Energy Efficiency Existing Ship Index (EEXI) and Carbon Intensity Indicator (CII)

Amended Rules and Guidance

Regulations for the Issue of Statutory Certificates
Rules for Marine Pollution Prevention Systems
Guidance for the Classification and Registry of Ships
Guidance for Marine Pollution Prevention Systems

Reason for Amendment

Since the reduction of greenhouse gas (GHG) emissions is a global issue that needs to be addressed, the IMO adopted its initial strategy on the reduction of GHG emissions, which includes goals for reducing GHG emissions from international shipping, as resolution MSC.304(72) at the 72nd session of the Marine Environment Protection Committee (MEPC72) held in April 2018. This strategy aims to achieve zero GHG emissions by the end of this century, regardless of whether a country is considered developed or developing.

In order to achieve its strategic goals, the IMO adopted resolution MEPC.328(76) to amend of MARPOL Annex VI so as to include both a technical approach (i.e. the Energy Efficiency Existing Ship Index (EEXI)) and an operational approach (i.e. the Carbon Intensity Indicator (CII)) related to the reduction of GHG emissions.

Accordingly, relevant requirements are amended based upon resolution MEPC.328(76).

Outline of Amendment

The main contents of this amendment are as follows:

(1) Adds requirements related to the Energy Efficiency Existing Ship Index (EEXI) and Carbon Intensity Indicator (CII) based upon resolution MEPC.328(76).
(2) Specifies that resolutions MEPC.333(76), MEPC.334(76) and MEPC.335(76) are to be referred to as guidelines with respect to the EEXI calculation methods, surveys, certification, and Shaft/Engine Power Limitation systems.
(3) Specifies that resolutions MEPC.336(76), MEPC.337(76), MEPC.338(76) and MEPC.339(76) are to be referred to as guidelines with respect to the CII calculation methods, reference lines, reduction factors, and ship ratings.

"Regulations for the issue of statutory certificates" has been partly amended as follows:

Chapter 2 CERTIFICATES AND THEIR VALIDITY

2.1 Statutory Certificates

Paragraph 2.1.1 has been amended as follows:

2.1.1 Definitions

In these Regulations, "statutory certificates" mean the following certificates including those certificates of compliance required under the Conventions~~, etc~~. to be kept on board the ships:
((1) to (22) are omitted.)
(23) Confirmation of Compliance related to Ship Energy Efficiency Management Plans (SEEMP)
(2~~3~~4) Statements of Compliance related to fuel oil consumption reporting and operational carbon intensity rating

2.2 Validity of Statutory Certificates

2.2.1 Validity

Sub-paragraph -1 has been amended as follows.

1 The validity of statutory certificates is to be as follows according to the kind of statutory certificate, and unless otherwise provided for by the flag state of the ship.
((1) to (19) are omitted.)
(20) Statements of Compliance related to fuel oil consumption reporting and operational carbon intensity rating
  (a) Those issued in accordance with *Regulation* 6.6 *of MARPOL Annex VI*
  1 *year* and 5 *months* as a maximum (valid for the calendar year in which it is issued and for the first five months of the following calendar year: in this context "calendar year" is as defined in **1.1.2, Part 8 of the Rules for Marine Pollution Prevention Systems**, and means the same hereinafter)
  (b) Those issued in accordance with *Regulation* 6.7 *of MARPOL Annex VI* 2 *years* and 5 *months* as a maximum (valid for the calendar year in which it is issued, for the following calendar year, and for the first five months of the subsequent calendar year)

"Rules for marine pollution prevention systems" has been partly amended as follows:

Part 2 SURVEYS

Chapter 1 GENERAL

1.3 Verification Survey of Certificates, etc.

1.3.2 Certificates and Documents, etc. other than those Specified in 1.3.1*

Sub-paragraph -1(3) has been amended as follows.

1 At surveys, the following certificates and other documents, etc. are to be presented to the Surveyor to verify that these certificates and documents are ~~placed~~ kept on board the ship (excluding unmanned towed ships)~~,~~ and are appropriate. However, at Occasional Surveys, the presentation of certificates and documents to the Surveyor may be limited to the concerned ones.
((1) and (2) are omitted.)
(3) Relating to the equipment for the prevention of air pollution from ships
((a) to (i) are omitted.)
(j) Confirmation of Compliance related to the Ship Energy Efficiency Management Plan (SEEMP) specified in **3.6-5, Part 8**
(~~j~~k) Statements of Compliance related to fuel oil consumption reporting and operational carbon intensity rating (when the requirements of **3.~~5~~7.1, Part 8** are applied)(All Statements of Compliance are to be kept on board for at least five years.)
(~~k~~l) (Omitted)
(~~l~~m) (Omitted)

Chapter 2 REGISTRATION SURVEYS

2.1 Registration Surveys during Construction

2.1.2 Submission of Plans and Documents for Approval*

Sub-paragraph -4 has been renumbered to Sub-paragraphs -5, and Sub-paragraph -4 has been added as follows.

