

Shipping MRV Regulation proposal

A brief summary by VERIFAVIA

Background

Emissions from the global shipping industry amount to around 1 billion tonnes a year, representing 3% of the world's total greenhouse gas (GHG) emissions and 4% of the EU's total emissions. Without action, these emissions are expected to more than double by 2050.

In June 2013, the European Commission proposed a strategy for progressively integrating maritime emissions into the EU's policy for reducing its domestic GHG emissions. With several amendments, this strategy was adopted by the European Parliament in April 2014. To become law, the proposal now requires approval by the European Council.

The strategy consists in three consecutive steps:

1. Monitoring, reporting and verification of CO₂ emissions from ships
2. GHG reduction targets for the maritime transport sector
3. Further measures, including Market-Based Measures (MBM)

Applicability

The MRV regulations will apply to vessels with more than 5,000 gross tonnage with reference to the CO₂ emissions released during their voyage to or from a port located within the jurisdiction of an EU Member State.

The regulations, however, will not apply to warships, naval auxiliaries, fish catching or processing ships, wooden ships of a primitive build, ships not propelled by mechanical means and government ships used for non-commercial purposes.

As per the latest proposal, the regulation will cover only CO₂ emissions instead of greenhouse gas emissions (proposed in the regulations issued in April 2014).

Monitoring and Reporting

Companies are required to monitor and report CO₂ emissions from combustion of fuels, while the ships are at sea as well as at berth.

Company refers to the owner of the ship, or any other entity or person such as the manager or the boat charterer, who has assumed the responsibility for the operation of the ship from the ship-owner.

Monitoring Methods

The company is required to define the monitoring method it would adopt to measure the fuel consumption during each voyage. The company may use any one or a combination (if approved by the verifier) of the four monitoring methods stated below.

- Bunker Fuel Delivery Note (BDN) and periodic stocktakes of fuel tanks;
- Bunker fuel tank monitoring on board;
- Flow meters for applicable combustion processes;
- Direct emissions measurements.

Monitoring Plan

Companies shall be required to submit to the verifiers a monitoring plan by 31 August 2017 indicating the method chosen to monitor and report emissions and other relevant information for each of their ships above 5,000 GT.

For ships falling under the scope of the regulations after 31 August 2017, the company shall be required to submit a monitoring plan within two months after the first call in a port under the jurisdiction of a Member State.

Information to be provided in the Monitoring Plan

1. Identification

The monitoring plan shall include the identification of the ship including,

- the name of the ship,
- IMO identification number,
- type of the ship,
- port of registry or home port, and
- name of the owner.

2. Details of the ship manager or operator

- The monitoring plan shall include detailed contact information for the company.
- Name and address of the company,
- Telephone and e-mail address for a contact person.

3. Emission Sources

The monitoring plan shall include the description of the following five emission sources.

- Main engines,
- Auxiliary engines,
- Gas turbines,
- Boilers, and
- Inert gas generators.

4. Procedures to ensure accuracy and completeness

The monitoring plan shall include description of procedures, systems and responsibilities to

- update the list of emissions sources;
- monitor the completeness of the list of voyages; and
- monitor fuel consumption of the ship.

5. Emission Factors

The monitoring plan shall include

- single emission factors used for each type of fuel; and
- detailed methodologies used for determining emissions factors (in case of alternative fuels).

6. Record of Activity

The monitoring plan shall include the description of procedures used for determining activity data per voyage. The monitoring plan shall also include a revision history sheet to record all details of the revision history.

Modifications to the Monitoring Plan

The company shall be required to modify the monitoring plan, if

- the name of the company has changed;
- emissions occur due to a new emission source or a new fuel not contained in the existing monitoring plan;

- there is a change in the availability of data which may impact the accuracy of determination of emissions; and
- data based on a previously used monitoring methodology was found to be inaccurate.

Monitoring per-voyage basis

Each ship is required to monitor and record the following information on a per-voyage basis.

- Port of departure and port of arrival including the date and hour of departure and arrival;
- Amount and emission factor for each type of fuel consumed in total;
- CO2 emitted;
- Distance travelled;
- Time spent at sea;
- Cargo carried; and
- Transport work.

Ships shall be exempted from monitoring and recording the above stated data on a per-voyage basis, if

- All the ship's voyages during a reporting period either start or end at a single port under the jurisdiction of a Member State;
- The ship makes more than 300 voyages during the reporting period.

Such ships shall, however, be required to report aggregate data on annual basis.

Monitoring on yearly basis

A company shall monitor the following parameters for each during and for each calendar year.

- amount and emission factor for each type of fuel consumed in total;
- total aggregated CO2 emitted;
- aggregated CO2 emissions from all voyages between ports under a Member State's jurisdiction;
- aggregated CO2 emissions from all voyages which departed from ports under a Member State's jurisdiction;
- aggregated CO2 emissions from all voyages to ports under a Member State's jurisdiction;
- CO2 emissions which occurred within ports under a Member State's jurisdiction at berth;
- total distance travelled;
- total time spent at sea;
- total transport work; and
- average energy efficiency.

