



Technical Circular

No.: 024/2024

Date: 18th November 2024

Subject: Unified Interpretation - MEPC.1/Circ.913 Guidance on the application of the amendments to Appendix IX of MARPOL Annex VI (Resolution MEPC.385(81)).

1. In March 2024, MEPC 81 had adopted amendments to Appendix IX of MARPOL Annex VI (vide IMO Resolution MEPC 385(81)), introducing increased data granularity requirements, including inter alia the reporting of fuel consumption per consumer type, data on transport work and use of onshore power. These amendments will be entering into force on 1 August 2025. The revised format is detailed in Appendix to this technical circular for ready reference.
2. Noting the fact that the aforementioned amendments are entering into force in the middle of a calendar year, which would result in two distinct levels of granularity for the data gathered in that calendar year, MEPC 82 considered a Unified Interpretation (UI) regarding the application of these amendments.
3. Consequently, on 4 October 2024 MEPC 82 approved MEPC.1/Circ.913 on “*Guidance on the application of the amendments to appendix IX of MARPOL Annex VI adopted by resolution MEPC.385(81) on inclusion of data on transport work and enhanced granularity in the IMO Ship Fuel Consumption Database (IMO DCS)*”.
4. Based on the above, shipowners and managers are guided as follows:
 - For ships flying the flag of the Administration that implements the amendments on the entry-into-force date (1 August 2025), the SEEMP is to be revised and verified prior to 1 January 2026 and data to be collected with existing level of granularity for the entire year of 2025, and with increased granularity from 1 January 2026. Those planning to retrofit flow meters or employ other methodologies should complete these actions within the same time frame.
 - For ships flying the flag of the Administration that implements the amendments early (1 January 2025), the SEEMP is to be revised and verified prior to 1 January 2025 and data to be collected with increased granularity throughout the entire year of 2025 and beyond. Those planning to retrofit flow meters or employ other methodologies should complete these actions within the same time frame
 - For ships delivered on or after 1 August 2025 data, SEEMP is to be developed to include a description of data collection methodology and the data is to be collected at the enhanced level of granularity from the date of delivery and onwards.

Encl: MEPC.1/Circ.913 and MEPC 385(81)



. This Technical Circular and the material contained in it is provided only for the purpose of supplying current information to the reader and not as an advice to be relied upon by any person.
. While we have taken utmost care to be as factual as possible, readers/ users are advised to verify the exact text and content of the Regulation from the original source/ issuing Authority.

Appendix

Revised Format for information to be submitted to the IMO Ship Fuel Oil Consumption Database as per Appendix-IX of MARPOL Annex VI

Identity of the ship

IMO Number.....
Period of calendar year for which the data is submitted
 Start date (dd/mm/yyyy)
 End date (dd/mm/yyyy).....

Technical characteristics of the ship

Year of delivery.....
Ship type, as defined in regulation 2.2 of this Annex or other (to be stated)
Gross tonnage¹ (GT).....
Net tonnage (NT)²
Deadweight tonnage (DWT)³
Power output (rated power)⁴ of main and auxiliary reciprocating internal combustion engines over 130 kW (to be stated in kW)
Attained EEDI⁵ (if applicable).....
Attained EEXI⁶ (if applicable)
Ice class⁷

Fuel oil consumption data

Total fuel oil consumption by fuel oil type⁵ in metric tonnes and methods used for collecting fuel oil consumption data:.....

Total fuel oil consumption by fuel oil type⁵ per consumer type in metric tonnes and methods used for collecting fuel oil consumption data:

 Main Engine(s)
 Auxiliary Engine(s)/Generator(s)
 Oil-fired Boiler(s)
 Others (specify)

Fuel oil consumption while the ship is not under way by fuel oil type⁵ per consumer type in metric tonnes and methods used for collecting fuel oil consumption data:

 Main Engine(s)
 Auxiliary Engine(s)/Generator(s)
 Oil-fired Boiler(s)
 Others (specify)

Total distance travelled (nm).....

.....
1 Gross tonnage should be calculated in accordance with the International Convention on Tonnage Measurement of Ships, 1969.

2 Net tonnage should be calculated in accordance with the International Convention on Tonnage Measurement of Ships, 1969. If not applicable, note "N/A".