4 For ships subject to **Chapter 3, Part 8**, the Energy Efficiency Existing Ship Index (EEXI) Technical File is to be submitted to the Society for verification prior to the tests specified in **2.1.3-7** (except in cases where the attained EEDI of the ship is equal to or less than the required EEXI.). Furthermore, in cases where the ship is provided with a Shaft/Engine Power limitation (SHaPoLi/EPL) system to satisfy **3.5, Part 8**, an Onboard Management Manual (OMM) for SHaPoLi/EPL deemed appropriate by the Society is to be submitted to the Society for approval.
~~4~~5 (Omitted)

2.1.3 Inspections of Construction and Equipment*

Sub-paragraph -7 has been renumbered to Sub-paragraph -8, and Sub-paragraph -7 has been added as follows.

7 For ships subject to **Chapter 3, Part 8,** the Energy Efficiency Existing Ship Index (EEXI) is to be verified. In cases where the ship is provided with a Shaft/Engine Power Limitation (SHaPoLi/EPL) system to satisfy **3.5, Part 8**, the Surveyor is to confirm that the system is appropriately installed and sealed in accordance with guidelines deemed appropriate by the Society and a verified Onboard Management Manual (OMM) for SHaPoLi/EPL is maintained on board.
~~7~~**8** (Omitted)

Paragraph 2.1.4 has been amended as follows.

2.1.4 Inspections of Ship Energy Efficiency Management Plans (SEEMP)

It is to be confirmed that the Ship Energy Efficiency Management Plan (SEEMP) is in accordance with **3.4~~4~~6, Part 8**.

2.1.5 Documents to be Maintained On Board*

Sub-paragraphs (4) and (5) have been added as follows.

At the completion of a registration survey, the Surveyor is to confirm~~s~~ that the following applicable certificates and documents of are maintained on board.
((1) to (3) are omitted.)
(4) The Energy Efficiency Existing Ship Index (EEXI) Technical File specified in **2.1.2-4** (except in cases where the attained EEDI of the ship is equal to or less than the required EEXI).
(5) The Onboard Management Manual (OMM) for ShaPoLi/EPL specified in **2.1.2-4** (in cases where a SHaPoLi/EPL system is installed).

2.2 Registration Surveys Not Built under the Survey

Paragraph 2.2.4 has been amended as follows.

2.2.4 Inspections of Ship Energy Efficiency Management Plans (SEEMP)

It is to be confirmed that the Ship Energy Efficiency Management Plan (SEEMP) is in accordance with **3.4~~4~~6, Part 8**.

Part 8 EQUIPMENT FOR THE PREVENTION OF AIR POLLUTION FROM SHIPS

Chapter 3 ENERGY EFFICIENCY FOR SHIPS

3.1 General

Paragraphs .3.1.1 and 3.1.2 have been renumbered to Paragraphs 3.1.3 and 3.1.4, and Paragraphs 3.1.1 and 3.1.2 have been added as follows.

3.1.1 Goal (*Regulation* 20 of *Annex* VI)

The goal of this chapter is to reduce the carbon intensity of international shipping, working towards the "levels of ambition" set out in the Initial *IMO* Strategy on reduction of GHG emissions from ships".

3.1.2 Functional requirements (*Regulation* 21 of *Annex* VI)

In order to achieve **3.1.1** above, ships subject to this chapter are to comply, as applicable, with the following functional requirements **(1)** and **(2)** to reduce their carbon intensities:

(1) The technical carbon intensity requirements specified in **3.2** to **3.5**.

(2) The operational carbon intensity requirements specified in **3.6** to **3.9**.

Paragraph 3.1.3 has been amended as follows.

3.1.~~1~~3 Application (*Regulation* 19 of *Annex* VI)*****

1 The requirements in this Chapter apply to all ships of 400 *gross tonnage* and above other than those solely engaged in voyages within waters subject to the sovereignty or jurisdiction of the State the flag of which the ship is entitled to fly. However, they do not apply to ships not propelled by mechanical means, and platforms including FPSOs, FSUs and drilling rigs, regardless of their propulsion.

