MARINE ENVIRONMENT PROTECTION COMMITTEE
68th session
Agenda item 3

MEPC 68/3/DD
DATE
Original: ENGLISH

AIR POLLUTION AND ENERGY EFFICIENCY

International Workshop on Environmentally Friendly Ships with a view to exchange opinions of minimum propulsion power

Submitted by Japan

SUMMARY	
Executive summary:	This document provides the proceedings of the International Workshop on Environmentally Friendly Ships, which was held in Yokohama, Japan on 4th March to exchange opinions and information in relation to minimum propulsion power needed to maintain the manoeuvrability under adverse conditions.
Strategic direction:	7.3
High-level action:	7.3.2
Planned output:	7.3.2.1
Action to be taken:	Paragraph 10
Related documents:	MEPC 64/4/13; MEPC 64/INF.7; MEPC 64/4/42; MEPC 64/23; MEPC 65/4; MEPC.232(65); MEPC 66/4/10; MEPC 66/INF.25; MSC 93/21/5 MSC 93/INF.13; MEPC 67/4/16; MEPC 67/4/25; MEPC 67/INF.14; MEPC 67/INF.22; MEPC 68/3/AA; MEPC 68/3/BB and MEPC 68/INF.ZZ

Introduction

1 This document is submitted in accordance with the provisions of paragraph 6.12.5 of the Guidelines on the organization and method of work of the Maritime Safety Committee and the Marine Environment Protection Committee and their subsidiary bodies (MSC-MEPC.1/Circ.4/Rev.2) and provides comments on MEPC 67/INF.22, MEPC 68/3/AA, MEPC 68/3/BB and MEPC 68/INF.ZZ.

Background

2 At the previous session, the Committee agreed that the "2013 Interim Guidelines for determining minimum propulsion power to maintain the manoeuvrability of ship in adverse conditions" (hereinafter "the Interim Guidelines") continue to apply to ships which are subject for EEDI requirements in Phase 1 and adopted the resolution MEPC.255(67) on Amendments to the Interim Guidelines. It also noted the need to undertake further work on the Interim Guidelines at a future session (see paragraph 4.76 of MEPC 67/20). Furthermore, it was acknowledged by the Committee that a few but important research projects are being conducted by experts and stakeholders with the aim of increasing expertise and knowledge on the issue per-se, and of, if appropriate proposing the revision of the Interim Guidelines (MEPC 67/INF.14 and MEPC 67/INF.22).

3 Following the discussion at MEPC 67, Japan conducted a study on the effect of the

proposal to strengthen the Interim Guidelines given in MSC 93/21/5 and submitted the results to this session of the Committee with Denmark (MEPC 68/3/AA and MEPC 68/INF.ZZ) . Denmark and Japan also submitted a document MEPC 68/3/BB, which proposes that a thorough review should be undertaken in order to appropriately revise the Interim Guidelines and raises principle matters which should be considered by the Committee.

3 In this regard, an International Workshop on Environmentally Friendly Ships was held in Yokohama, Japan on 4th March 2015. The workshop included the introduction of the ongoing research projects by SHOPERA and JASNAOE, and also the possible effect of the revision of the Interim Guidelines proposed by Greece (MSC 93/21/5 and MSC 93/INF.13). There were active and fruitful discussions with regard to the ongoing research projects on establishing a “comprehensive” assessment method and the way how the Interim Guidelines should be revised.

4 The program of the workshop is attached as Annex of this document, and the presentation materials used in the workshop can be downloaded from the following URL (http://www.cosie.ynu.ac.jp/english/).

5 It is advised that the second workshop is to be held at Athens, Greece on 28th April. Japan expects further technical and academic discussion at the workshop which would contribute to the future revision of the Interim Guidelines.

