

## II

(Non-legislative acts)

## REGULATIONS

## COMMISSION IMPLEMENTING REGULATION (EU) 2016/1927

of 4 November 2016

**on templates for monitoring plans, emissions reports and documents of compliance pursuant to Regulation (EU) 2015/757 of the European Parliament and of the Council on monitoring, reporting and verification of carbon dioxide emissions from maritime transport**

(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 <sup>(1)</sup>, and in particular Articles 6(5), 12(2), and 17(5) thereof,

Whereas:

- (1) Articles 6(1) and 6(3) of Regulation (EU) 2015/757 require companies to submit to the verifier a monitoring plan consisting of complete and transparent documentation of the monitoring method to be applied for each ship falling under the scope of that Regulation.
- (2) In order to ensure that those monitoring plans contain standardised information allowing for harmonised implementation of the monitoring and reporting obligations, it is necessary to lay down templates, including technical rules for their uniform application.
- (3) The monitoring plan should contain at least the elements laid down in Article 6(3) of Regulation (EU) 2015/757. It should also use the units for determining 'cargo carried' as specified in Commission Implementing Regulation (EU) 2016/1928 <sup>(2)</sup>. Given the two distinct transport services that ro-pax ships provide, such ships will need to differentiate between fuel consumption and CO<sub>2</sub> emissions data for freight and for passengers. This would allow for a better determination of their average operational energy efficiency indicators.
- (4) Without prejudice to Article 6(3) of Regulation (EU) 2015/757, and in accordance with the last paragraph of Article 10 of that Regulation, the monitoring plan should allow for the monitoring and reporting of fuel consumption and CO<sub>2</sub> emitted on the basis of other voluntary criteria. This would make it possible to better understand the average reported energy efficiency. This concerns in particular differentiated monitoring of fuel consumption for cargo heating and for dynamic positioning as well as differentiated monitoring of laden voyages and when navigating through ice.
- (5) To make it easier to prepare monitoring plans for companies with several ships, it is appropriate to allow companies to indicate which procedures described of the monitoring plan would apply in a relevant manner to all ships under the company's responsibility.

<sup>(1)</sup> OJ L 123, 19.5.2015, p. 55.

<sup>(2)</sup> Commission Implementing Regulation (EU) 2016/1928 of 4 November 2016 on determination of cargo carried for categories of ships other than passenger, ro-ro and container ships pursuant to Regulation (EU) 2015/757 of the European Parliament and of the Council on the monitoring, reporting and verification of carbon dioxide emissions from maritime transport (see page 22 of this Official Journal).

- (6) When providing information on elements and procedures as part of the monitoring plan pursuant to Article 6(3) of Regulation (EU) 2015/757, companies should be able to also refer to procedures or systems effectively implemented as part of their existing management systems, such as the International Safety Management Code (ISM Code) <sup>(1)</sup>, the Ship Energy Efficiency Management Plan (the SEEMP) <sup>(2)</sup>, or to systems and controls covered by harmonised quality, environmental or energy management standards, such as EN ISO 9001:2015, EN ISO 14001:2015 or EN ISO 50001:2011.
- (7) To make monitoring easier, it is appropriate to allow the use of default values for the level of uncertainty associated with fuel monitoring.
- (8) To make the entire compliance cycle (including monitoring, reporting and verification) easier, information on management, in particular on appropriate data management and control activities, should be considered as useful information. A dedicated section in the monitoring template should help companies to structure the necessary management elements.
- (9) It is necessary to lay down specifications for an electronic template for emissions reports. This is needed to ensure that verified emissions reports are submitted electronically and that they contain complete and standardised aggregated annual information, which can be made publicly available and which enables the Commission to prepare the reports required under Article 21 of Regulation (EU) 2015/757.
- (10) The emissions report should cover the minimum content as laid down in Article 11(3) of Regulation (EU) 2015/757, including the results of the annual monitoring. It should also allow for the reporting of additional information that can help understanding of the average operational energy efficiency indicators reported on a voluntary basis. This concerns in particular the elements for voluntary monitoring of fuel consumed and CO<sub>2</sub> emissions emitted, differentiated on the basis of criteria specified in the monitoring plan.
- (11) It is necessary to lay down technical rules establishing an electronic template for documents of compliance. This ensures that standardised, easily processable information can be included in the documents of compliance sent by the verifiers pursuant to their obligation under Article 17(4) of Regulation (EU) 2015/757 to inform without delay the Commission and the authorities of the flag State of the issuance of a document of compliance.
- (12) Thetis MRV, a dedicated Union information system developed and operated by the European Maritime Safety Agency, should be available for companies and accredited verifiers so that they can use it to electronically submit satisfactorily verified emissions reports and related documents of compliance to the Commission and flag States. It should be designed in a flexible way so as to consider the event of a global monitoring, reporting and verification system for greenhouse gas emissions.
- (13) The Commission has consulted parties concerned on best practices on matters addressed by this Regulation. The consultation was carried out through the 'Shipping MRV experts' subgroups' set up under the umbrella of the European Sustainable Shipping Forum.
- (14) The measures provided for in this Regulation are in accordance with the opinion of the Climate Change Committee established by Article 26 of Regulation (EU) No 525/2013 of the European Parliament and of the Council <sup>(3)</sup>,