2 Notwithstanding **-1**, **3.2** ~~and~~, **3.3**, **3.4** and **3.5** do not to apply to ~~the following ships:~~

~~(1) S~~ships that have non-conventional propulsion~~. (However, this does not include cruise passenger ships having non-conventional propulsion and LNG carriers having conventional or non-conventional propulsion, delivered on or after 1 September 2019); and~~, except the following **(1)** and **(2)**.

~~(2) Category *A* ships as defined in the Polar Code.~~

(1) Requirements **3.2** and **3.4** apply to cruise passenger ships having non-conventional propulsion and LNG carriers having conventional or non-conventional propulsion delivered on or after 1 September 2019.

(2) Requirements **3.3** and **3.5** apply to cruise passenger ships having non-conventional propulsion and LNG carriers having conventional or non-conventional propulsion.

3 Notwithstanding **-1** above, **3.2**, **3.3**, **3.4**, **3.5** and **3.9** do not to apply to category *A* ships as defined in the Polar Code.

~~3~~**4** Notwithstanding **-1** above, **3.2** and **3.~~3~~4** need not be applied to ships of 400 *gross tonnage* and above which are exempted by the Administration from complying with the requirements except in the following cases:

(1) Ships for which the building contract is placed on or after 1 January 2017.

(2) In the absence of a building contract, ships at the beginning stage of construction on or after 1

July 2017.

(3) Ship ~~whose~~ for which the delivery is on or after 1 July 2019.

(4) New ships or existing ships in which a major conversion is carried out on or after 1 January 2017.

~~4~~5 Notwithstanding **-1** to **-~~3~~4**, the requirements in this Chapter need not be applied in cases where deemed appropriate by the Society.

3.1.~~2~~4 Terminology (*Regulation* 2.2 of *Annex* VI)*****

For the purpose of ~~the requirements in~~ this Chapter, the following definitions apply:

~~(1) "New ship" means as follows:~~

~~(a) A ship for which the building contract is placed on or after 1 January 2013~~

~~(b) In the absence of a building contract, a ship at beginning stage of construction on or after 1 July 2013~~

~~(c) A ship the delivery of which is on or after 1 July 2015~~

~~(2) "Existing ship" means a ship which is not a new ship.~~

~~(3) "Major Conversion" means any of the following:~~

~~(a) A conversion that substantially alters the dimensions, carrying capacity or engine power of the ship~~

~~(b) A conversion that changes the type of the ship~~

~~(c) A conversion whose intent in the opinion of the Administration is to substantially prolong the life of the ship~~

~~(d) A conversion which otherwise so alters the ship that, if it were a newly constructed ship, it would become subject to relevant provisions of the present Convention not applicable to it as an existing ship~~

~~(e) A conversion which substantially alters the energy efficiency of the ship and includes any modifications that could cause the ship to exceed the applicable required EEDI specified in **3.3.**~~

~~(4) "Bulk carrier" means a ship which is intended primarily to carry dry cargo in bulk, including such types as ore carriers, but excluding combination carriers.~~

~~(5) "Gas carrier" means a cargo ship constructed or adapted and used for the carriage in bulk of any liquefied gas, but does not include LNG carrier specified in **(17).**~~

~~(6) "Tanker" means an oil tanker as defined in **2.1.1(6)** of **Part 1**, an NLS tanker as defined in **2.1.1(7)** of **Part 1**, or a chemical tanker as defined in **1.3.1(9) of Rules for the Survey and Construction of Steel Ships, Part S.**~~

~~(7) "Container ship" means a ship designed exclusively for the carriage of containers in holds and on deck.~~

~~(8) "General cargo ship" means a ship with a multi-deck or single deck hull designed primarily for the carriage of general cargo. This definition excludes specialized dry cargo ships, which are not included in the calculation of reference lines for general cargo ships, namely livestock carriers, barge carriers, heavy load carriers, yacht carriers and nuclear fuel carriers.~~

~~(9) "Refrigerated cargo carrier" means a ship designed exclusively for the carriage of refrigerated cargoes in holds.~~

~~(10) "Combination carrier" means a ship designed to load 100% deadweight with both liquid and dry cargo in bulk.~~

~~(11) "Passenger ship" means a ship which carries more than 12 passengers.~~

~~(12) "Ro-ro cargo ship (vehicle carrier)" means a multi deck roll-on-roll-off cargo ship designed for the carriage of empty cars and trucks.~~

~~(13) "Ro-ro cargo ship" means a ship designed for the carriage of roll-on-roll-off cargo transportation units.~~

