



MARINE ENVIRONMENT PROTECTION  
COMMITTEE  
61st session  
Agenda item 5

MEPC 61/5/11  
23 July 2010  
Original: ENGLISH

## **REDUCTION OF GHG EMISSIONS FROM SHIPS**

### **Comments on the report of the Intersessional Meeting of the Working Group on Energy Efficiency Measures for Ships**

**Submitted by the International Chamber of Shipping (ICS)**

#### **SUMMARY**

*Executive summary:* This document proposes amended draft text for definitions and calculation procedures related to the EEDI, to provide additional clarity where identified as necessary by the first Intersessional Meeting of the Working Group on Energy Efficiency Measures for Ships. Alternative proposals are made for some definitions and the calculation of appropriate allowances for shaft generators.

*Strategic direction:* 7.3

*High-level action:* 7.3.2

*Planned output:* 7.3.2.1

*Action to be taken:* Paragraph 8

*Related document:* MEPC 61/5/3

#### **Introduction**

1 The report of the first Intersessional Meeting of the Working Group on Energy Efficiency Measures for Ships (EE-WG 1) identified a number of items related to the calculation of the EEDI that are in need of clearer definition or further development. In response to a request from the EE-WG 1 for relevant submissions to MEPC 61, this document proposes new definitions for "attained EEDI" and "required EEDI" along with a revised definition of the term "dry cargo carrier". Proposals are also made relating to the calculation of appropriate allowances for shaft generators.

#### **Definition of the terms "attained EEDI" and "required EEDI"**

2 Paragraph 2.11.3 of document MEPC 61/5/3 refers to a proposal that definitions of the terms "attained EEDI" and "required EEDI" should be developed in draft regulation 1. The working group agreed that there was a need for these definitions to be developed.

3 In order to facilitate the development of these definitions, ICS proposes that draft regulation 1 (annex 1 to document MEPC 61/5/3) could be modified by the insertion of the following definitions:

- .1 "Attained EEDI" is the EEDI value actually achieved by an individual ship as verified by sea trials; and
- .2 "Required EEDI" is the maximum value of attained EEDI that is allowed by these regulations for the specific ship type and size.

#### Definition of the term $P_{ME(i)}$ in the calculation of EEDI

4 Paragraph 2.5.5.1 of annex 2 to document MEPC 61/5/3 defines  $P_{ME(i)}$  as follows:

$P_{ME(i)}$  is 75% of the rated installed power (MCR) for each main engine ( $i$ ) after having deducted any installed shaft generator(s):

$$P_{ME(i)} = 0.75 \times (MCR_{MEi} - P_{PTOi})$$

But no less than 75% of the power that the propulsion system is capable of delivering through the propulsor.

5 ICS understands that the intent of the sentence underlined above is to avoid any potential for paragraph ships where a large shaft generator (in excess of the required capacity for auxiliary power) might be installed to provide a means of artificially reducing the value calculated for the attained EEDI. ICS fully agrees with this intent. However, ICS considers that the intent is not fully achieved by the present wording.

6 The following revised text is proposed as a replacement for the underlined sentence in order to provide clarification:

"Irrespective of the maximum output of an installed shaft generator, the maximum allowable deduction of  $P_{PTOi}$  within the calculation of  $P_{ME(i)}$  is to be no more than  $P_{AE}$  as defined in 2.5.6 calculated for the normal sea load condition. The appropriate proportion of  $P_{AE}$  can then be accounted for using the  $SFC$  for the main engine.

Where power from the shaft generator is being used for cargo loads under normal seagoing conditions, (e.g., reefer containers) then these do not need to be included in the calculation.

For specialized designs, where for example, an engine is installed with a higher power output than the shaft(s) and propeller(s) are capable of delivering, then the value of  $P_{ME(i)}$  used for EEDI purposes is to be no less than 75% of the power that the propulsion system is capable of delivering through the propulsor."

**Definition of "dry cargo carrier"**

7 The definition of a dry cargo carrier in draft regulation 1.5 of annex 1 to document MEPC 61/5/3 is the definition of a bulk carrier as defined in SOLAS chapter IX, regulation 1. As it is clear that this definition is intended to refer to bulk carriers and that general cargo ships are defined separately, ICS proposes that draft regulation 1.5 should read:

*"Dry cargo carrier" is a bulk carrier which is a ship intended primarily to carry dry cargo in bulk, including such types as ore carriers and combination carriers as defined in SOLAS chapter XII, regulation 1.*

**Action requested of the Committee**

8 The Committee is invited to consider the proposals in paragraphs 3, 6 and 7 and to take action as appropriate.

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