3 DWT means the difference in tonnes between the displacement of a ship in water of relative density of 1,025 kg/m³ at the summer load draught and the lightweight of the ship. The summer load draught should be taken as the maximum summer draught as certified in the stability booklet approved by the Administration or an organization authorized by it. If not applicable, note "N/A".

4 Rated power means the maximum continuous rated power as specified on the nameplate of the engine.

5 Refer to the 2022 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships (resolution MEPC.364(79)).

6 Refer to the 2022 Guidelines on the method of calculation of the attained Energy Efficiency Existing Ship Index (EEXI) (resolution MEPC.350(78)).

7 Ice class should be consistent with the definition set out in the International Code for Ships Operating in Polar Waters (Polar Code) (resolutions MEPC.264(68) and MSC.385(94)). If not applicable, note "N/A".

Laden distance travelled (nm) (on a voluntary basis)
Hours under way
Total amount of onshore power supplied (kWh)

For ships to which regulation 28 of MARPOL Annex VI applies

Total transport work
Applicable CII⁸: AER cgDIST
Required annual operational CII⁹
Attained annual operational CII before any correction¹⁰
Attained annual operational CII¹¹
Installation of innovative technology¹², if applicable: A B-1 B-2 C-1 C-2
Operational carbon intensity rating¹³: A B C D E
CII for trial purpose (on voluntary basis)¹⁴:
 EEPI (gCO₂/t/nm)
 cbDIST (gCO₂/berth/nm)
 clDIST (gCO₂/m/nm)
 EEOI (gCO₂/t/nm)¹⁵

8 Refer to the 2022 Guidelines on operational carbon intensity indicators and the calculation methods (CII guidelines, G1) (resolution MEPC.352(78)).

9 Refer to the 2022 Guidelines on the reference lines for use with operational carbon intensity indicators (CII reference lines guidelines, G2) (resolution MEPC.353(78)) and 2021 Guidelines on the operational carbon intensity reduction factors relative to reference lines (CII reduction factors guidelines, G3) (resolution MEPC.338(76)).

10 As calculated in accordance with the 2022 Guidelines on operational carbon intensity indicators and the calculation methods (CII guidelines, G1) (resolution MEPC.352(78)) before any correction using Interim guidelines on correction factors and voyage adjustments for CII calculations (G5) (resolution MEPC.355(78)).

11 As calculated in accordance with the 2022 Guidelines on operational carbon intensity indicators and the calculation methods (CII guidelines, G1) (resolution MEPC.352(78)) and having been corrected taking into account Interim guidelines on correction factors and voyage adjustments for CII calculations (G5) (resolution MEPC.355(78)).

12 Refer to the 2021 Guidance on treatment of innovative energy efficiency technologies for calculation and verification of the attained EEDI and EEXI (MEPC.1/Circ.896).

13 Refer to the 2022 Guidelines on the operational carbon intensity rating of ships (CII rating guidelines, G4) (resolution MEPC.354(78)).

14 Refer to the 2022 Guidelines on operational carbon intensity indicators and the calculation methods (CII guidelines, G1) (resolution MEPC.352(78)).

15 Refer to the Guidelines for voluntary use of the ship energy efficiency operational indicator (EEOI) (MEPC.1/Circ.684).

Whilst the utmost care has been taken in the compilation of the Technical Information, neither Indian Register of Shipping, its affiliates and subsidiaries if any, nor any of its directors, officers, employees or agents assume any responsibility and shall not be liable to any person for any loss, damage or expense caused in any manner whatsoever by reliance on the information in this document.

4 ALBERT EMBANKMENT
LONDON SE1 7SR
Telephone: +44 (0)20 7735 7611 Fax: +44 (0)20 7587 3210

MEPC.1/Circ.913
21 October 2024

**GUIDANCE ON THE APPLICATION OF THE AMENDMENTS TO APPENDIX IX OF
MARPOL ANNEX VI ON INCLUSION OF DATA ON TRANSPORT WORK AND
ENHANCED GRANULARITY IN THE IMO SHIP FUEL CONSUMPTION
DATABASE (IMO DCS) AS ADOPTED BY RESOLUTION MEPC.385(81)**

1 The Marine Environment Protection Committee, at its eighty-second session (30 September to 4 October 2024), approved the *Guidance on the application of the amendments to appendix IX of MARPOL Annex VI on inclusion of data on transport work and enhanced granularity in the IMO Ship Fuel Consumption Database (IMO DCS)* as adopted by resolution MEPC.385(81), as set out in the annex.