HAS ADOPTED THIS REGULATION:

#### *Article 1*

#### **Subject matter**

This Regulation lays down templates and technical rules for the submission of monitoring plans, emissions reports and documents of compliance pursuant to Regulation (EU) 2015/757.

<sup>(1)</sup> Adopted by the International Maritime Organisation (IMO) by Assembly Resolution A.741(18).

<sup>(2)</sup> Regulation 22 Marpol Annex VI.

<sup>(3)</sup> Regulation (EU) No 525/2013 of the European Parliament and of the Council of 21 May 2013 on a mechanism for monitoring and reporting greenhouse gas emissions and for reporting other information at national and Union level relevant to climate change and repealing Decision No 280/2004/EC (OJ L 165, 18.6.2013, p. 13).

*Article 2***Template of the monitoring plan**

1. Companies shall draw up the monitoring plan referred to in Article 6 of Regulation (EU) 2015/757 using a template corresponding to the model set out in Annex I.
2. Companies may split the monitoring plan into a company-specific part and a ship-specific part, provided that all elements set out in Annex I are covered.

The information contained in the company-specific part, which may include Tables B.2, B.5, D, E and F.1 of Annex I, shall be applicable to each of the ships for which the company is to submit a monitoring plan pursuant to Article 6 of Regulation (EU) 2015/757.

*Article 3***Electronic template of the emissions report**

1. For the purposes of submitting the emissions report pursuant to Article 11(1) of Regulation (EU) 2015/757, companies shall use the electronic version of the template available in the Thetis MRV automated Union information system operated by the European Maritime Safety Agency (hereinafter referred to as 'Thetis MRV').
2. The electronic version of the template of the emissions report referred to in paragraph 1 shall contain the information set out in Annex II.

*Article 4***Electronic template of document of compliance**

1. For the purposes of issuing a document of compliance pursuant to Article 17(4) of Regulation (EU) 2015/757, the verifier shall provide relevant data using the electronic version of the template available in Thetis MRV.
2. The electronic version of the template of the document of compliance referred to in paragraph 1 shall contain the information set out in Annex III.

*Article 5***Entry into force**

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, 4 November 2016.

*For the Commission*  
*The President*  
Jean-Claude JUNCKER

## ANNEX I

**Template for monitoring plans****Part A Revision record sheet**

Version No	Reference date	Status at reference date <sup>(1)</sup>	Reference to Chapters where revisions or modifications have been made, including a brief explanation of changes

<sup>(1)</sup> Select one of the following categories: 'Working draft', 'Final draft submitted to the verifier', 'Assessed', 'Modified without need for re-assessment'.

**Part B Basic data****Table B.1. Identification of the ship**

Name of the ship	
IMO identification number	
Port of registry	
Home port (if not identical with port of registry)	
Name of the shipowner	
IMO unique company and registered owner identification number	
Type of the ship <sup>(1)</sup>	
Deadweight (in metric tonnes)	
Gross Tonnage	
Classification Society (voluntary)	
Ice class (voluntary) <sup>(2)</sup>	
Flag State (voluntary)	
Voluntary open description field for additional information about the characteristics of the ship	

<sup>(1)</sup> Select one of the following categories: 'Passenger ship', 'Ro-ro ship', 'Container ship', 'Oil tanker', 'Chemical tanker', 'LNG carrier', 'Gas carrier', 'Bulk carrier', 'General cargo ship', 'Refrigerated cargo ship', 'Vehicle carrier', 'Combination carrier', 'Ro-pax ship', 'Container/ro-ro cargo ship', 'Other ship types'.

<sup>(2)</sup> Select one of the Polar Classes PC1 — PC7 or one of the Finnish-Swedish Ice Classes (IC, IB, IA or IA Super).