Transport work to be reported

- Transport work will be determined by multiplying the distance travelled with the amount of cargo carried.
- For passenger ships, the number of passengers shall be used to express cargo carried.
- For all other types of ships, cargo shall be expressed either in terms of metric tonnes or standard cubic meters, as appropriate.
- For ro-ro ships, cargo carried shall be defined as the number of cargo units (trucks, cars, etc.) or lane-meters multiplied by default values for their weight.
- For container vessels, cargo carried shall be defined as the total weight in tons of the cargo or, failing that, the amount of TEUs multiplied by default values for their weight.

Emissions Report

From 2019, companies shall be required to submit an emissions report to the European Commission and the authorities of the flag states by 30 April of each year. The emissions report has to be verified by a verified. The emissions report shall include the following parameters,

- name of ship;

- IMO identification number;
- port of registry or home port;
- technical efficiency of the ship – the Energy Efficiency Design Index (EEDI) or the Estimated Index Value (EIV);
- name of the ship owner;
- address of the ship owner and his principal place of business;
- name of the company (if not the ship owner);
- address of the company (if not the ship owner) and his principal place of business;
- address, telephone and e-mail details for a contact person;
- information on the monitoring method used and the related level of uncertainty.

The emissions report shall have to be verified by a verifier against the requirements laid down in the regulations. In case of any non-conformities, the company shall be required to correct them. If the company fails to do so the verifier shall inform the Commission that the emissions report does not comply with the requirements of the regulation.

Verification Procedures

The verifier shall identify potential risks related to the monitoring and reporting process by comparing the reported emissions and the estimated data based on ship tracking data and characteristics of installed engine power. The verifier may conduct spot-checks during the verification process to determine the reliability of reported data and information.

Document of Compliance

If the emissions report meets all requirements stated in the regulation, the verifier shall issue the document of compliance to the concerned ship. The document of compliance shall be valid for the a period of 18 months after the end of the reporting period.

By 30 June of the every year following the end of the a reporting year all ships entering or leaving EU ports or the ships that fell under the scope of the regulation during that reporting period shall be obligated to carry the document of compliance on board.

Penalties for non-compliance

- EU member states shall set up a system of penalties and and notify these provisions to the European Commission by 1 July 2017.
- Ships that fail to comply with the monitoring and reporting requirements for two or more consecutive reporting periods will be issued an expulsion order by the competent authority of the member state of the port of entry. Every member state shall then refuse entry to such a ship.
- Shipping companies shall have the right to challenge the expulsion order in a court of law.

International Cooperation

- The European Commission shall inform the IMO and other relevant international organisations about the implement of the MRV regulation.
- When an international agreement on MRV of GHG emissions from maritime transport is reached, the European Commission shall review its own MRV regulation and propose amendments if required.

Timeline

June 2013 - The Commission published its original legislative proposal to require owners of ships exceeding 5,000 GT calling at EU ports regardless of country or flag to monitor and report their ships' annual carbon dioxide (CO₂) emissions starting from 2018.

January 2014 - The ENVI Committee of the Parliament voted its report on the proposed regulation that supports the proposal but proposes to apply the regulation to ships exceeding 400 GT and to include all greenhouse gas (GHG) and not only CO₂ emissions.

June 2014 - The Parliament adopted the proposal but rejected the ENVI Committee's proposal to lower

the exemption threshold and to include other GHG emissions.

September 2014 - Inter-institutional negotiations (trilogue) between the Parliament, the Commission and the Council started with the objective to find a compromise on the regulation. Key issues are the reporting of energy efficiency index and transport work.

November 2014 - A compromise is found between the European institutions. Apart from data on CO2 emissions and distance sailed, the negotiators agreed that the regulation will also require ships to report cargo-related information.

December 2014 - The text is to be examined by the ENVI Committee on 3 December. After approval by the Committee, the Council is expected to reach a political agreement at the Environment Council meeting on 17 December, followed by the formal adoption of its common position, which should be transmitted to the Parliament.

Spring 2015 - The Parliament must vote on the agreed text at one of its plenary meetings scheduled in Spring 2015.

July 2015 - If the text is voted at the Parliament, it would enter into force on 1 July 2015.

August 2017 - Companies will have to submit to their verifier for approval a monitoring plan indicating the methodologies chosen to monitor and report emissions and other relevant information for each of their ships above 5,000 GT.

January 2018 - Companies will have to monitor fuel consumption, CO2 emissions and other cargo-related information for each ship on a per-voyage and an annual basis in accordance with the approved monitoring plan.

April 2019 - Companies will have to submit to the authority a report including CO2 emissions and other relevant information during the 2018 monitoring period for each ship under their responsibility. The report must be verified by an independent accredited verifier.

June 2019 - Ships arriving at or departing from an EU port will have to carry on-board a valid document certifying the ship's compliance with the monitoring and reporting obligations for the 2018 period. This document would be subject to inspection by MS authorities.

Next Steps

The ENVI Committee of the European Parliament shall vote on this latest proposal on 3 December 2014. If approved, the regulation shall be presented to the European Parliament for a second reading and, a consequent vote, in 2015. Entry into force is expected in July 2015.

For more information, contact shipping@verifavia.com

Verifavia is a worldwide independent accredited environmental verification, certification and auditing body for aviation (airlines and business jets), airports and maritime transport (shipping).

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