2 Member Governments are invited to bring the annexed Guidance to the attention of masters, seafarers, shipowners, ship operators and other stakeholders concerned.

ANNEX

GUIDANCE ON THE APPLICATION OF THE AMENDMENTS TO APPENDIX IX OF MARPOL ANNEX VI ON INCLUSION OF DATA ON TRANSPORT WORK AND ENHANCED GRANULARITY IN THE IMO SHIP FUEL CONSUMPTION DATABASE (IMO DCS) AS ADOPTED BY RESOLUTION MEPC.385(81)

The amended regulations 27.1 and 27.2 of MARPOL Annex VI read as follows:

"1 From calendar year 2019, each ship of 5,000 gross tonnage and above shall collect the data specified in appendix IX to this Annex, for that and each subsequent calendar year or portion thereof, as appropriate according to the methodology included in the SEEMP.

2 Except as provided for in paragraphs 4, 5 and 6 of this regulation, at the end of each calendar year, the ship shall aggregate the data collected in that calendar year or portion thereof, as appropriate."

Regulation 5.4.5 of MARPOL Annex VI reads as follows:

"5 The Administration shall ensure that for each ship to which regulation 27 applies, the SEEMP complies with regulation 26.2 of this Annex. This shall be done prior to collecting data under regulation 27 of this Annex in order to ensure the methodology and processes are in place prior to the beginning of the ship's first reporting period. Confirmation of compliance shall be provided to and retained on board the ship;"

Regulation 26.2 of MARPOL Annex VI reads as follows:

"2 In the case of a ship of 5,000 gross tonnage and above, the SEEMP shall include a description of the methodology that will be used to collect the data required by regulation 27.1 of this Annex and the processes that will be used to report the data to the ship's Administration."

Guidance on application

Within the scope of application of the amendments to appendix IX of MARPOL Annex VI adopted by resolution MEPC.385(81) and aiming to maintain uniform data granularity throughout the collection and reporting process over a calendar year, the term "portion thereof" in regulations 27.1 and 27.2 of MARPOL Annex VI should be applied in such a way that all data portions for the same calendar year are to be collected and reported at the same level of granularity.

Prior to collecting data specified in appendix IX of MARPOL Annex VI as amended by resolution MEPC.385(81), each ship to which regulation 27 applies should have their SEEMP revised to ensure compliance with regulation 26.2 of MARPOL Annex VI, taking into account the *2024 Guidelines for the development of a Ship Energy Efficiency Management Plan (SEEMP)* (resolution MEPC.395(82)).

In light of this, Administrations are invited to apply the amendments adopted by resolution MEPC.385(81) as follows:

For ships flying the flag of the Administration which implements the amendments early (1 January 2025):

- .1 the SEEMP should undergo revision and verification by the Administration, or its recognized organization, to incorporate a description of the methodology intended for collecting data with enhanced granularity before 1 January 2025 or the delivery date for ships delivered on or after 1 January 2025. Those planning to retrofit flow meters or other methodologies should complete these actions within the same time frame; and
- .2 data will be collected and reported with an enhanced level of granularity throughout the entire year of 2025 and beyond.

For ships flying the flag of the Administration which implements the amendments on the entry-into-force date (1 August 2025):

- .1 the SEEMP should undergo revision and verification by the Administration, or its recognized organization, to incorporate a description of the methodology intended for collecting data with enhanced granularity before 1 January 2026. Those planning to retrofit flow meters or employ other methodologies should complete these actions within the same time frame;
- .2 data will be collected with the existing level of granularity throughout the entire year of 2025 and, therefore, the data reported at the beginning of 2026 will be based on this consistent level. Data will be collected and reported with the enhanced level of granularity from 1 January 2026 and beyond; and
- .3 ships delivered on or after 1 August 2025 should collect data at the enhanced level of granularity from the date of delivery and the data reported at the beginning of 2026 will be based on appendix IX of MARPOL Annex VI in the annex to resolution MEPC.385(81), as this provides consistent data collection and reporting for such ships on or after the entry-into-force date.