**Table B.2. Company information**

Name of the company	
Address Line 1	
Address Line 2	
City	
State/Province/Region	
Postcode/ZIP	
Country	
Contact person	
Telephone number	
Email address	

**Table B.3. Emission sources and fuel types used**

Emission source reference no.	Emission source (name, type)	Technical description of emission source (performance/power, specific fuel oil consumption (SFOC), year of installation, identification number in case of multiple identical emission sources, etc.)	(Potential) Fuel types used <sup>(1)</sup>

<sup>(1)</sup> Select one of the following categories: 'Heavy Fuel Oil (HFO)', 'Light Fuel Oil (LFO)', 'Diesel/Gas Oil (MDO/MGO)', 'Liquefied Petroleum Gas (Propane, LPG)', 'Liquefied Petroleum Gas (Butane, LPG)', 'Liquefied Natural Gas (LNG)', 'Methanol', 'Ethanol', 'Other fuel with non-standard emission factor'

**Table B.4. Emission factors**

Fuel type	IMO emission factors (in tonnes of CO <sub>2</sub> /tonne fuel)
Heavy Fuel Oil (Reference: ISO 8217 Grades RME through RMK)	3,114
Light Fuel Oil (Reference: ISO 8217 Grades RMA through RMD)	3,151
Diesel/Gas Oil (Reference: ISO 8217 Grades DMX through DMB)	3,206
Liquefied Petroleum Gas (Propane)	3,000
Liquefied Petroleum Gas (Butane)	3,030
Liquefied Natural Gas	2,750

Fuel type	IMO emission factors (in tonnes of CO <sub>2</sub> /tonne fuel)
Methanol	1,375
Ethanol	1,913
Other fuel with non-standard emission factor	

In case of use of non-standard emission factors:

Non-standard fuel	Emission factor	Methodologies for determining the emission factor (methodology for sampling, methods of analysis and a description of the laboratories used, if any)

**Table B.5. Procedures, systems and responsibilities used to update the completeness of emission sources**

Title of procedure	Managing the completeness of the list of emission sources
Reference to existing procedure	
Version of existing procedure	
Description of EU MRV procedures if not already existing outside the MP	
Name of person or position responsible for this procedure	
Location where records are kept	
Name of IT system used (where applicable)	

### Part C Activity data

**Table C.1. Conditions of exemption related to Article 9(2)**

Item	Confirmation field
Minimum number of expected voyages per reporting period falling under the scope of the EU MRV Regulation according to the ship's schedule	
Are there expected voyages per reporting period not falling under the scope of the EU MRV Regulation according to the ship's schedule? <sup>(1)</sup>	
Conditions of Article 9(2) fulfilled? <sup>(2)</sup>	
If yes, do you intend to make use of the derogation for monitoring the amount of fuel consumed on a per-voyage basis? <sup>(3)</sup>	

<sup>(1)</sup> Select either 'Yes' or 'No'.

<sup>(2)</sup> Select either 'Yes' or 'No'.

<sup>(3)</sup> Select 'Yes', 'No' or 'Not applicable'.

**Table C.2. Monitoring of fuel consumption**

C.2.1. Methods used to determine fuel consumption of each emission source:

Emission source <sup>(1)</sup>	Chosen methods for fuel consumption <sup>(2)</sup>

(1) Select one of the following categories: 'All sources', 'Main engines', 'Auxiliary engines', 'Gas turbines', 'Boilers' or 'Inert gas generators'.

(2) Select one or more of the following categories: 'Method A: BDN and periodic stocktakes of fuel tanks', 'Method B: Bunker fuel tank monitoring on-board', 'Method C: Flow meters for applicable combustion processes' or 'Method D: Direct CO<sub>2</sub> emissions measurement'.

C.2.2. Procedures for determining fuel bunkered and fuel in tanks:

Title of procedure	Determining fuel bunkered and fuel in tanks
Reference to existing procedure	
Version of existing procedure	
Description of EU MRV procedures if not already existing outside the MP	
Name of person or position responsible for this procedure	
Location where records are kept	
Name of IT system used (where applicable)	

C.2.3. Regular cross-checks between bunkering quantity as provided by BDN and bunkering quantity indicated by on-board measurement:

Title of procedure	Regular cross-checks between bunkering quantity as provided by BDNs and bunkering quantity indicated by on-board measurement
Reference to existing procedure	
Version of existing procedure	
Description of EU MRV procedures if not already existing outside the MP	
Name of person or position responsible for this procedure	