~~(14) "Ro-ro passenger ship" means a passenger ship with roll-on-roll-off cargo spaces.~~

~~(15) "Attained EEDI" is the EEDI value achieved by an individual ship in accordance with **3.2**.~~

~~(16) "Required EEDI" is the maximum value of attained EEDI that is allowed by **3.3** for the specific ship type and size.~~

~~(17) "LNG carrier" means a cargo ship constructed or adapted and used for the carriage in bulk of liquefied natural gas (*LNG*).~~

~~(18) "Cruise passenger ship" means a passenger ship not having a cargo deck, designed exclusively for commercial transportation of passengers in overnight accommodations on a sea voyage.~~

~~(19) "Conventional propulsion" means a method of propulsion where a main reciprocating internal combustion engine is the prime mover and coupled to a propulsion shaft either directly or through a gear box.~~

~~(20) "Non-conventional propulsion" means a method of propulsion, other than conventional propulsion, including diesel-electric propulsion, turbine propulsion, and hybrid propulsion systems.~~

~~(21) "Polar Code" means the International Code for Ships Operating in Polar Waters, consisting of an introduction, Parts I-A and II-A and Parts I-B and II-B, adopted by resolutions MSC.385(94) and MEPC.264(68), as may be amended, provided that:~~

~~(a) amendments to the environment-related provisions of the introduction and Chapter 1 of part II-A of the Polar Code are adopted, brought into force and take effect in accordance with the provisions of Article 16 of the present convention concerning the amendment procedures applicable to an appendix to an annex; and~~

~~(b) amendments to Part II-B of the Polar Code are adopted by the Marine Environment Protection Committee in accordance with its "Rules of Procedure".~~

~~(22) "A ship delivered on or after 1 September 2019" means as follows :~~

~~(a) A ship for which the building contract is placed on or after 1 September 2015;~~

~~(b) In the absence of a building contract, a ship at beginning stage of construction on or after 1 March 2016; or~~

~~(c) A ship the delivery of which is on or after 1 September 2019.~~

(1) "A ship delivered on or after 1 September 2019" means as follows:

(a) ships for which the building contract is placed on or after 1 September 2015;

(b) in the absence of a building contract, ships at the beginning stage of construction on or after 1 March 2016; or

(c) ships for which the delivery is on or after 1 September 2019.

(2) "Attained annual operational CII" is the operational carbon intensity indicator value achieved by an individual ship in accordance with **3.6** and **3.9**.

(3) "Attained EEDI" is the EEDI value achieved by an individual ship in accordance with **3.2**.

(4) "Attained EEXI" is the EEXI value achieved by an individual ship in accordance with **3.3**.

(5) "Bulk carrier" means a ship which is intended primarily to carry dry cargo in bulk, including such types as ore carriers, but excluding combination carriers.

(6) "Calendar year" means the period from 1 January until 31 December inclusive.

(7) "Combination carrier" means a ship designed to load 100 % deadweight with both liquid and dry cargo in bulk.

(8) "Company" means the owner of the ship or any other organization or person such as the manager, or the bareboat charterer, who has assumed the responsibility for operation of the ship from the owner of the ship and who on assuming such responsibility has agreed to take over all the duties and responsibilities imposed by the *International Management Code for the Safe Operation of Ships and for Pollution Prevention* as amended.

(9) "Containership" means a ship designed exclusively for the carriage of containers in holds and on deck.

(10) "Conventional propulsion" means a method of propulsion where a main reciprocating internal combustion engine is the prime mover and coupled to a propulsion shaft either directly or through a gear box.

(11) "Cruise passenger ship" means a passenger ship not having a cargo deck, designed exclusively for commercial transportation of passengers in overnight accommodations on a sea voyage.

(12) "Existing ship" means a ship which is not a new ship.

(13) "Gas carrier" means a cargo ship constructed or adapted and used for the carriage in bulk of any liquefied gas but does not include LNG carrier specified in **(17)**.

(14) "General cargo ship" means a ship with a multi-deck or single deck hull designed primarily for the carriage of general cargo. This definition excludes specialized dry cargo ships (e.g. livestock carriers, barge carriers, heavy load carriers, yacht carriers and nuclear fuel carriers) not included in the calculation of reference lines for general cargo ships.

(15) "LNG carrier" means a cargo ship constructed or adapted and used for the carriage in bulk of liquefied natural gas (*LNG*).

(16) "Major conversion" means any of the following.

(a) A conversion that substantially alters the dimensions, carrying capacity or engine power of the ship.

