
COMMISSION DELEGATED REGULATION (EU) 2016/2071**of 22 September 2016****amending Regulation (EU) 2015/757 of the European Parliament and of the Council as regards the methods for monitoring carbon dioxide emissions and the rules for monitoring other relevant information****(Text with EEA relevance)**

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) 2015/757 of the European Parliament and of the Council of 29 April 2015 on the monitoring, reporting and verification of carbon dioxide emissions from maritime transport, and amending Directive 2009/16/EC ⁽¹⁾, and in particular Article 5(2) thereof,

Whereas:

- (1) Regulation (EU) 2015/757 lays down rules for the accurate monitoring, reporting and verification of carbon dioxide (CO₂) emissions and of other relevant information from ships arriving at, within or departing from ports under the jurisdiction of a Member State, in order to promote the reduction of CO₂ emissions from maritime transport in a cost effective manner.
- (2) Annex I to Regulation (EU) 2015/757 lays down the methods for monitoring CO₂ emissions on the basis of fuel consumption. Annex II to Regulation (EU) 2015/757 lays down the rules for ‘monitoring of other relevant information’.
- (3) Part A of Annex I to Regulation (EU) 2015/757 provides that CO₂ emissions should be calculated by multiplying emission factors and fuel consumption which is determined by monitoring methods A (BDN and periodic stock takes of fuel tanks), B (bunker fuel tank monitoring on board) and C (flow meters for applicable combustion processes) set out in Part B of that Annex. The IMO Resolution ⁽²⁾ on Guidelines on the method of calculation of the attained Energy Efficiency Design Index for new ships lays down a set of default values for emissions factors for standard fuels used on board ships. These default values can be used to calculate CO₂ emissions from shipping. Having ships apply these default values to monitor and report their CO₂ emissions in accordance with Annex I to Regulation (EU) 2015/757 ensures both a lean regulatory approach and harmonised implementation.
- (4) Monitoring methods A, B and C address the determination of fuel uplift (bunkering) or amount of fuel remaining in the tanks from volume to mass, using actual fuel density values. Pursuant to point (c) of the fifth subparagraph of paragraph 2 of Part B of Annex I, companies using monitoring method B can determine actual density on the basis of the density measured in a test analysis conducted by an accredited fuel laboratory, if available. Extending that possibility to companies using monitoring methods A and C would ensure harmonised implementation of these three monitoring methods, in line with ISO standard 3675:1998 ⁽³⁾. It would also fully reflect

industry practices and increase the comparability of fuel consumption monitored using the three methods concerned.

- (5) The ‘berth-to-berth’ concept would provide more clarity and a harmonised approach to the exact starting and ending point of voyages. This would refine the parameters used to monitor the time spent at sea and distance travelled, as specified under points (a) and (b) of paragraph 1 of Part A of Annex II to Regulation (EU) 2015/757, and reflect industry practices.
- (6) IMO Guidelines for voluntary use of the ship Energy Efficiency Operational Indicator ⁽⁴⁾ and CEN standard EN 16258 (2012) ⁽⁵⁾ provide ro-ro ships with a possibility to monitor and report cargo carried on the basis of the actual cargo mass. Adding this additional parameter to those laid down in point (e) of paragraph 1 of Part A of Annex II to Regulation (EU) 2015/757 would better reflect industry practices and therefore make monitoring easier.
- (7) In line with the Commission usual practice of consulting experts during the preparatory phase of delegated acts, a ‘Shipping MRV monitoring subgroup’ gathering experts from Member States, industry and civil society was set up under the umbrella of the European Sustainable Shipping Forum (ESSF). The subgroup identified a number of international and European standards and international rules and scientific and technical developments and recommended that they be covered by this Regulation. The subgroup's draft recommendations on these aspects were endorsed by the ESSF plenary on 28 June 2016.
- (8) Annexes I and II to Regulation (EU) 2015/757 should therefore be amended accordingly,

HAS ADOPTED THIS REGULATION:

Article 1

Annexes I and II to Regulation (EU) 2015/757 are amended in accordance with the Annex to this Regulation.

Article 2

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 22 September 2016.

For the Commission

The President

Jean-Claude JUNCKER

⁽¹⁾ OJ L 123, 19.5.2015, p. 55.

⁽²⁾ MEPC 245 (66) 2014.

⁽³⁾ ISO 3675:1998 crude petroleum and liquid petroleum products — Laboratory determination of density — Hydrometer method.

(⁴) MEPC.1/Circ.684 IMO Guidelines for voluntary use of the ship Energy Efficiency Operational Indicator.

(⁵) Methodology for calculation and declaration of energy consumption and GHG emissions of transport services (freight and passengers).

ANNEX

Annexes I and II to Regulation (EU) 2015/757 are amended as follows:

(1) Annex I is amended as follows:

(a) Part A is replaced by the following:

‘A. CALCULATION OF CO₂ EMISSIONS (ARTICLE 9)

For the purposes of calculating CO₂ emissions companies shall apply the following formula:

Fuel consumption × emission factor

Fuel consumption shall include fuel consumed by main engines, auxiliary engines, gas turbines, boilers and inert gas generators.

Fuel consumption within ports at berth shall be calculated separately.

The following default values for emission factors for fuels used on board shall be applied:

Type of fuel	Reference	Emission factor (t-CO ₂ /t-fuel)
1. Diesel/Gas oil	ISO 8217 Grades DMX through DMB	3,206
2. Light fuel oil (LFO)	ISO 8217 Grades RMA through RMD	3,151
3. Heavy fuel oil (HFO)	ISO 8217 Grades RME through RMK	3,114
4. Liquefied petroleum gas (LPG)	Propane	3,000
	Butane	3,030
5. Liquefied natural gas (LNG)		2,750
6. Methanol		1,375
7. Ethanol		1,913

Appropriate emission factors shall be applied for biofuels, alternative non-fossil fuels and other fuels for which no default values are specified.’;

(b) Part B is amended as follows:

(i) in the fifth subparagraph of paragraph 1, point (b) is replaced by the following:

‘(b) the density measured by the fuel supplier at fuel uplift and recorded on the fuel invoice or BDN;’;

(ii) in the fifth subparagraph of paragraph 1, the following point (c) is added:

‘(c) the density measured in a test analysis conducted in an accredited fuel test laboratory, where available.’;

(iii) in the fourth subparagraph of paragraph 3, point (b) is replaced by the following:

‘(b) the density measured by the fuel supplier at fuel uplift and recorded on the fuel invoice or BDN;’;

(iv) in the fourth subparagraph of paragraph 3, the following point (c) is added:

‘(c) the density measured in a test analysis conducted in an accredited fuel test laboratory, where available.’.

(2) Paragraph 1 of part A of Annex II is amended as follows:

(a) in point (a), the first sentence is replaced by the following:

‘the date and hour of departure from berth and arrival at berth shall be considered using Greenwich Mean Time (GMT/UTC).’;

(b) in point (b), the last sentence is replaced by the following:

‘The distance travelled shall be determined from berth of the port of departure to berth of the port of arrival and shall be expressed in nautical miles;’;

(c) in point (e), the first subparagraph is replaced by the following:

‘for ro-ro ships, cargo carried shall be defined as the mass of cargo on board, determined as the actual mass or as the number of cargo units (trucks, cars, etc.) or occupied lane-metres multiplied by default values for their weight.’.