C.2.4. Description of the measurement instruments involved:

Measurement equipment (name)	Elements applied to (e.g. emission sources, tanks)	Technical description (specification, age, maintenance intervals)

## C.2.5. Procedures for recording, retrieving, transmitting and storing information regarding measurements:

Title of procedure	Recording, retrieving, transmitting and storing information regarding measurements
Reference to existing procedure	
Version of existing procedure	
Description of EU MRV procedures if not already existing outside the MP	
Name of person or position responsible for this procedure	
Location where records are kept	
Name of IT system used (where applicable)	

## C.2.6. Method for determination of density:

Fuel type/tank	Method to determine actual density values of fuel bunkered <sup>(1)</sup>	Method to determine actual density values of fuel in tanks <sup>(2)</sup>

<sup>(1)</sup> Select one of the following categories: 'On-board measurement equipment', 'Fuel supplier' or 'Laboratory test'.

<sup>(2)</sup> Select one of the following categories: 'Measurement equipment', 'Fuel supplier', 'Laboratory test'.

## C.2.7. Level of uncertainty associated with fuel monitoring:

Monitoring method <sup>(1)</sup>	Approach used <sup>(2)</sup>	Value

<sup>(1)</sup> Select one or more of the following categories: 'Method A: BDN and periodic stocktakes of fuel tanks', 'Method B: Bunker fuel tank monitoring on-board', 'Method C: Flow meters for applicable combustion processes' or 'Method D: Direct CO<sub>2</sub> emissions measurement'

<sup>(2)</sup> Select one of the following categories: 'Default value' or 'Ship specific estimate'.

## C.2.8. Procedures for ensuring quality assurance of measuring equipment:

Title of procedure	Ensuring quality assurance of measuring equipment
Reference to existing procedure	
Version of existing procedure	
Description of EU MRV procedures if not already existing outside the MP	
Name of person or position responsible for this procedure	
Location where records are kept	
Name of IT system used (where applicable)	



## C.2.9. Method for determining the split of fuel consumption into freight and passenger part (for ro-pax ships only):

Title of method	Determining the split of fuel consumption into freight and passenger part
Applied allocation method according to EN 16258 (!)	
Description of method to determine the mass of freight and passengers including the possible use of default values for the weight of cargo units/lane meters (if mass method is used)	
Description of method to determine the deck area assigned to freight and passengers including the consideration of hanging decks and of passenger cars on freight decks (if area method is used)	
Split of fuel consumption (in %) into freight and passenger part (if area method is used only)	
Name of person or position responsible for this method	
Formulae and data sources	
Location where records are kept	
Name of IT system used (where applicable)	

(!) Select either 'Mass method' or 'Area method'.

## C.2.10. Procedures for determining and recording the fuel consumption on laden voyages (voluntary monitoring):

Title of procedure	Determining and recording the fuel consumption on laden voyages
Reference to existing procedure	
Version of existing procedure	
Description of EU MRV procedures if not already existing outside the MP	
Name of person or position responsible for this procedure	
Formulae and data sources	
Location where records are kept	
Name of IT system used (where applicable)	

## C.2.11. Procedures for determining and recording the fuel consumption for cargo heating (voluntary monitoring for chemical tankers):

Title of procedure	Determining and recording the fuel consumption for cargo heating
Reference to existing procedure	
Version of existing procedure	
Description of EU MRV procedures if not already existing outside the MP	

Title of procedure	Determining and recording the fuel consumption for cargo heating
Name of person or position responsible for this procedure	
Formulae and data sources	
Location where records are kept	
Name of IT system used (where applicable)	

C.2.12. Procedures for determining and recording the fuel consumption for dynamic positioning (voluntary monitoring for oil tankers and 'other ship types'):

Title of procedure	Determining and recording the fuel consumption for dynamic positioning
Reference to existing procedure	
Version of existing procedure	
Description of EU MRV procedures if not already existing outside the MP	
Name of person or position responsible for this procedure	
Formulae and data sources	
Location where records are kept	
Name of IT system used (where applicable)	

**Table C.3. List of voyages**

Title of procedure	Recording and safeguarding completeness of voyages
Reference to existing procedure	
Version of existing procedure	
Description of EU MRV procedures (including recording voyages, monitoring voyages etc.) if not already existing outside the MP	
Name of person or position responsible for this procedure	
Data sources	
Location where records are kept	
Name of IT system used (where applicable)	

