



Brussels, **XXX**  
[...] (2016) **XXX** draft

ANNEX 1

**ANNEX**

**to**

**the Commission Delegated Regulation**

**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**

## 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 CO<sub>2</sub> EMISSIONS (ARTICLE 9)

For the purposes of calculating CO<sub>2</sub> 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 <sub>2</sub> /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) Annex II is amended as follows:

(a) Paragraph 1 of part A is amended as follows:

(i) 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);’;

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

‘(b) 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;’;

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

‘(e) 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.’.