



Dienststelle Schiffssicherheit BG Verkehr

ISM-Circular No.: 02/2012

- Subject:** MARPOL Annex VI - Ship Energy Efficiency Management System
- Rule**
- Reference:**
- ISM Code 1.2.3
 - Res./MEPC.203(62) Amendments to MARPOL Annex VI
 - Res./MEPC.213(63) Guidelines for the development of a Ship Energy Efficiency Management Plan (SEEMP)
- Remark:** This circular needs not be carried on board of ships
- Date:** 17.04.2012

Preamble

During the 62. Session of the Marine Environment Protection Committee of the IMO in July 2011 new regulations for the reduction of greenhouse gas emissions were adopted. By inserting a fourth chapter in MARPOL Annex VI, an Energy Efficiency Design Index (EEDI) has been introduced, which is applicable to new ships with a keel-laying date on or after 01.07.2013. This index describes the emission of CO₂ of new ships per tonne of cargo and one nautical mile. Beside the introduction of the EEDI, the responsible companies are obliged to establish a Ship Energy Efficiency Management Plan (SEEMP) for their ships, which needs to be kept on board permanently. However, whereas the introduction of the EEDI is only applicable to ships which are keel-laid on or after 01.07.2013, the requirement of a SEEMP is also applicable to existing ships already from 01.01.2013.

Since the latter is an organizational measure to protect the environment, which therewith has a direct connection with the safety management system according to the ISM-Code, this circular only addresses the SEEMP.

Ships Energy Efficiency Management Plan (SEEMP)

Survey, certification and verification

The requirement to provide a SEEMP on board concerns all **new ships** of 400 gross tonnage and more,

- for which the building contract is placed on or after 01.01.2013,
- which were keel-laid on or after 01.07.2013, or
- which were delivered on or after 01.07.2015.

Existing ships of 400 gross tonnage or more need to comply with the requirements at the date of the first intermediate or renewal survey for the Air Pollution Prevention Certificate (IAPP) on or after 01.01.2013. This means that it will be verified during the relevant survey that a SEEMP is provided on board.

If the ship complies with the requirements, an International Energy Efficiency Certificate (IEEC) will be issued, which will be valid throughout the life of the ship. The certificate ceases to be valid, if the ship is withdrawn from service, a new certificate is issued following a major conversion of the ship or upon change of flag.

MARPOL Annex VI particularly lays down that Port State inspections considering the new chapter 4 of MARPOL Annex VI shall be limited to verify whether there is a valid IEEC on board.

Development of a SEEMP

As with each other management system the respective steps *planning, implementation, monitoring and self-evaluation and improvement* are components of a continuous circle that may lead to a permanent improvement of energy management.

During the *planning* phase the possible measures should be identified, by which an efficient energy management may be achieved, e.g.

- ship specific measures: speed optimization, weather-routeing, maintenance of hull, and others,
- personnel specific measures: motivation, training.

During the *implementation* phase appropriate procedures for realization of the identified measures should be prepared, appropriately qualified persons should be appointed and an appropriate documentation should be ensured.

For the *monitoring* of the energy efficiency criteria should be determined, with which a continuous development of the energy management is observable. The IMO recommends using the Energy Efficiency Operational Indicator (EEOI) as a parameter. An appropriate guideline for the calculation of the EEOI was established and published with MEPC.1/Circ.684. However, every company is free to develop a monitoring tool on their own which is the most practical.

A *self-evaluation* of the measures should be carried out periodically with regard to effectiveness and potential *improvement*. The SEEMP should contain an appropriate procedure.

The SEEMP may be included in the company's safety management system because of the systematic overlapping.

The IMO has released a guideline to support the companies concerned. This guideline (Resolution MEPC.213(63) *Guidelines for the development of a Ship Energy Efficiency Management Plan*) is attached to this circular.

Action required

This circular and the documents attached are intended to advise companies in developing a SEEMP. Companies concerned are requested to note these documents.

For further questions to the new regulations concerning energy efficiency in shipping please contact the department ship machinery/engineering of the Dienststelle Schiffssicherheit, (Tel. 040 / 36 137 – 217).

You can find this circular, IMO-Resolution MEPC.203(62) and Resolution MEPC.213(63) on our homepage:

<http://www.bg-verkehr.de/service/downloads/dienststelle-schiffssicherheit/ism/uebersicht-ism-rundschreiben-und-ism-info-mails>

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