**Table C.4. Distance travelled**

Title of procedure	Recording and determining the distance per voyage made
Reference to existing procedure	
Version of existing procedure	
Description of EU MRV procedures (including recording and managing distance information) if not already existing outside the MP	
Name of person or position responsible for this procedure	
Data sources	
Location where records are kept	
Name of IT system used (where applicable)	

Procedures for determining and recording the distance travelled when navigating through ice (voluntary monitoring):

Title of procedure	Determining and recording the distance travelled when navigating through ice
Reference to existing procedure	
Version of existing procedure	
Description of EU MRV procedures (including recording and managing distance and winter conditions information) if not already existing outside the MP	
Name of person or position responsible for this procedure	
Formulae and data sources	
Location where records are kept	
Name of IT system used (where applicable)	

**Table C.5. Amount of cargo carried & Number of passengers**

Title of procedure	Recording and determining the amount of cargo carried and/or the number of passengers
Reference to existing procedure	
Version of existing procedure	
Description of EU MRV procedures (including recording and determining the amount of cargo carried and/or the number of passengers and the use of default values for the mass of cargo units, if applicable) if not already existing outside the MP	

Title of procedure	Recording and determining the amount of cargo carried and/or the number of passengers
Unit of cargo/passengers <sup>(1)</sup>	
Name of person or position responsible for this procedure	
Formulae and data sources	
Location where records are kept	
Name of IT system used (where applicable)	

(<sup>1</sup>) For passenger ships, the 'Unit of cargo/passengers' shall be specified as 'passengers'.  
 For ro-ro ships, container ships, oil tankers, chemical tankers, gas carriers, bulk carriers, refrigerated cargo ships, combination carriers, the 'Unit of cargo/passengers' shall be specified as 'tonnes'.  
 For LNG carriers, container/ro-ro cargo ships, the 'Unit of cargo/passengers' shall be specified as 'cubic metres'.  
 For general cargo ships, the 'Unit of cargo/passengers' shall be specified by selecting one of the following categories: 'tonnes of deadweight carried', 'tonnes of deadweight carried and tonnes'.  
 For vehicle carriers, the 'Unit of cargo/passengers' shall be specified by selecting one of the following categories: 'tonnes', 'tonnes and tonnes of deadweight carried'.  
 For ro-pax ships, the 'Unit of cargo/passengers' shall be specified as 'tonnes' and as 'passengers'.  
 For other ship types, the 'Unit of cargo/passengers' shall be specified by selecting one of the following categories: 'tonnes', 'tonnes of deadweight carried'.

Procedures for determining and recording the average density of the cargoes transported (voluntary monitoring for chemical tankers, bulk carriers and combination carriers):

Title of procedure	Determining and recording the average density of the cargoes transported
Reference to existing procedure	
Version of existing procedure	
Description of EU MRV procedures (including recording and managing cargo density information) if not already existing outside the MP	
Name of person or position responsible for this procedure	
Formulae and data sources	
Location where records are kept	
Name of IT system used (where applicable)	

**Table C.6. Time spent at sea**

Title of procedure	Determining and recording the time spent at sea from berth of port of departure to berth of the port of arrival
Reference to existing procedure	
Version of existing procedure	
Description of EU MRV procedures (including recording and managing port departure and arrival information) if not already existing outside the MP	
Name of person or position responsible for this procedure	

Title of procedure	Determining and recording the time spent at sea from berth of port of departure to berth of the port of arrival
Formulae and data sources	
Location where records are kept	
Name of IT system used (where applicable)	

Procedures for determining and recording the time spent at sea when navigating through ice (voluntary monitoring):

Title of procedure	Determining and recording the time spent at sea when navigating through ice
Reference to existing procedure	
Version of existing procedure	
Description of EU MRV procedures (including recording and managing port departure and arrival and winter conditions information) if not already existing outside the MP	
Name of person or position responsible for this procedure	
Formulae and data sources	
Location where records are kept	
Name of IT system used (where applicable)	

#### Part D Data gaps

**Table D.1. Methods to be used to estimate fuel consumption**

Title of method	Method to be used to estimate fuel consumption
Back-up monitoring method <sup>(1)</sup>	
Formulae used	
Description of method to estimate fuel consumption	
Name of person or position responsible for this method	
Data sources	
Location where records are kept	
Name of IT system used (where applicable)	

<sup>(1)</sup> Select one of the following categories: 'Method A: BDN and periodic stocktakes of fuel tanks', 'Method B: Bunker fuel tank monitoring on-board', 'Method C: Flow meters for applicable combustion processes', 'Method D: Direct CO<sub>2</sub> emissions measurement' or 'Not applicable'. The selected category must be different from the category selected under 'Chosen methods for fuel consumption' in table C.2. (Monitoring of fuel consumption — Methods used to determine fuel consumption of each emission source).