(b) A conversion that changes the type of the ship.

(c) A conversion whose intent in the opinion of the Administration is to substantially prolong the life of the ship.

(d) A conversion which otherwise so alters the ship that, if it were a newly constructed ship, it would become subject to relevant provisions of the present convention not applicable to it as an existing ship.

(e) A conversion which substantially alters the energy efficiency of the ship and includes any modifications that could cause the ship to exceed the applicable required EEDI specified in **3.4** and required EEXI specified in **3.5**.

(17) "New ship" means as follows:

(a) ships for which the building contract is placed on or after 1 January 2013;

(b) in the absence of a building contract, ships at the beginning stage of construction on or after 1 July 2013; or

(c) ships for which the delivery is on or after 1 July 2015.

(18) "Non-conventional propulsion" means a method of propulsion, other than conventional propulsion, including diesel-electric propulsion, turbine propulsion, and hybrid propulsion systems.

(19) "Passenger ship" means a ship which carries more than 12 passengers.

(20) "Polar Code" means the International Code for Ships Operating in Polar Waters, consisting of an introduction, Parts I-A and II-A and Parts I-B and II-B, adopted by resolutions MSC.385(94) and MEPC.264(68), as may be amended, provided that the following conditions are satisfied:

(a) amendments to the environment-related provisions of the introduction and Chapter 1 of Part II-A of the Polar Code are adopted, brought into force and take effect in accordance with the provisions of Article 16 of the present convention concerning the amendment procedures applicable to an appendix to an annex; and

(b) amendments to Part II-B of the Polar Code are adopted by the Marine Environment Protection Committee in accordance with its "Rules of Procedure".

(21) "Refrigerated cargo carrier" means a ship designed exclusively for the carriage of refrigerated cargoes in holds.

(22) "Required annual operational CII" is the target value of attained annual operational CII in

accordance with **3.6** and **3.9** for the specific ship type and size.

(23) "Required EEDI" is the maximum value of attained EEDI that is allowed by **3.4** for the specific ship type and size.

(24) "Required EEXI" is the maximum value of attained EEXI that is allowed by **3.5** for the specific ship type and size.

(25) "Ro-ro cargo ship" means a ship designed for the carriage of roll-on-roll-off cargo transportation units.

(26) "Ro-ro cargo ship (vehicle carrier)" means a multi deck roll-on-roll-off cargo ship designed for the carriage of empty cars and trucks.

(27) "Ro-ro passenger ship" means a passenger ship with roll-on-roll-off cargo spaces.

(28) "Tanker" means an oil tanker as defined in **2.1.1(6), Part 1**, an NLS tanker as defined in **2.1.1(7), Part 1**, or a chemical tanker as defined in **1.3.1(9), Part S of Rules for the Survey and Construction of Steel Ships**.

Section 3.2 has been amended as follows.

3.2 Attained Energy Efficiency Design Index (Attained EEDI) (*Regulation* 2~~0~~2 of *Annex* VI)*****

1 The attained EEDI is to be calculated for the following and is to be verified in accordance with guidelines deemed appropriate by the Society, based on the EEDI Technical File, either by the Society or the Administration.

(1) ~~each n~~New ship~~s~~ ~~which~~ that fall~~s~~ into one or more of the categories in ~~**3.1.2(4)** to **(14)**, **(17)** and **(18)**~~**3.1.4(5)**, **(7)**, **(9)**, **(11)**, **(13)** to **(15)**, **(19)**, **(21)** and **(25)** to **(28)**.

(2) ~~each n~~New ship~~s~~ ~~which has~~ that have undergone a major conversion and that fall into one or more of the categories in ~~**3.1.2(4)** to **(14)**, **(17)** and **(18)**~~**3.1.4(5)**, **(7)**, **(9)**, **(11)**, **(13)** to **(15)**, **(19)**, **(21)** and **(25)** to **(28)**.

(3) ~~each n~~New ships or existing ship~~s~~ ~~which has~~ that have undergone a major conversion ~~which~~ (i.e. the conversion is so extensive that the ship is regarded as newly constructed by the Administration) and that fall~~s~~ into one or more of the categories in ~~**3.1.2(4)** to **(14)**, **(17)** and **(18)**, and which is so extensive that the ship is regarded as newly constructed by the Administration~~ **3.1.4(5)**, **(7)**, **(9)**, **(11)**, **(13)** to **(15)**, **(19)**, **(21)** and **(25)** to **(28)**.

(-2 and -3 are omitted.)

