

The Shipboard Energy Efficiency Management Plan (SEEMP)

IACS Secretary General – Robert Ashdown

The Shipboard Energy Efficiency Management Plan (SEEMP)

History

- A SEEMP has been required from 1 January 2013 (Resolution MEPC.203(62)) – MARPOL Annex VI, regulation 22.
- Applicable to ships of 400 GT and above.
- No SEEMP approval is currently required
- “The SEEMP shall be developed taking into account guidelines adopted by the Organization” (MARPOL Annex VI, regulation 22.2) ie 2012 Guidelines for the development of a Ship Energy Efficiency Management Plan (resolution MEPC.213(63))
- Paragraph 3.2 of the 2012 SEEMP Guidelines states
3.2 The purpose of a SEEMP is to establish a mechanism for a company and/or a ship to improve the energy efficiency of a ship's operation. Preferably, the ship-specific SEEMP is linked to a broader corporate energy management policy for the company that owns, operates or controls the ship, recognizing that no two shipping companies are the same, and that ships operate under a wide range of different conditions.”

SEEMP and IMO Data collection system for fuel oil consumption

MEPC 70 (October 2016) Developments

- **Resolution MEPC.278(70) - Amendments to MARPOL VI**

Entry into force on 1 March 2018, with the first reporting period being for the **2019 calendar year**.

Amendments include :

- SEEMPs to be updated with a methodology for the collection and reporting of data pursuant to new VI/Reg.22A; and
- Confirmation of Compliance of SEEMP to be provided by the Administration or authorised organisations by 31 December 2018

- **Resolution MEPC.282(70) - 2016 Guidelines for the development of a Ship Energy Efficiency Management Plan (SEEMP)** [supersede the 2012 SEEMP Guidelines]

SEEMP and IMO Data collection system for fuel oil consumption

Data collection system process (IMO Res. MEPC.278(70)):

For ships of 5,000 GT and above

update the SEEMP to include methodology that will be used to collect the data and the processes to report the data to the ship's Administration,

For ships of 5,000 GT and above

collect consumption data for each type of fuel oil they use, as well as the distance travelled and the hours underway.

Aggregated data will be reported to the Administration (or any Organization duly authorized by it) after the end of each calendar year. The data shall be verified according to procedures established by the Administration, taking into account guidelines to be developed by the IMO.

Issuance of a Statement of Compliance by the Administration.

Administrations (or any organization duly authorized by it) will be required to subsequently transfer this data to an IMO Ship Fuel Oil Consumption Database.

IMO will be required to produce an annual report to the MEPC, summarizing the data collected.

- Entered into force on 1 July 2015.
- Applicable to all vessels over 5,000 GT operating in EU waters for commercial purposes.
- Ship-specific CO2 **monitoring** plan submission for conformity assessment by a third-party accredited verifier by 31 August, 2017;
assessment to be completed by 31 December 2017.
- First **reporting** period is 2018 calendar year.
- **Verification** of data by an accredited verifier, submission by the Company to the EU Commission and the flag authority for each vessel by 30 April each year, and issuance by the verifier of a Document of Compliance by 30 June each year.
- Aggregated ship-specific data to be published by June 30 each year

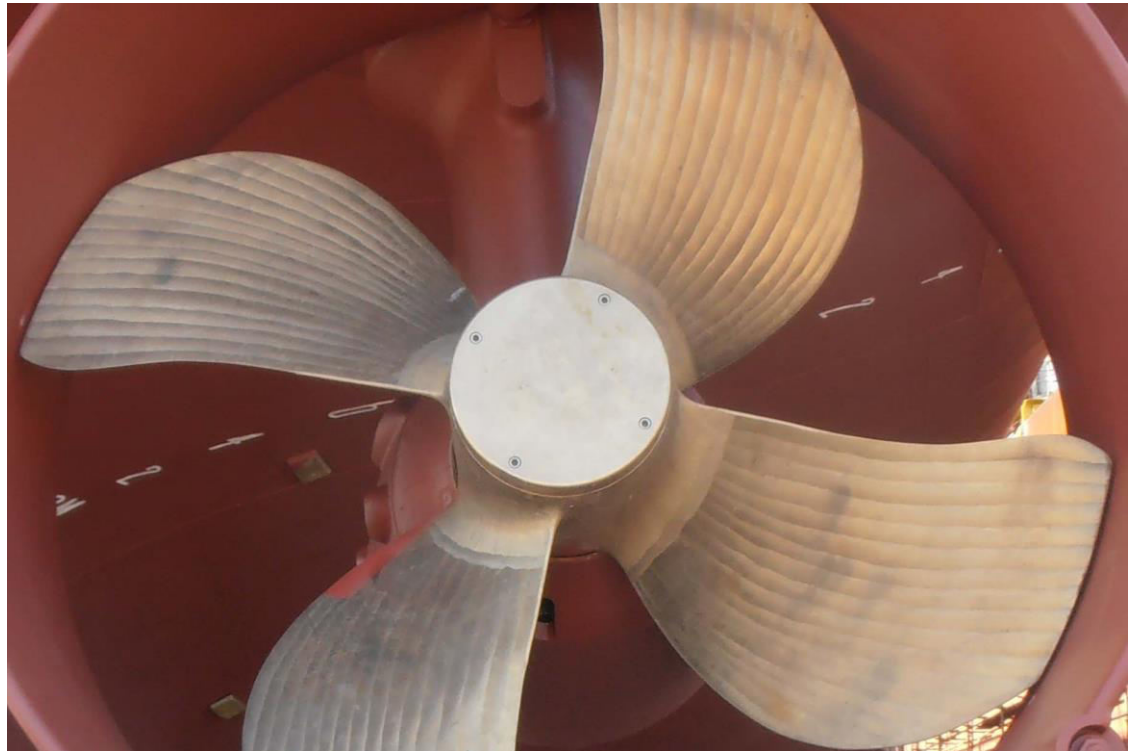
CLARIFYING MONITORING ASPECTS WHEN DEVELOPING THE SEEMP

- The 2012 Guidelines for the development of a Ship Energy Efficiency Management Plan (SEEMP) (MEPC 213(63)), provides "4.3 Monitoring", especially 4.3.4 – "continuous and consistent data collection is the foundation of monitoring"
- In the training material prepared by IMO (IMO Train the Trainer (TTT) Course on Energy Efficient Ship Operation Module 2), the following are stated
 - Monitoring is an essential element of any management cycle. It is well known that "if one cannot measure, one cannot manage". This applies to energy management system as well.
 - Monitoring to a large extent relies on data collection and data analysis over long term. Thus establishment of a data collection and analysis system is an essential part of any monitoring system.
 - To effectively analyse and make conclusions, a set of Key Performance Indicators (KPIs) need to be defined for quantitative assessment of the gathered data. As indicated, the KPIs could relate to overall ship performance (such as EEOI) or developed for each EEM.
 - Data collection and analysis, performing internal audits, energy reviews, benchmarking, etc. and so on forms the backbone of any good monitoring system.

For ROs involved in the IMO Data collection system for fuel oil consumption:

- Potential for abundance of SEEMPs to be submitted for review just prior to the start of the first reporting period.
- The Administration (or any organisation duly authorised by it) shall 'ensure' the SEEMP complies with new MARPOL Annex VI, regulation 22.2 and 'Confirmation of compliance shall be provided to and retained on board the ship' - ambiguous terms used.
 - What is the actual scope of the exercise to 'ensure' SEEMP complies (for example, check for completeness, relevance, conformity, accuracy?)

Thank you!



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