



Sample Form of Ship Management Fuel Oil  
Consumption Data Collection / Operational Carbon  
Intensity (SEEMP PART II & III)  
Under the provisions of MARPOL Annex VI and IMO Resolution MEPC.347(78)



## PART II of the SEEMP (Sample Form of Ship Management Fuel Oil Consumption Data Collection)

### Review and update log

Date/ Timeline	Updated Parts	Developed by	Implemented by

### Ship particulars

Name of Ship	
IMO Number	
Company	
Year of Delivery	
Ship type	
Gross Tonnage	
NT	
DWT	
Attained EEDI (if applicable)	
Attained EEXI (if applicable)	
Ice class	

### Record of revision of Fuel Oil Consumption Data Collection Plan

Date of Revision	Revised provision

### Ship's engines and other fuel oil consumers and fuel oil types used

	Engines or other fuel oil consumers	Power	Fuel oil types
1	Type/ model of main engine	(kW)	
2	Type/ model of auxiliary engine	(kW)	
3	Boiler	(.....)	
4	Inert gas generator	(.....)	

### Emission factor

$C_F$  is a non-dimensional conversion factor between fuel oil consumption and CO<sub>2</sub> emission in the 2018 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships (resolution MEPC.308(73)), as amended. The annual total amount of CO<sub>2</sub> is calculated by multiplying annual fuel oil consumption and  $C_F$  for the type of fuel.

Fuel oil type	C <sub>F</sub> (t-CO <sub>2</sub> / t- Fuel)
Diesel/Gas oil (e.g. ISO 8217 grades DMX through DMB)	3.206
Light fuel oil (LFO) (e.g. ISO 8217 grades RMA through RMD)	3.151
Heavy fuel oil (HFO) (e.g. ISO 8217 grades RME through RMK)	3.114
Liquefied petroleum gas (LPG) (Propane)	3.000
Liquefied petroleum gas (LPG) (Butane)	3.030
Liquefied natural gas (LNG)	2.750
Methanol	1.375
Ethanol	1.913
Other	

### Method to measure fuel oil consumption

The applied method for measurement for this ship is given below. The description explains the procedure for measuring data and calculating annual values, the measurement equipment involved, etc.

Method	Description

### Method to measure distance travelled

Description

### Method to measure hours underway

Description

### Processes that will be used to report the data to the Administration

Description

### Data Quality

Description

## PART III of the SEEMP (Sample Form of Ship Operational Carbon Intercity)

### Review and update log

Date/ Timeline	Updated Parts	Developed by	Implemented by
1 <sup>st</sup> time			
2 <sup>nd</sup> time			
Etc.			

### Required CII over the next three years, attained CII and rating over three consecutive years

Name of the ship		IMO number	
Company		Year of delivery	
Flag		Ship type	
Gross tonnage		DWT	
Applicable CII		<input type="checkbox"/> AER <input type="checkbox"/> cgDIST	

Year	Required annual operational CII	Attained annual operational CII (before any correction)	Attained annual operational CII	Operational carbon intensity rating (A, B, C, D or E):
<year -1>				
<year -2>				
<year -3>				
	Required annual operational CII			
<year>:				
<year + 1>				
<year + 2>				

Calculation methodology of the ship's attained annual CII, including required data and how to obtain these data as far as not addressed in Part II

Description

### Three-year implementation plan

Description

Company personnel to be responsible for the three-year implementation plan, monitoring and recording performance

### List of measures to be considered and implemented

Measure	Impact on CII	Time and method of implementation and responsible personnel			Impediments and contingency measures	
		Milestone	Due	Responsible	Impediment	Contingencies

Calculation showing the combined effect of the measures and that the required operational CII will be achieved

Year	Required annual operational CII	Targeted operational annual CII	Targeted rating
<year>:			
<year +1>:			
<year +2>:			

### Self-evaluation and improvement

Description

### Plan of corrective actions (if applicable)

Description

### Analysis of causes for inferior CII Rating

Cause	Analysis of effect	Actions

### Analysis of measures in the implementation plan

Measure	Analysis of effect	Actions

List of additional measures and revised measures to be added to the implementation plan

Measure	Impact on CII	Time and method of implementation and responsible personnel			Impediments and contingency measures		
		Milestone	Due	Responsible	Impediments	Contingencies	

**Appendix A** - Standardized data reporting format for the data collection system and operational carbon intensity to the Administration

