is amended as follows:

"1 Every ship of 400 gross tonnage and above and every fixed and floating drilling rig and other platforms shall to ensure compliance with Chapter 3 be subject to the surveys specified below:

- .1 An initial survey before the ship is put into service or before the certificate required under regulation 6 of this Annex is issued for the first time. This survey shall be such as to ensure that the equipment, systems, fittings, arrangements and material fully comply with the applicable requirements of Chapter 3;
- .2 A renewal survey at intervals specified by the Administration, but not exceeding five years, except where regulation 9.2, 9.5, 9.6 or 9.7 of this Annex is applicable. The renewal survey shall be such as to ensure that the equipment, systems, fittings, arrangements and material fully comply with applicable requirements of Chapter 3;
- .3 An intermediate survey within three months before or after the second anniversary date or within three months before or after the third anniversary date of the certificate which shall take the place of one of the annual surveys specified in paragraph 1.4 of this regulation. The intermediate survey shall be such as to ensure that the equipment and arrangements fully comply with the applicable requirements of Chapter 3 and are in good working order. Such intermediate surveys shall be endorsed on the IAPP Certificate issued under regulation 6 or 7 of this Annex;
- .4 An annual survey within three months before or after each anniversary date of the certificate, including a general inspection of the equipment, systems, fittings, arrangements and material referred to in paragraph 1.1 of this regulation to ensure that they have been maintained in accordance with paragraph 5 of this regulation and that they remain satisfactory for the service for which the ship is intended. Such annual surveys shall be endorsed on the IAPP Certificate issued under regulation 6 or 7 of this Annex; and
- .5 An additional survey either general or partial, according to the circumstances, shall be made whenever any important repairs or renewals are made as prescribed in paragraph 5 of this regulation or after a repair resulting from investigations prescribed in paragraph 6 of this regulation. The survey shall be such as to ensure that the necessary repairs or renewals have been

effectively made, that the material and workmanship of such repairs or renewals are in all respects satisfactory and that the ship complies in all respects with the requirements of Chapter 3."

6 Paragraph 2 is amended as follows:

"2 In the case of ships of less than 400 gross tonnage, the Administration may establish appropriate measures in order to ensure that the applicable provisions of Chapter 3 are complied with."

7 New paragraph 4 is added after existing paragraph 3 as follows:

"4 Ships to which Chapter 4 applies shall also be subject to the surveys specified below, [taking into account Guidelines adopted by the Organization¹]:

- .1 an initial survey before a new ship is put in service and before the International Certificate on the Energy Efficiency of the Ship is issued. The survey shall verify that the ship's attained EEDI is in accordance with the requirements in Chapter 4, and that the SEEMP required by regulation 22 is on board;
- .2 a general or partial survey, according to the circumstances, after a major conversion of a ship to which this regulation applies. The survey shall ensure that the attained EEDI is recalculated as necessary and meets the requirement of regulation 21, with the reduction factor applicable to the ship type and size of the converted ship in the phase corresponding to the date of contract or keel laying or delivery determined for the original ship in accordance with regulation 2.23; and
- .3 in cases where the major conversion of a new or existing ship is so extensive that the ship is regarded by the Administration as a newly constructed ship, the Administration shall determine the necessity of an initial survey on attained EEDI. Such a survey, if determined necessary, shall ensure that the attained EEDI is calculated and meets the requirement of regulation 21, with the reduction factor applicable corresponding to the ship type and size of the converted ship at the date of the contract of the conversion, or in the absence of a contract, a commencement date of the conversion. The survey shall also verify that the SEEMP required by regulation 22 is on board."
- .4 For existing ships, the verification of the requirement to have a SEEMP on board according to regulation 22 shall take place at the intermediate or renewal survey, whichever is the first, after the entry into force of this Chapter, identified in paragraph 1 of this regulation.

8 Paragraph 4 is renumbered paragraph 5.

9 Paragraph 5 is renumbered paragraph 6.

¹ Refer to Guidelines on Survey and Certification of the Energy Efficiency Design Index.

Regulation 6

Issue or endorsement of a Certificate

10 The heading is amended as follows:

"Issue or endorsement of Certificates"

11 The following sub-heading is added at the beginning of the regulation:

"International Air Pollution Prevention Certificate"

12 Paragraph 2 is amended as follows:

"2 A ship constructed before the date of entry into force of Annex VI shall be issued with an International Air Pollution Prevention Certificate in accordance with paragraph 1 of this regulation no later than the first scheduled dry-docking after the date of such entry into force, but in no case later than three years after this date."

13 The following is added at the end of the regulation:

"International Energy Efficiency Certificate

4 An International Energy Efficiency Certificate for the ship shall be issued after a survey in accordance with the provisions of regulation 5.4 to any ship of 400 gross tonnage and above before that ship may engage in voyages to ports or offshore terminals under the jurisdiction of other Parties.

5 The certificate shall be issued or endorsed either by the Administration or any organization duly authorized by it². In every case, the Administration assumes full responsibility for the certificate."