**Table D.2. Methods to be used to treat data gaps regarding distance travelled**

Title of method	Method to treat data gaps regarding distance travelled
Formulae used	
Description of method to treat data gaps	
Name of person or position responsible for this method	
Data sources	
Location where records are kept	
Name of IT system used (where applicable)	

**Table D.3. Methods to be used to treat data gaps regarding cargo carried**

Title of method	Method to treat data gaps regarding cargo carried
Formulae used	
Description of method to treat data gaps	
Name of person or position responsible for this method	
Data sources	
Location where records are kept	
Name of IT system used (where applicable)	

**Table D.4. Methods to be used to treat data gaps regarding time spent at sea**

Title of method	Method to treat data gaps regarding time spent at sea
Formulae used	
Description of method to treat data gaps	
Name of person or position responsible for this method	
Data sources	
Location where records are kept	
Name of IT system used (where applicable)	

**Part E Management****Table E.1. Regular check of the adequacy of the monitoring plan**

Title of procedure	Regular check of the adequacy of the monitoring plan
Reference to existing procedure	
Version of existing procedure	
Description of EU MRV procedures if not already existing outside the MP	
Name of person or position responsible for this procedure	
Location where records are kept	
Name of IT system used (where applicable)	

**Table E.2. Control activities: Quality assurance and reliability of information technology**

Title of procedure	Information Technology Management (e.g. access controls, back up, recovery and security)
Reference for procedure	
Brief description of procedure	
Name of person or position responsible for data maintenance	
Location where records are kept	
Name of system used (where applicable)	
List of relevant existing management systems	

**Table E.3. Control activities: Internal reviews and validation of EU MRV relevant data**

Title of procedure	Internal reviews and validation of EU MRV relevant data
Reference to existing procedure	
Version of existing procedure	
Description of EU MRV procedures if not already existing outside the MP	
Name of person or position responsible for this procedure	
Location where records are kept	
Name of IT system used (where applicable)	

**Table E.4. Control activities: Corrections and corrective actions**

Title of procedure	Corrections and corrective actions
Reference to existing procedure	
Version of existing procedure	
Description of EU MRV procedures if not already existing outside the MP	
Name of person or position responsible for this procedure	
Location where records are kept	
Name of IT system used (where applicable)	

**Table E.5. Control activities: Outsourced activities (if applicable)**

Title of procedure	Outsourced activities
Reference to existing procedure	
Version of existing procedure	
Description of EU MRV procedures if not already existing outside the MP	
Name of person or position responsible for this procedure	
Location where records are kept	
Name of IT system used (where applicable)	

**Table E.6. Control activities: Documentation**

Title of procedure	Documentation
Reference to existing procedure	
Version of existing procedure	
Description of EU MRV procedures if not already existing outside the MP	
Name of person or position responsible for this procedure	
Location where records are kept	
Name of IT system used (where applicable)	



**Part F Further information****Table F.1. List of definitions and abbreviations**

Abbreviation, acronym, definition	Explanation

**Table F.2. Additional information**

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## ANNEX II

**Template for emissions reports****Part A Data identifying the ship and the company**

1. Name of the ship
2. IMO identification number
3. a) Port of registry OR  
b) Home port
4. Ship category [drop down menu: 'Passenger ship', 'Ro-ro ship', 'Container ship', 'Oil tanker', 'Chemical tanker', 'LNG carrier', 'Gas carrier', 'Bulk carrier', 'General cargo ship', 'Refrigerated cargo carrier', 'Vehicle carrier', 'Combination carrier', 'Ro-pax ship', 'Container/ro-ro cargo ship', 'Other ship types']
5. Ice class of the ship (non-mandatory — only if included in the monitoring plan) [drop down menu: Polar Class PC1 — PC7, Finnish-Swedish Ice Class IC, IB, IA or IA Super]
6. Technical efficiency of the ship
  - a) Energy Efficiency Design Index (EEDI), where required by MARPOL, Annex VI, Chapter 4, Regulations 19 and 20, expressed in grams CO<sub>2</sub>/tonne-nautical mile OR
  - b) Estimated Index Value (EIV), calculated in accordance with IMO Resolution MEPC.215 (63), expressed in grams CO<sub>2</sub>/tonne-nautical mile
7. Name of the shipowner
8. Address of the shipowner and its principal place of business: address line 1, address line 2, city, state/province/region, postcode/ZIP, Country
9. Name of the company (only if not the shipowner)
10. Address of the company (only if not the shipowner) and its principal place of business: address line 1, address line 2, city, state/province/region, postcode/ZIP, Country
11. Contact person
  - a) Name: title, first name, surname, job title
  - b) Address: address line 1, address line 2, city, state/province/region, postcode/ZIP, Country
  - c) Telephone
  - d) email