Name of the ship		IMO number	
Company		Year of delivery	
Flag		Ship type	
Gross tonnage		DWT	
Applicable CII		<input type="checkbox"/> AER <input type="checkbox"/> cgDIST	
Operational carbon intensity rating		<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E	
CII for trial purpose (none, one or more on voluntary basis)		<input type="checkbox"/> EEPI <input type="checkbox"/> cbDIST <input type="checkbox"/> clDIST <input type="checkbox"/> EEOI	
Attained annual operational CII before any correction (AER in g CO2/dwt.nm or cgDIST in g CO2/gt.nm)			
Attained annual operational CII (AER in g CO2/dwt.nm or cgDIST in g CO2/gt.nm)			
End date for annual CII (dd/mm/yy)*			
Start date for annual CII (dd/mm/yy)*			
Attained EEDI (if applicable)			
Attained EEXI (if applicable)			
EEPI (gCO2/dwt.nm)			
cbDIST (gCO2/berth.nm)			
clDIST (gCO2/m.nm)			
EEOI (gCO2/t.nm or others)			
.....			
.....			
IMO number			
End date for DCS (dd/mm/yy)			
Start date for DCS (dd/mm/yy)			

## Appendix B – Standardized data reporting format for the parameters to calculate the trial carbon intensity indicators on a voluntary basis

Attained annual EEOI	
Metric of Cargo Mass Carried or Work Done in EEOI calculation (gCO <sub>2</sub> /t.nm or others)*****	
Transport work*****	
Attained annual EEPI (gCO <sub>2</sub> /dwt.nm)	
Laden distance travelled (n.m)	
Attained annual cDIST (gCO <sub>2</sub> /m.nm)****	
Length of lanes (metre) ****	
Attained annual cbDIST(gCO <sub>2</sub> /berth.nm)***	
Available lower berths***	
End date for trial CII (dd/mm/yy)**	
Start date for trial CII (dd/mm/yy)**	
IMO number**	
End date for DCS (dd/mm/yy)**	
Start date for DCS (dd/mm/yy)**	

- \* For reporting a trial CII, the data should be reported as applicable taking into account the information already provided in appendix A
- \*\* Consistent with appendix A
- \*\*\* Only applicable to cruise passenger ships
- \*\*\*\* Only applicable to RO-RO ships
- \*\*\*\*\* As defined in section 3 of Guidelines for voluntary use of the ship energy efficiency operational indicator (EEOI) circulated by MEPC.1/Circ.684. 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.

## Appendix C – Indicative SEEMP Timeline

YEAR	DATE	ACTION
2022	31/DEC	Initial Verification: Issuance of the Confirmation of Compliance (CoC)
2023	01/JAN	Start of CII Year 2023 (Updated SEEMP in place; Confirmation of Compliance (CoC) in place)
	30/NOV	Deadline for Company audits, if conducted
	31/DEC	End of CII Year 2023
2024	01/JAN	Start of CII Year 2024
	31/MAR	Deadline for submission of 2023 CII for verification
	30/APR	For ships rated E in 2023, only Deadline for submission of Corrective Action Plan to be implemented in 2024 and 2025
	31/MAY	Additional verification, if applicable Deadline for issuance of SoC for 2023 (valid until 31 May 2025)
	30/JUN	Deadline for transfer of 2023 data to DCS
	30/NOV	Deadline for Company audits, if conducted

	31/DEC	End of CII Year 2024
2025	01/JAN	Start of CII Year 2025
	31/MAR	Deadline for submission of 2024 CII for verification
	30/APR	For ships rated E in 2024, only Deadline for submission of Corrective Action Plan to be implemented in 2025 and 2026 (at the discretion of the Administration to require a new Corrective Action Plan or previous one can be continuously implemented)
	31/MAY	Deadline for issuance of Statement of Compliance for 2024 (valid until 31 May 2026)
	30/JUN	Deadline for transfer of 2024 data to DCS
	30/NOV	Deadline for Company audits, if conducted
	31/DEC	Periodical verification: Issuance of the Confirmation of Compliance (CoC) for updated SEEMP related to upcoming three-year period. End of CII Year 2025
	2026	01/JAN
31/MAR		Deadline for submission of 2025 CII for verification
30/APR		For ships rated D in 2023-2025 or E in 2025, only Deadline for submission of Corrective Action Plan to be implemented in 2026 and 2027 (at the discretion of the Administration whether a new Corrective Action Plan is required or the previous one can be continuously implemented)
31/MAY		Deadline for issuance of SoC for 2025 (valid until 31 May 2027)
30/JUN		Deadline for transfer of 2025 data to DCS
30/NOV		Deadline for Company audits, if conducted
31/DEC		Periodical verification: Issuance of the Confirmation of Compliance (CoC) for updated SEEMP related to upcoming three-year period End of CII Year 2026