Section 3.3 has been renumbered to 3.4, and Section 3.3 has been added as follows.

3.3 Attained Energy Efficiency Existing Ship Index (Attained EEXI) (*Regulation* 23 of *Annex* VI)

1 The attained EEXI is to be calculated for the following and is to be verified in accordance with guidelines deemed appropriate by the Society (based on the EEXI Technical File) either by the Society or the Administration.

(1) Ships that fall into one or more of the categories in **3.1.4(5)**, **(7)**, **(9)**, **(11)**, **(13)** to **(15)**, **(21)** and **(25)** to **(28)**.

(2) Ships that have undergone a major conversion and that fall into one or more of the categories in **3.1.4(5)**, **(7)**, **(9)**, **(11)**, **(13)** to **(15)**, **(21)** and **(25)** to **(28)**.

2 The attained EEXI is to be specific to each ship and is to indicate the estimated performance of the ship in terms of energy efficiency; moreover, it is to be accompanied by an EEXI Technical

File that contains the information necessary for the calculation of the attained EEXI and shows the process of calculation.

3 The attained EEXI is to be calculated in accordance with guidelines deemed appropriate by the Society.

4 In cases where the attained EEXI verified by the Administration or the Society is more than the required EEXI specified in **3.5**, and the ship is provided with a Shaft/Engine Power Limitation (SHaPoLi/EPL) system deemed appropriate by the Society to satisfy **3.5**, an Onboard Management Manual (OMM) for SHaPoLi/EPL is to be created in accordance with guidelines deemed appropriate by the Society and is to be verified by the Administration or the Society.

5 Notwithstanding **-1** and **-2** above, for ships to which **3.2** applies, the attained EEDI verified by the Administration or the Society in accordance with **3.2-1** and **-2** may be taken as the attained EEXI if the value of the attained EEDI is equal to or less than that of the EEXI required by **3.5**. In this case, the attained EEXI is to be verified based on the EEDI technical file.

Section 3.4 has been amended as follows.

3.~~3~~4 Required Energy Efficiency Design Index (Required EEDI) (*Regulation* 2~~1~~4 of *Annex* VI)*****

1 The attained EEDI of the following **(1)** to **(3)** is not to exceed the required EEDI calculated according to the equation specified below:

(1) ~~a n~~New ship~~s~~ ~~which~~that fall~~s~~ into or more of the categories in ~~**3.1.2(4) to (10), (12) to (14), (17)** and **(18)**~~**3.1.4(5), (7), (9), (11), (13)** to **(15), (21)** and **(25)** to **(28).**

(2) ~~a n~~New ship~~s~~ ~~which~~that have undergone a major conversion which fall~~s~~ into one or more of the categories in ~~**3.1.2(4) to (10), (12) to (14), (17)** and **(18)** and which has undergone a major conversion~~ **3.1.4(5), (7), (9), (11), (13)** to **(15), (21)** and **(25)** to **(28).**

(3) ~~a n~~New ships or existing ship~~s~~ ~~which~~ that have undergone a major conversion (i.e. a conversion so extensive that the ship is regarded as newly constructed by the Administration) that fall~~s~~ into one or more of the categories in ~~**3.1.2(4) to (10), (12) to (14), (17)** and **(18)** and which has undergone a major conversion that is so extensive that the ship is regarded as newly constructed by the Administration~~ **3.1.4(5), (7), (9), (11), (13)** to **(15), (21)** and **(25)** to **(28).**

Attained EEDI $\leqq$ Required EEDI = (1-*X*/100) × Reference line value

where,

X: reduction factor specified in **Table 8-8** for the required EEDI compared to the EEDI reference line.

Reference line value: $a \times b^{-c}$

a, b and *c*: parameters given in **Table 8-9**

(-2 to -4 are omitted.)

Sections 3.4, 3.5 and Sub-paragraph 3.5.2 are to be renumbered to Sections 3.6, 3.7 and 3.8, and Section 3.5 has been added as follows.

3.5 Required Energy Efficiency Existing Ship Index (Required EEXI) (*Regulation* 25 of *Annex* VI)*****

1 The attained EEXI of the following **(1)** to **(3)** is not to exceed the required EEXI calculated according to the formulae specified below:

(1) Ships that fall into one or more of the categories in **3.1.4(5)**, **(7)**, **(9)**, **(11)**, **(13)** to **(15)**, **(21)** and **(25)** to **(28)**.

(2) Ships that have undergone a major conversion and that fall into one or more of the categories in **3.1.4(5)**, **(7)**, **(9)**, **(11)**, **(13)** to **(15)**, **(21)** and **(25)** to **(28)**.