**Part B Verification**

1. Name of the verifier
2. Address of the verifier and its principal place of business: address line 1, address line 2, city, state/province/region, postcode/ZIP, Country
3. Accreditation number
4. Verifier's statement

**Part C Information on the monitoring method used and the related level of uncertainty**

1. Emission source [drop down menu: 'All sources', 'Main engines', 'Auxiliary engines', 'Gas turbines', 'Boilers', 'Inert gas generators']
2. Monitoring method(s) used (per emission source) [drop down menu: 'Method A: BDN and periodic stocktakes of fuel tanks', 'Method B: Bunker fuel tank monitoring on-board', 'Method C: Flow meters for applicable combustion processes', 'Method D: Direct CO<sub>2</sub> emissions measurement']
3. Related level of uncertainty, expressed as % (per monitoring method used)

**Part D Results from annual monitoring of the parameters in accordance with Article 10***FUEL CONSUMPTION AND CO<sub>2</sub> EMITTED*

1. Amount and emission factor for each type of fuel consumed in total:
  - a) Fuel type [drop down menu: 'Heavy Fuel Oil (HFO)', 'Light Fuel Oil (LFO)', 'Diesel/Gas Oil (MDO/MGO)', 'Liquefied Petroleum Gas (Propane, LPG)', 'Liquefied Petroleum Gas (Butane, LPG)', 'Liquefied Natural Gas (LNG)', 'Methanol', 'Ethanol', 'Other fuel with non-standard emission factor']
  - b) Emission factor, expressed in tonnes CO<sub>2</sub>/tonne fuel
  - c) Total fuel consumption, expressed in tonnes fuel
2. Total aggregated CO<sub>2</sub> emitted within the scope of this Regulation, expressed in tonnes CO<sub>2</sub>
3. aggregated CO<sub>2</sub> emissions from all voyages between ports under a Member State's jurisdiction, expressed in tonnes CO<sub>2</sub>
4. aggregated CO<sub>2</sub> emissions from all voyages which departed from ports under a Member State's jurisdiction, expressed in tonnes CO<sub>2</sub>
5. aggregated CO<sub>2</sub> emissions from all voyages to ports under a Member State's jurisdiction, expressed in tonnes CO<sub>2</sub>
6. CO<sub>2</sub> emissions which occurred within ports under a Member State's jurisdiction at berth, expressed in tonnes CO<sub>2</sub>
7. Total fuel consumption and total aggregated CO<sub>2</sub> emitted assigned to passenger transport (for ro-pax ships), expressed in tonnes fuel and in tonnes CO<sub>2</sub>
8. Total fuel consumption and total aggregated CO<sub>2</sub> emitted assigned to freight transport (for ro-pax ships), expressed in tonnes fuel and in tonnes CO<sub>2</sub>
9. Total fuel consumption and total aggregated CO<sub>2</sub> emitted on laden voyages (voluntary), expressed in tonnes fuel and in tonnes CO<sub>2</sub>
10. Total fuel consumption for cargo heating (for chemical tankers, voluntary), expressed in tonnes fuel
11. Total fuel consumption for dynamic positioning (for oil tankers and 'other ship types', voluntary), expressed in tonnes fuel

*DISTANCE TRAVELLED, TIME SPENT AT SEA AND TRANSPORT WORK*

1. Total distance travelled, expressed in nautical miles
2. Total distance travelled when navigating through ice (voluntary), expressed in nautical miles
3. Total time spent at sea, expressed in hours
4. Total time spent at sea when navigating through ice (voluntary), expressed in hours