ANNEX 3

**RESOLUTION MEPC.385(81)
(adopted on 22 March 2024)**

**AMENDMENTS TO THE ANNEX OF THE PROTOCOL OF 1997 TO AMEND THE
INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS,
1973, AS MODIFIED BY THE PROTOCOL OF 1978 RELATING THERETO**

Amendments to MARPOL Annex VI

**(Low-flashpoint fuels and other fuel oil related issues, marine diesel engine replacing
steam system, accessibility of data and inclusion of data on transport work and
enhanced granularity in the IMO Ship Fuel Consumption Database (IMO DCS))**

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee conferred upon it by international conventions for the prevention and control of marine pollution from ships,

RECALLING ALSO article 16 of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocols of 1978 and 1997 relating thereto (MARPOL), which specifies the amendment procedure and confers upon the appropriate body of the Organization the function of considering amendments thereto for adoption by the Parties,

HAVING CONSIDERED, at its eighty-first session, proposed amendments to MARPOL Annex VI concerning low-flashpoint fuels and other fuel oil related issues, marine diesel engine replacing a steam system, and accessibility of data and inclusion of data on transport work and enhanced granularity in the IMO Ship Fuel Consumption Database (IMO DCS), which were circulated in accordance with article 16(2)(a) of MARPOL,

1 ADOPTS, in accordance with article 16(2)(d) of MARPOL, amendments to MARPOL Annex VI, the text of which is set out in the annex to the present resolution;

2 DETERMINES, in accordance with article 16(2)(f)(iii) of MARPOL, that the amendments shall be deemed to have been accepted on 1 February 2025 unless prior to that date not less than one third of the Parties or Parties the combined merchant fleets of which constitute not less than 50% of the gross tonnage of the world's merchant fleet have communicated to the Organization their objection to the amendments;

3 INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of MARPOL, the said amendments shall enter into force on 1 August 2025 upon their acceptance in accordance with paragraph 2 above;

4 ALSO INVITES the Parties to consider the early application of the amendments to appendix IX with regard to information to be submitted to the IMO Ship Fuel Oil Consumption Database from 1 January 2025;

5 REQUESTS the Secretary-General, for the purposes of article 16(2)(e) of MARPOL, to transmit certified copies of the present resolution and the text of the amendments contained in the annex to all Parties to MARPOL;

6 ALSO REQUESTS the Secretary-General to transmit copies of the present resolution and its annex to Members of the Organization which are not Parties to MARPOL.

ANNEX

AMENDMENTS TO MARPOL ANNEX VI

(Low-flashpoint fuels and other fuel oil related issues, marine diesel engine replacing steam system, accessibility of data and inclusion of data on transport work and enhanced granularity in the IMO Ship Fuel Consumption Database (IMO DCS))

Regulation 2

Definitions

1 Paragraph 1.14 is replaced by the following:

"1.14 *Fuel oil* means any fuel delivered to and intended for use on board a ship."

2 A new paragraph 1.33 is inserted after existing paragraph 1.32, as follows:

"1.33 *Gas fuel* means a fuel oil with a vapour pressure exceeding 0.28 MPa absolute at a temperature of 37.8°C.*"

* Refer to paragraph 2.2.18 of the *International Code of Safety for Ships using Gases or other Low-flashpoint Fuels (IGF Code)*

Regulation 13

Nitrogen oxides (NO_x)

Major conversion

3 Paragraph 2.2 is replaced by the following:

"2.2 For a major conversion involving the replacement of a marine diesel engine with a non-identical marine diesel engine, or the installation of an additional marine diesel engine, the standards in this regulation at the time of the replacement or addition of the engine shall apply. For the purpose of this regulation, the installation of a marine diesel engine replacing a steam system shall be considered a replacement engine. In the case of replacement engines only, if it is not possible for such a replacement engine to meet the standards set forth in paragraph 5.1.1 of this regulation (Tier III, as applicable), then that replacement engine shall meet the standards set forth in paragraph 4 of this regulation (Tier II), taking into account the guidelines developed by the Organization*. The Administration shall notify the Organization in those instances where a Tier II rather than a Tier III replacement engine has been installed on or after 1 August 2025 in accordance with the provisions of this paragraph.