Regulation 10

Port State Control on Operational Requirements

21 A new paragraph is added at the end of the regulation as follows:

"5 In relation to Chapter 4, any port State inspection shall be limited to verifying, when appropriate, that there is a valid International Energy Efficiency Certificate on board, in accordance with article 5 of the Convention."

22 A new Chapter 4 is added at the end of the Annex as follows:

² Refer to the Guidelines for the authorization of organizations acting on behalf of the Administration, adopted by the Organization by resolution A.739(18), as may be amended by the Organization, and the Specifications on the survey and certification functions of recognized organizations acting on behalf of the Administration, adopted by the Organization by resolution A.789(19), as may be amended by the Organization.

"CHAPTER 4

REGULATIONS ON ENERGY EFFICIENCY FOR SHIPS

Regulation 19

Application

- 1 This Chapter shall apply to all ships of 400 gross tonnage and above.
- 2 The provisions of this Chapter shall not apply to:
 - .1 ships solely engaged in voyages within waters subject to the sovereignty or jurisdiction of the State the flag of which the ship is entitled to fly. However, each Party should ensure, by the adoption of appropriate measures, that such ships are constructed and act in a manner consistent with Chapter 4, so far as is reasonable and practicable.
 - 3 Regulation 20 and regulation 21 shall not apply to ships which have diesel-electric propulsion, turbine propulsion or hybrid propulsion systems.
 - 4 Notwithstanding the provisions of paragraph 1 of this regulation, the Administration may waive the requirement for a ship of 400 gross tonnage and above from complying with regulation 20 and regulation 21.
- 5 The provision of paragraph 4 above of this regulation shall not apply to ships of 400 gross tonnage and above:
 - .1 for which the building contract is placed 4 years on or after the entry into force date of Chapter 4; or
 - .2 in the absence of a building contract, the keel of which is laid or which is at a similar stage of construction on or after 4 years and 6 months after the entry into force of Chapter 4; or
 - .3 the delivery of which is on or after 6 years and 6 months after the entry into force of Chapter 4; or
 - .4 in cases of the major conversion of a new or existing ship as defined in regulation 2.24 of Chapter 1, 4 years upon or after the entry into force date of Chapter 4, and in which regulation 5.4.2 and regulation 5.4.3 of Chapter 2 apply.
- 6 The Administration of a Party to the present Convention which allows application of paragraph 4, or suspends, withdraws or declines the application of that paragraph, to a ship entitled to fly its flag shall forthwith communicate to the Organization for circulation to the Parties to the present Protocol particulars thereof, for their information.

Regulation 20

Attained Energy Efficiency Design Index (Attained EEDI)

- 1 The attained EEDI shall be calculated for:
 - .1 each new ship;
 - .2 each new ship which has undergone a major conversion; and
 - .3 each new or existing ship which has undergone a major conversion, that is so extensive that the ship is regarded by the Administration as a newly constructed ship

which falls into one or more of the categories in regulation 2.25 to 2.35. The attained EEDI shall be specific to each ship and shall indicate the estimated performance of the ship in terms of energy efficiency, and be accompanied by the technical file that contains the information necessary for the calculation of the attained EEDI and that shows the process of calculation. The attained EEDI shall be verified, based on the technical file, either by the Administration or by any organization³ duly authorized by it.

- 2 The attained EEDI shall be calculated taking into account guidelines⁴ developed by the Organization.

Regulation 21

Required EEDI

- 1 For each:
 - .1 new ship;
 - .2 new ship which has undergone a major conversion; and
 - .3 new or existing ship which has undergone a major conversion that is so extensive that the ship is regarded by the Administration as a newly constructed ship

which falls into one of the categories defined in regulation 2.25 to 2.31 and to which this Chapter is applicable, the attained EEDI shall be as follows:

³ Refer to the Guidelines for the authorization of organizations acting on behalf of the Administration, adopted by the Organization by resolution A.739(18), as may be amended by the Organization, and the Specifications on the survey and certification functions of recognized organizations acting on behalf of the Administration, adopted by the Organization by resolution A.789(19), as may be amended by the Organization.

⁴ Guidelines on the method of calculation of the Energy Efficiency Design Index for new ships.

$$\text{Attained EEDI} \leq \text{Required EEDI} = (1-X/100) \times \text{Reference line value}$$

where X is the reduction factor specified in Table 1 for the required EEDI compared to the EEDI Reference line.

2 For each new and existing ship that has undergone a major conversion which is so extensive that the ship is regarded by the Administration as a newly constructed ship, the attained EEDI shall be calculated and meet the requirement of paragraph 21.1 with the reduction factor applicable corresponding to the ship type and size of the converted ship at the date of the contract of the conversion, or in the absence of a contract, the commencement date of the conversion.