Action requested of the Committee

6 The Committee is invited to consider the above information and take action as appropriate.

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Annex

International Workshop on Environmentally Friendly Ships

Wednesday, 4th March, 2015
Education and Culture Hall, Yokohama National University
79-5 Tokiwadai, Hodogaya-ku, Yokohama 240-8501, Japan

Organized by Yokohama National University, Centre for Oceanic Studies and Integrated Education (YNU-COSIE)
Sponsored by ClassNK and The Nippon Foundation
Supported by Ministry of Land, Infrastructure, Transport and Tourism of Japan (MLIT), National Technical University of Athens, The Japan Association of Naval Architects and Ocean Engineers (JASNAOE) The Shipbuilders' Association of Japan (SAJ)

10:00 Registration

10:20～10:40 Opening Remarks, latest IMO discussion on this topic
Mr. Koichi Yoshida
Visiting Professor, Center for Oceanic Studies and Integrated Education (COSIE), Yokohama National University (YNU)
(Summary)
MARPOL EEDI regulation requires ships to have propulsion power sufficient enough for maintaining the manoeuvrability of the ship under adverse sea conditions. This presentation reports the discussion at IMO on this regard.

10:40～11:40 Keynote Speech "Progress Report of SHOPERA project in EU"
Dr. Apostolos Papanikolaou
Professor, National Technical University of Athens
(Summary)
SHOPERA was launched in 2013 and its object is to develop new guidelines for the required minimum propulsion power and steering performance to maintain manoeuvrability in adverse conditions and submit to IMO a summary of results and recommendation for further consideration. In this speech, the latest progress is introduced.

11:40～12:10 "Japanese research project on maneuvering motion in waves and minimum power requirements of ships"
Dr. Hironori Yasukawa Professor, Hiroshima University
(Summary)
Activity of the Strategy Research Committee on the minimum propulsion power established by the Japan Society of Naval Architects and Ocean Engineers (JASNAOE) is introduced.

12:10～12:40 "Examination of guidelines for determining minimum propulsion power inn light of model experiment"
Dr. Naoya Umeda Associate Professor, Osaka University
(Summary)

Examination of the level 2 simplified assessment in Interim Guidelines for determing minimum propulsion power based on the model experiment is introduced.

12:40～14:00 Lunch (sponsored by ClassNK)

14:00～14:30 "Minimum propulsion power for ship safe operation under adverse weather conditions"

Dr. G.J. Grigoropoulos (by document)
Professor, National Technical University of Athens

(Summary)

This presentation refers to safety aspects of the interim minimum propulsion power requirement guidelines and makes proposals to improve (strengthen) the minimum propulsion power requirement, taking into consideration of maintaining manoeuvrability under adverse weather conditions as in the IMO document MSC93/21/5.

14:30～15:10 "A study on the 2013 Interim Guidelines for determining minimum propulsion power to maintain the manoeuvrability of ships in adverse conditions"

Mr. Kunihiko Kitabayashi MLIT Japan, and
Dr. Ryuji Miyake ClassNK

(Summary)

Taking into account of the discussion at recent MEPC sessions, this presentation introduces some technical issues to be further considered about the Interim Guidelines as well as consideration of the proposed revision of the Guidelines.

15:10～15:30 Coffee Break

15:30～16:00 "Impact of strengthening minimum propulsion power on ship design"

Mr. Ko Koiso The Shipbuilders' Association of Japan (SAJ)

(Summary)

This presentation introduces the influence for ship design by the proposed stricter minimum propulsion power requirement and shows examples of trial design for typical ship types.

16:00～17:10 Panel Discussion

Moderator: Mr. Koichi Yoshida
Presenters, and Prof. Naoji Toki and My. Kazuyoshi Hirota

Exchange views on the topics on the Interim Guidelines as well as the schedule for the revision work of it. Submitting a comment paper to IMO to report this WS result will be considered.

17:10～17:20 Closing Remarks

Dr. Hiroyuki Matsuda
Professor, Director of Center for Oceanic Studies and Integrated Education (COSIE), Yokohama National University (YNU)

17:30～19:30 Reception（sponsored by ClassNK）

Presentation Information: Yokohama National University COSIE at http://www.cosie.ynu.ac.jp/english/
