

Implementation of Shipping MRV Regulation

European Sustainable Shipping Forum
Subgroup on Shipping MRV Monitoring

Identification and assessment of possible
amendments to Annex I and II

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I Monitoring Methods

1. Overview of identified areas for best practice/ guidance

1.1. BDN (Method A): LNG Carriers: Determination of LNG consumption on loaded passage, ballast passage and at berth.

1.2. Fuel tank readings (Methods A/B): use of manual tank reading methods (e.g. in cases of electronic equipment failure)

1.4. Density: e.g. dealing with changes of density caused by mixing of fuels with different densities; impacts from returning fuels, etc.

2.10. Uncertainty of determination of fuel consumption and CO₂ emissions (1)

- The MRV Regulation requires that the monitoring plan as well as the annual emission reports need to contain information on the level of uncertainty of the monitoring method used (Annex I; Article 11 (3) (c)).
- Furthermore, according to Article 6 (3) (f) (iv), the monitoring plan needs to establish a procedure to ensure that the total uncertainty of fuel measurements is consistent with requirements of the Regulation (if they have been set).

2.10.1. International and European rules and standards

No relevant international and European rules and standards have been identified to established quantitative requirements for the **acceptable level** of uncertainty.

2.10.2 Technological and scientific developments

The state of the art of uncertainty of determination of fuel consumption and CO₂ emissions is described in relevant studies. However, no relevant technological and scientific developments have been identified.

2.10. Uncertainty of determination of fuel consumption and CO₂ emissions (2)

2.10.3. Impact on the regulation

As no relevant international and European rules and standards or technological and scientific developments could trigger amendments to Annex I, it is suggested to provide guidance on expected levels of uncertainty for the different monitoring methods including default values which could be applied in the monitoring plans.

2.10.4. Issues possibly covered by best practices and guidance

Indications for the level of uncertainty for the four relevant monitoring methods (studies suggest uncertainty levels of up to $\pm 5\%$).

2.10.5. Questions for discussion

- Do you see a need for documents on best practices and guidance regarding the uncertainty of determination of fuel consumption and CO₂ emissions?
- Could you provide anonymized data for fuel consumption measurements carried out in parallel allowing the comparisons of methods?

Summary of amendments to Annex I

2.4. Density

Triggered by ISO 3675:1998 it is recommended that the option to measure fuel density in an accredited fuel test laboratory should also be included into Methods A, C and D.

2.7. Emission factors

The exclusive use of the latest IMO emission factors was concluded. These can be found in Resolution MEPC 245 (66) 2014: Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships.

II Key elements with regard to monitoring other relevant information

Contents Part II: Key elements with regard to monitoring other relevant information

1. Distance sailed and Total time spent at sea
2. Amount of cargo carried – ro-ro ships

1. Distance Sailed and Total time spent at sea

1.0 Aim

Specifying the determination of distance sailed and total time spent at sea, while keeping the additional administrative burden to a minimum.

1.1 Impact on the regulation

The 'berth-to-berth' concept could be specified in Annex II, section A, point 1. (a).

1. Distance Sailed and Total time spent at sea

1.2 Need for guidance

- Should distance be measured through the water or over ground
- Should the following times and distances be included in the annual totals:
 - Detours for bunkering purposes
 - Distance drifting
 - Movements for tank cleaning and/or bunkering

1.2 Question for discussion

Do you see other related areas where a need for guidance exists?

2. Amount of cargo carried – ro-ro ships

International and European rules and standards

The EEOI guidelines prescribe the use of mass of the cargo for ro-ro ships,

Impact on the regulation

The current regulation includes the technical rule for determining cargo for ro-ro vessels as ‘the number of cargo units (trucks, cars, etc.) or lane-metres multiplied by default values for their weight’ In view of the above, actual mass of cargo could be added as an option.

Question for discussion

Do you agree to allow the use of actual mass of cargo as additional option?

Thank you for your input

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