Table 1 Reduction factors (in percentage) for the EEDI relative to the EEDI Reference line

<u>Ship Type</u>	<u>Size</u>	<u>Phase 0</u>	<u>Phase 1</u>	<u>Phase 2</u>	<u>Phase 3</u>
		<u>[1 Jan 2013 = 31 Dec 2014]</u>	<u>[1 Jan 2015 = 31 Dec 2019]</u>	<u>[1 Jan 2020 = 31 Dec 2024]</u>	<u>[1 Jan 2025 and onwards]</u>
<u>Bulk Carrier</u>	<u>20,000 DWT and above</u>	<u>0</u>	<u>10</u>	<u>20</u>	<u>30</u>
	<u>10,000 – 20,000 DWT</u>	<u>n/a</u>	<u>0-10*</u>	<u>0-20*</u>	<u>0-30*</u>
<u>Gas tanker</u>	<u>10,000 DWT and above</u>	<u>0</u>	<u>10</u>	<u>20</u>	<u>30</u>
	<u>2,000 – 10,000 DWT</u>	<u>n/a</u>	<u>0-10*</u>	<u>0-20*</u>	<u>0-30*</u>
<u>Tanker</u>	<u>20,000 DWT and above</u>	<u>0</u>	<u>10</u>	<u>20</u>	<u>30</u>
	<u>4,000 – 20,000 DWT</u>	<u>n/a</u>	<u>0-10*</u>	<u>0-20*</u>	<u>0-30*</u>
<u>Container ship</u>	<u>15,000 DWT and above</u>	<u>0</u>	<u>10</u>	<u>20</u>	<u>30</u>
	<u>10,000 – 15,000 DWT</u>	<u>n/a</u>	<u>0-10*</u>	<u>0-20*</u>	<u>0-30*</u>
<u>General Cargo ships</u>	<u>15,000 DWT and above</u>	<u>0</u>	<u>10</u>	<u>15</u>	<u>30</u>
	<u>3,000 – 15,000 DWT</u>	<u>n/a</u>	<u>0-10*</u>	<u>0-15*</u>	<u>0-30*</u>
<u>Refrigerated cargo carrier</u>	<u>5,000 DWT and above</u>	<u>0</u>	<u>10</u>	<u>15</u>	<u>30</u>
	<u>3,000 – 5,000 DWT</u>	<u>n/a</u>	<u>0-10*</u>	<u>0-15*</u>	<u>0-30*</u>
<u>Combination carrier</u>	<u>20,000 DWT and above</u>	<u>0</u>	<u>10</u>	<u>20</u>	<u>30</u>
	<u>4,000 – 20,000 DWT</u>	<u>n/a</u>	<u>0-10*</u>	<u>0-20*</u>	<u>0-30*</u>

* Reduction factor to be linearly interpolated between the two values dependent upon vessel size. The lower value of the reduction factor is to be applied to the smaller ship size.

n/a means that no required EEDI applies.]

3 The Reference line values shall be calculated as follows:

$$\text{Reference line value} = a \times b^{-c}$$

where a, b and c are the parameters given in Table 2.

Table 2 Parameters for determination of reference values for the different ship types

Ship type defined in regulation 1	a*	b	c*
2.25 Bulk carrier		DWT of the ship	
2.26 Gas tanker		DWT of the ship	
2.27 Tanker		DWT of the ship	
2.28 Container ship		DWT of the ship	
2.29 General cargo ship		DWT of the ship	
2.30 Refrigerated cargo carrier		DWT of the ship	
2.31 Combination carrier		DWT of the ship	

* to be developed by the IMO Secretariat prior to adoption.

4 If the design of a ship allows it to fall into more than one of the above ship type definitions, the required EEDI for the ship shall be the most stringent (the lowest) required EEDI.

5 For each ship to which this regulation applies, the installed propulsion power shall not be less than the propulsion power needed to maintain the manoeuvrability of the ship under adverse conditions as defined in the guidelines to be developed by the Organization.

6 At the beginning of Phase 1 and at the midpoint of phase 2, the Organization shall review the status of technological developments and, if proven necessary, amend the time periods, the EEDI reference line parameters for relevant ship types and reduction rates set out in this regulation.

Regulation 22

Ship Energy Efficiency Management Plan (SEEMP)

1 Each ship shall keep on board a ship specific Ship Energy Efficiency Management Plan (SEEMP). This may form part of the ship's Safety Management System (SMS).

2 The SEEMP shall be developed taking into account guidelines adopted by the Organization.

Regulation 23

Promotion of technical co-operation and transfer of technology relating to the improvement of energy efficiency of ships

1 Administrations shall, in co-operation with the Organization and other international bodies, promote and provide, as appropriate, support directly or through the Organization to States, especially developing States, that request technical assistance.

2 The Administration of a Party shall co-operate actively with other Parties, subject to its national laws, regulations and policies, to promote the development and transfer of technology and exchange of information to States which request technical assistance, particularly developing States, in respect of the implementation of measures to fulfil the requirements of Chapter 4 of this annex, in particular regulation 19.4 – 19.6.