Attained EEXI ≦ Required EEXI = (1-*Y*/100) × Reference line value

where

Y: reduction factor specified in **Table 8-10** for the required EEXI compared to the EEDI reference line.

Reference line value: $a \times b^{-c}$

a, *b* and *c*: parameters given in **Table 8-9**. For ro-ro cargo ships and ro-ro passenger ships, the reference line value to be used from phase 2 and is to be referred to thereafter as such.

2 If the design of a ship allows it to fall into more than one of the above ship type definitions, the required EEXI for the ship is to be the most stringent (i.e. the lowest) required EEXI.

Table 8-10 Reduction Factors (%) for EEXI Relative to the EEDI Reference Lines

Ship Type	Size	Reduction Factors (%)
Bulk Carrier	200,000 DWT –	15
	20,000–200,000 DWT	20
	10,000–20,000 DWT	0–20*
Gas Carrier	15,000 DWT –	30
	10,000–15,000 DWT	20
	2,000–10,000 DWT	0–20*
Tanker	200,000 DWT –	15
	20,000–200,000 DWT	20
	4,000–20,000 DWT	0–20*
Containership	200,000 DWT –	50
	120,000–200,000 DWT	45
	80,000–120,000 DWT	35
	40,000–80,000 DWT	30
	15,000–40,000 DWT	20
	10,000–15,000 DWT	0–20*
General Cargo Ships	15,000 DWT –	30
	3,000–15,000 DWT	0–30*
Refrigerated Cargo Carrier	5,000 DWT –	15
	3,000–5,000 DWT	0–15*
Combination Carrier	20,000 DWT –	20
	4,000–20,000 DWT	0–20*
LNG Carrier	10,000 DWT –	30
Ro-ro Cargo Ship (vehicle carrier)	10,000 DWT –	15
Ro-ro Cargo Ship	2,000 DWT –	5
	1,000–2,000 DWT	0–5*
Ro-ro Passenger Ship	1,000 DWT –	5
	250–1,000 DWT	0–5*
Cruise Passenger Ship Having Non-Conventional Propulsion	85,000 GT –	30
	25,000–85,000 GT	0–30*

Note:
Reduction factor to be linearly interpolated between the two values dependent upon vessel size. The lower value of the reduction factor is to be applied to the smaller ship size.

Section 3.6 has been amended as follows.

3.~~4~~6 Ship Energy Efficiency Management Plan (SEEMP) (*Regulation* 2~~2~~6 of *Annex* VI)*

1 ~~Each s~~Ships ~~is~~are to maintain on board a ship specific Ship Energy Efficiency Management Plan (SEEMP). This may form part of the ship's Safety Management System (SMS).

2 ~~In the case of a~~For ships of 5,000 *gross tonnage* and above, the SEEMP is to include a description of the methodology that ~~will~~is to be used to collect the data required by *Regulation* ~~22A.1~~27.1 *of Annex VI* and the processes that ~~will~~are to be used to report the data to the ship's Administration.

3 SEEMPs are to be developed and reviewed in accordance with guidelines deemed appropriate by the Society.

4 Ships of 5,000 *gross tonnage* and above that fall into one or more of the categories in **3.1.4(5)**, **(7)**, **(9)**, **(11)**, **(13)** to **(15)**, **(21)** and **(25)** to **(28)** are to satisfy the following **(1)** to **(3)**

(1) SEEMPs are to include the following **(a)** to **(d)**.

(a) A description of the methodology that is to be used to calculate the ship's attained annual operational CII required by **3.9** and the processes that are to be used to report this value to the ship's Administration

(b) The required annual operational CII, as specified in **3.9**, for the next three years

(c) An implementation plan documenting how the required annual operational CII is to be achieved during the next three years

(d) A procedure for self-evaluation and improvement.

(2) For ships rated as D for three consecutive years or rated as E in accordance with **3.9**, the SEEMP is to be reviewed in accordance with **3.9.4-2** and is to include a plan for corrective actions for achieving the required annual operational CII.

(3) SEEMPs are to be subject to verification and company audits taking into account guidelines developed by the *IMO*.

5 The Confirmation of Compliance, which indicates that an SEEMP satisfying in **-2** and **-4(1)** above is to be maintained on board.

Section 3.7 has been amended as follows.