* Refer to the *2024 Guidelines as required by regulation 13.2.2 of MARPOL Annex VI in respect of non-identical replacement engines not required to meet the Tier III limit* (resolution MEPC.386(81)).

Regulation 14

Sulphur oxides (SO_x) and particulate matter

4 Paragraph 12 is replaced by the following:

"12 The requirements of paragraphs 10 and 11 above are not applicable to a fuel oil service system used for a low-flashpoint fuel or a gas fuel."

Regulation 18

Fuel oil availability and quality

5 The existing chapeau of paragraph 3 is replaced by the following:

"3 Fuel oil delivered to and used on board a ship to which this Annex applies shall meet the following requirements:"

6 The existing chapeau of paragraph 3.2 is replaced by the following:

"3.2 fuel oil derived by methods other than petroleum refining shall not:"

7 Paragraph 4 is replaced by the following:

"4 This regulation does not apply to coal in its solid form or nuclear fuels. Paragraphs 5.1, 8.1 and 8.2 of this regulation do not apply to a low-flashpoint fuel or a gas fuel."

8 Paragraph 5 is replaced by the following new paragraphs 5.1 and 5.2, as follows:

"5.1 For each ship subject to regulations 5 and 6 of this Annex, details of fuel oil delivered to and used on board that ship shall be recorded by means of a bunker delivery note that shall contain at least the information specified in appendix V to this Annex.

5.2 For each ship subject to regulations 5 and 6 of this Annex, details of low-flashpoint fuel or gas fuel delivered to and used on board that ship shall be recorded by means of a bunker delivery note that shall include at least the information specified in items 1 to 6 of appendix V to this Annex, the density as determined by a test method appropriate to the fuel type together with the associated temperature and a declaration signed and certified by the fuel oil supplier's representative that the fuel oil is in conformity with paragraph 3 of this regulation. In addition the sulphur content of a low-flashpoint fuel or a gas fuel delivered to a ship specifically for use on board that ship shall be documented on the bunker delivery note by the supplier in terms of either the actual value as determined by a test method appropriate to the fuel type or, with the agreement of the appropriate authority at the port of supply, a statement that the sulphur content, when tested by such a method, is less than 0.001% m/m."

9 Paragraph 9.2 is replaced by the following:

".2 require local suppliers to provide the bunker delivery note and, if applicable, the MARPOL delivered sample as required by this regulation, certified by the fuel oil supplier that the fuel oil meets the requirements of regulations 14 and 18 of this Annex; "

Regulation 27

Collection and reporting of ship fuel oil consumption data

10 New paragraphs 14 and 15 are added after existing paragraph 13, as follows:

"14 On an ad hoc basis, the Secretary-General of the Organization may share data with analytical consultancies and research entities, under strict confidentiality rules.

15 The Secretary-General of the Organization, on the request of a company, shall grant access to the fuel oil consumption reports of the company's owned ship(s) in a non-anonymized form to the general public."

Appendix I

Form of International Air Pollution Prevention (IAPP) Certificate (regulation 8)

11 Paragraph 2.3.5 is replaced by the following:

"In accordance with regulation 14.12, the requirement for fitting or designating sampling point(s) in accordance with regulation 14.10 or 14.11 is not applicable for a fuel oil service system used for a low-flashpoint fuel or a gas fuel.....□"

Appendix IX

Information to be submitted to the IMO Ship Fuel Oil Consumption Database (regulation 27)

12 Appendix IX is replaced by the following:

" Appendix IX

**Information to be submitted to the IMO Ship Fuel Oil
Consumption Database (regulation 27)**

Identity of the ship

IMO Number.....

Period of calendar year for which the data is submitted

Start date (dd/mm/yyyy)

End date (dd/mm/yyyy).....

Technical characteristics of the ship

Year of delivery.....

Ship type, as defined in regulation 2.2 of this Annex or other (to be stated)

- Gross tonnage¹ (GT).....
- Net tonnage (NT)²
- Deadweight tonnage (DWT)³
- Power output (rated power)⁴ of main and auxiliary reciprocating internal combustion engines over 130 kW (to be stated in kW)
- Attained EEDI⁵ (if applicable).....
- Attained EEXI⁶ (if applicable)
- Ice class⁷

Fuel oil consumption data

Total fuel oil consumption by fuel oil type⁵ in metric tonnes and methods used for collecting fuel oil consumption data:.....

