

# MONITORING PLAN (MP)

[SHIP NAME]

[IMO NUMBER]

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**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	Choose an item.
Deadweight (in metric tonnes)	
Gross Tonnage	
Classification Society (voluntary)	
Ice class (voluntary)	Choose an item.
Flag State (voluntary)	
Voluntary open description field for additional information about the characteristics of the ship	

Table B.2. Details of the company & contact person

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
			Choose an item.
			Choose an item.
			Choose an item.
			Choose an item.

			Choose an item.
			Choose an item.

Table B.4. Emission factors

<b>Fuel type</b>	<b>IMO Values 2012/63 (t CO<sub>2</sub> / t fuel)</b>
Heavy Fuel Oil (Ref.: ISO 8217 Grades RME through RMK)	3.114
Light Fuel Oil (Ref.: ISO 8217 Grades RMA through RMD)	3.151
Diesel/Gas Oil (Ref.: 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
Methanol	1.375
Ethanol	1.913
Other Fuel with No-Standard Emission Factor	

In case of use of non-standard emission factors:

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

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

<b>Title of procedure</b>	<b>Managing the completeness of the list of emission sources</b>
Reference to existing procedure	
Version of existing procedure	
Description of EU and/or UK 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. Condition of exemption related to Article 9(2)

<b>Item</b>	<b>Confirmation field</b>
Minimum number of expected voyages per reporting period falling under the scope of the EU and/or UK MRV Regulations according to the	

ship's schedule	
Are there expected voyages per reporting period not falling under the scope of the EU and/or UK MRV Regulations according to the ship's schedule?	Choose an item.
Conditions of Article 9 (2) fulfilled?	Choose an item.
If yes, do you intend to make use of the derogation for monitoring the amount of fuel consumed on a per-voyage basis?	Choose an item.

Table C.2. Monitoring of fuel consumption

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

<b>Emission source</b>	<b>Chosen methods for fuel consumption</b>
Choose an item.	Choose an item.
Choose an item.	Choose an item.
Choose an item.	Choose an item.
Choose an item.	Choose an item.
Choose an item.	Choose an item.

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

<b>Title of procedure</b>	<b>Determining fuel bunkered and fuel in tanks</b>
Reference to existing procedure	
Version of existing procedure	
Description of EU and/or UK 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

<b>Title of procedure</b>	<b>Regular cross-checks between bunkering quantity as provided by BDNs and bunkering quantity indicated by on-board measurement</b>
Reference to existing procedure	
Version of existing procedure	
Description of EU and/or UK 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

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

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

<b>Title of procedure</b>	<b>Recording, retrieving, transmitting and storing information regarding measurements</b>
Reference to existing procedure	
Version of existing procedure	
Description of EU and/or UK 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

<b>Fuel type/tank</b>	<b>Method to determine actual density values of fuel bunkered</b>	<b>Method to determine actual density values of fuel in tanks</b>
	Choose an item.	Choose an item.

C.2.7. Level of uncertainty associated with fuel monitoring

<b>Monitoring method</b>	<b>Approach used</b>	<b>Value</b>
Choose an item.	Choose an item.	

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

<b>Title of procedure</b>	<b>Ensuring quality assurance of measuring equipment</b>
Reference to existing procedure	
Version of existing procedure	
Description of EU and/or UK 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)

<b>Title of method</b>	<b>Determining the split of fuel consumption into freight and passenger part</b>

Applied allocation method according to EN 16258	Choose an item.
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)	

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

<b>Title of procedure</b>	<b>Determining and recording the fuel consumption on laden voyages</b>
Reference to existing procedure	
Version of existing procedure	
Description of EU and/or UK 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)

<b>Title of procedure</b>	<b>Determining &amp; recording the fuel consumption for cargo heating</b>
Reference to existing procedure	
Version of existing procedure	
Description of EU and/or UK 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)	



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

<b>Title of procedure</b>	<b>Determining and recording the fuel consumption for dynamic positioning</b>
Reference to existing procedure	
Version of existing procedure	
Description of EU and/or UK 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

<b>Title of procedure</b>	<b>Recording and safeguarding completeness of voyages</b>	
	<b>EU MRV</b>	<b>UK MRV</b>
Reference to existing procedure		
Version of existing procedure		
Description of EU and/or UK 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

<b>Title of procedure</b>	<b>Recording and determining the distance per voyage made</b>
Reference to existing procedure	
Version of existing procedure	
Description of EU and/or UK 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):

<b>Title of procedure</b>	<b>Determining and recording the distance travelled when navigating through ice</b>
Reference to existing procedure	
Version of existing procedure	
Description of EU and/or UK 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

<b>Title of procedure</b>	<b>Recording and determining the amount of cargo carried and/ or the number of passengers</b>
Reference to existing procedure	
Version of existing procedure	
Description of EU and/or UK 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	
Unit of cargo/passengers <sup>1</sup>	Choose an item.
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):

<b>Title of procedure</b>	<b>Determining and recording the average density of the cargoes transported</b>
Reference to existing procedure	
Version of existing procedure	
Description of EU and/or UK 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

<b>Title of procedure</b>	<b>Determining and recording the time spent at sea from berth of port of departure to berth of the port of arrival</b>
Reference to existing procedure	
Version of existing procedure	
Description of EU and/or UK 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	
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):

<b>Title of procedure</b>	<b>Determining and recording the time spent at sea when navigating through ice</b>
Reference to existing procedure	
Version of existing procedure	
Description of EU and/or UK 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

<b>Title of procedure</b>	<b>Method to be used to estimate fuel consumption</b>
Back-up monitoring method (A/B/C/D) <sup>2</sup>	Choose an item.
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)	

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

<b>Title of method</b>	<b>Method to treat data gaps regarding distance travelled</b>
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

<b>Title of method</b>	<b>Method to treat data gaps regarding cargo carried</b>
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)	

<sup>2</sup> 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.4. Methods to be used to treat data gaps regarding time spent at sea

<b>Title of method</b>	<b>Method to treat data gaps regarding time spent at sea</b>
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

<b>Title of procedure</b>	<b>Regular check of the adequacy of the monitoring plan</b>
Reference to existing procedure	
Version of existing procedure	
Description of EU and/or UK 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

<b>Title of procedure</b>	<b>Information Technology Management (e.g. access controls, back up, recovery and security)</b>
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 and/or UK MRV relevant data

<b>Title of procedure</b>	<b>Internal reviews and validation of EU MRV relevant data</b>
Reference to existing procedure	
Version of existing procedure	
Description of EU and/or UK 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

<b>Title of procedure</b>	<b>Corrections and corrective actions</b>
Reference to existing procedure	
Version of existing procedure	
Description of EU and/or UK 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)

<b>Title of procedure</b>	<b>Outsourced activities</b>
Reference to existing procedure	
Version of existing procedure	
Description of EU and/or UK 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

<b>Title of procedure</b>	<b>Documentation</b>
Reference to existing procedure	
Version of existing procedure	
Description of EU and/or UK 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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