5. Total transport work, expressed in
  - passenger-nautical miles (for passenger ships)
  - tonne-nautical miles (for ro-ro ships, container ships, oil tankers, chemical tankers, gas carriers, bulk carriers, refrigerated cargo carriers, vehicle carriers, combination carriers)
  - cubic meter-nautical miles, (for LNG carriers, container/ro-ro cargo ships)
  - deadweight-tonne carried-nautical miles (for general cargo ships)
  - passenger-nautical miles AND tonne-nautical miles (for ro-pax ships)
  - tonne-nautical miles OR deadweight-tonne carried-nautical miles (for other ship types)
6. Second parameter for total transport work (voluntary), expressed in
  - tonne-nautical miles (for general cargo ships)
  - deadweight-tonne carried-nautical miles (for vehicle carriers)
7. Average density of the cargoes transported in the reporting period (for chemical tankers, bulk carriers and combination carriers, voluntary), expressed in tonnes per cubic meter

#### ENERGY EFFICIENCY

1. Average energy efficiency
    - a) Fuel consumption per distance, expressed in kilogram per nautical mile
    - b) Fuel consumption per transport work, expressed in grams per passenger-nautical mile, grams per tonne-nautical mile, grams per cubic meter-nautical mile, grams per deadweight-tonne carried-nautical mile or grams per passenger-nautical mile AND grams per tonne-nautical mile, as applicable to relevant ship category
    - c) CO<sub>2</sub> emissions per distance, expressed in kilograms CO<sub>2</sub> per nautical mile
    - d) CO<sub>2</sub> emissions per transport work, expressed in grams CO<sub>2</sub> per passenger-nautical mile, grams CO<sub>2</sub> per tonne-nautical mile, grams CO<sub>2</sub> per cubic meter-nautical mile, grams CO<sub>2</sub> per deadweight-tonne carried-nautical mile or grams CO<sub>2</sub> per passenger-nautical mile AND grams CO<sub>2</sub> per tonne-nautical mile, as applicable to relevant ship category
  2. Second parameter for average energy efficiency per transport work (voluntary), expressed in
    - grams per tonne-nautical mile and grams CO<sub>2</sub> per tonne-nautical mile (for general cargo ships)
    - grams per deadweight-tonne carried-nautical mile and grams CO<sub>2</sub> per deadweight-tonne carried-nautical mile (for vehicle carriers)
  3. Differentiated average energy efficiency (fuel consumption and CO<sub>2</sub> emitted) of laden voyages (voluntary), expressed in
    - kilograms per nautical mile
    - grams per tonne-nautical mile, grams per cubic meter-nautical mile, grams per deadweight-tonne carried-nautical mile or grams per passenger-nautical mile, as applicable to relevant ship category
    - kilograms CO<sub>2</sub> per nautical mile
    - grams CO<sub>2</sub> per tonne-nautical mile, grams CO<sub>2</sub> per cubic meter-nautical mile, grams CO<sub>2</sub> per deadweight-tonne carried-nautical mile or grams CO<sub>2</sub> per passenger-nautical mile, as applicable to relevant ship category
  4. Additional information to facilitate the understanding of the reported average operational energy efficiency indicators of the ship (voluntary)
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## ANNEX III

**Template for documents of compliance**

This is to certify that the ship 'NAME' emissions report covering the reporting period 'YEAR N – 1' has been considered as satisfactory regarding the requirements of Regulation (EU) 2015/757.

This document of compliance has been issued on 'DAY/MONTH/YEAR N'

This document of compliance is linked to emissions report No. 'NUMBER' and is valid until 30 JUNE 'YEAR N + 1'

**I) Ship particulars**

1. Name of the ship
2. IMO identification number
3. a) Port of registry OR  
b) Home port
4. Ship category [drop down menu: 'Passenger ship', 'Ro-ro ship', 'Container ship', 'Oil tanker', 'Chemical tanker', 'LNG carrier', 'Gas carrier', 'Bulk carrier', 'General cargo ship', 'Refrigerated cargo carrier', 'Vehicle carrier', 'Combination carrier', 'Ro-pax ship', 'Container/ro-ro cargo ship', 'Other ship types']
5. Flag State/Registry
6. Gross tonnage

**II) Ship owner details**

1. Name of the shipowner
2. Address of the shipowner and its principal place of business: address line 1, address line 2, city, state/province/region, postcode/ZIP, Country

**III) Details of company fulfilling the obligations under Regulation (EU) 2015/757 (voluntary field)**

1. Name of the company
2. Address of the company and its principal place of business: address line 1, address line 2, city, state/province/region, postcode/ZIP, Country

**IV) Verifier**

1. Accreditation number
  2. Name of the verifier
  3. Address of the company and its principal place of business: address line 1, address line 2, city, state/province/region, postcode/ZIP, Country
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