Total fuel oil consumption by fuel oil type⁵ per consumer type in metric tonnes and methods used for collecting fuel oil consumption data:

- Main Engine(s)
- Auxiliary Engine(s)/Generator(s)
- Oil-fired Boiler(s)
- Others (specify)

Fuel oil consumption while the ship is not under way by fuel oil type⁵ per consumer type in metric tonnes and methods used for collecting fuel oil consumption data:

- Main Engine(s)
- Auxiliary Engine(s)/Generator(s)
- Oil-fired Boiler(s)
- Others (specify)

Total distance travelled (nm).....

¹ Gross tonnage should be calculated in accordance with the International Convention on Tonnage Measurement of Ships, 1969.

² Net tonnage should be calculated in accordance with the International Convention on Tonnage Measurement of Ships, 1969. If not applicable, note "N/A".

³ DWT means the difference in tonnes between the displacement of a ship in water of relative density of 1,025 kg/m³ at the summer load draught and the lightweight of the ship. The summer load draught should be taken as the maximum summer draught as certified in the stability booklet approved by the Administration or an organization authorized by it. If not applicable, note "N/A".

⁴ Rated power means the maximum continuous rated power as specified on the nameplate of the engine.

⁵ Refer to the *2022 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships* (resolution MEPC.364(79)).

⁶ Refer to the *2022 Guidelines on the method of calculation of the attained Energy Efficiency Existing Ship Index (EEXI)* (resolution MEPC.350(78)).

⁷ Ice class should be consistent with the definition set out in the International Code for Ships Operating in Polar Waters (Polar Code) (resolutions MEPC.264(68) and MSC.385(94)). If not applicable, note "N/A".

Laden distance travelled (nm) (on a voluntary basis)
Hours under way
Total amount of onshore power supplied (kWh)

For ships to which regulation 28 of MARPOL Annex VI applies

Total transport work
Applicable CII⁸: AER cgDIST
Required annual operational CII⁹.....
Attained annual operational CII before any correction¹⁰.....
Attained annual operational CII¹¹.....
Installation of innovative technology¹², if applicable: A B-1 B-2 C-1 C-2
Operational carbon intensity rating¹³: A B C D E
CII for trial purpose (on voluntary basis)¹⁴:

- EEPI (gCO₂/t/nm)
- cbDIST (gCO₂/berth/nm)
- clDIST (gCO₂/m/nm)
- EEOI (gCO₂/t/nm)¹⁵ "

⁸ Refer to the *2022 Guidelines on operational carbon intensity indicators and the calculation methods (CII guidelines, G1)* (resolution MEPC.352(78)).

⁹ Refer to the *2022 Guidelines on the reference lines for use with operational carbon intensity indicators (CII reference lines guidelines, G2)* (resolution MEPC.353(78)) and *2021 Guidelines on the operational carbon intensity reduction factors relative to reference lines (CII reduction factors guidelines, G3)* (resolution MEPC.338(76)).

¹⁰ As calculated in accordance with the *2022 Guidelines on operational carbon intensity indicators and the calculation methods (CII guidelines, G1)* (resolution MEPC.352(78)) before any correction using *Interim guidelines on correction factors and voyage adjustments for CII calculations (G5)* (resolution MEPC.355(78)).

¹¹ As calculated in accordance with the *2022 Guidelines on operational carbon intensity indicators and the calculation methods (CII guidelines, G1)* (resolution MEPC.352(78)) and having been corrected taking into account *Interim guidelines on correction factors and voyage adjustments for CII calculations (G5)* (resolution MEPC.355(78)).

¹² Refer to the *2021 Guidance on treatment of innovative energy efficiency technologies for calculation and verification of the attained EEDI and EEXI* (MEPC.1/Circ.896).

¹³ Refer to the *2022 Guidelines on the operational carbon intensity rating of ships (CII rating guidelines, G4)* (resolution MEPC.354(78)).

¹⁴ Refer to the *2022 Guidelines on operational carbon intensity indicators and the calculation methods (CII guidelines, G1)* (resolution MEPC.352(78)).

¹⁵ Refer to the *Guidelines for voluntary use of the ship energy efficiency operational indicator (EEOI)* (MEPC.1/Circ.684).