3.5**7** Statements of Compliance related to Fuel Oil Consumption Reporting ~~and Others~~ (~~*Regulation* 22A of *Annex* VI~~) and Operational Carbon Intensity Rating to be Kept

~~**3.5.1 Statements of Compliance to be Kept and Data to be Retained** (*Regulation* 22A.8 of *Annex* VI)~~

~~**1**~~ In the case of ships to which the requirements of **3.4****6**-**2** and **3.6**-**4** apply, valid Statement~~(s)~~ of Compliance related to fuel oil consumption reporting which are ~~to be~~ issued as a result of the requirements specified in ~~**3.5.2**~~ **3.8** and **3.9** in accordance with *Regulation* 6.6 and/or *Regulation* 6.7 *of Annex VI* are to be ~~kept~~maintained on board for at least five years.

~~**2 In the case of ships which keep a Statement of Compliance issued in accordance with *Regulation* 6.6 *of Annex VI* on board, the disaggregated data that underlies the aggregated data reported as aggregated values in accordance with **3.5.2(2)(a)** to obtain the Statement of Compliance is to be retained so as to satisfy the following **(1)** and **(2)**:~~

~~(1) The data is to be readily accessible for a period of not less than 12 *months* from the end of the calendar year in which the data was collected; and~~

~~(2) The data is to be made available to the Flag Administration upon request.~~

Section 3.8 has been amended as follows.

~~3.5.2~~3.8 Data Collection ~~and~~, Reporting and Retained related to Fuel Oil Consumption Reporting, etc. (*Regulations* ~~22A.1 to 22A.7~~27 of *Annex* VI)*

1 Data collection and reporting to be carried out to obtain the Statements of Compliance required by ~~**3.5.1**~~**3.7** are to be in accordance with the following **(1)** to **(3)**:

((1) to (3) are omitted.)

2 For ships which maintain on board a Statement of Compliance issued in accordance with *Regulation* 6.6 *of Annex VI*, disaggregated data that underlies the aggregated data reported in accordance with **-1(2)(a)** to obtain the Statement of Compliance is to be retained so as to satisfy the following **(1)** and **(2)**:

(1) The data is to be readily accessible for a period of not less than 12 *months* from the end of the calendar year in which the data was collected; and
(2) The data is to be made available to the Flag Administration upon request.

Section 3.9 has been added as follows.

3.9 Operational Carbon Intensity (*Regulations* 28 of *Annex* VI)

3.9.1 Attained Annual Operational Carbon Intensity Indicator (attained Annual Operational CII)

1 After the end of calendar year 2023 and after the end of each following calendar year, ships of 5,000 *gross tonnage* and above that fall into one or more of the categories in **3.1.4(5)**, **(7)**, **(9)**, **(11)**, **(13)** to **(15)**, **(21)** and **(25)** to **(28)** are to calculate the attained annual operational CII over a 12-month period from 1 January to 31 December for the preceding calendar year, using the data collected in accordance with **3.8**, taking into account guidelines developed by the *IMO*.

2 Within three months after the end of each calendar year, the ship is to report to its Administration or the Society the attained annual operational CII via electronic communication and using a standardized format developed by the *IMO*.

3 Notwithstanding **-1** and **-2** above, in the event of any transfer of a ship addressed in regulations **3.8-1.(2)(b)i)**, **ii)** or **iii)** completed after 1 January 2023, the ship is to, after the end of the calendar year in which the transfer takes place, calculate and report the attained annual operational CII for the full 12-month period from 1 January to 31 December in the calendar year during which the transfer took place, in accordance with **-1** and **-2** above, for verification in accordance with *Regulation* 6.6 *of Annex VI*, taking into account guidelines developed by the *IMO*. Nothing in this requirement relieves any ship of its reporting obligations under **3.8** or this requirement.

3.9.2 Required Annual Operational Carbon Intensity Indicator (Required Annual Operational CII)

1 For ships of 5,000 *gross tonnage* and above that fall into one or more of the categories in **3.1.4(5)**, **(7)**, **(9)**, **(11)**, **(13)** to **(15)**, **(21)** and **(25)** to **(28)**, the required annual operational CII is to be determined as follows:

Required annual operational CII = $(1\text{-}Z/100) \times CII_R$

where

Z: annual reduction factor to ensure continuous improvement of the ship's operational carbon intensity within a specific rating level

CII_R: reference value

2 The annual reduction factor Z and the reference value CII_R are to be the values defined taking into account guidelines developed by the *IMO*.

3.9.3 Operational Carbon Intensity Rating

The attained annual operational CII is to be documented and verified against the required annual operational CII to determine an operational carbon intensity rating of A, B, C, D or E, indicating a major superior, minor superior, moderate, minor inferior, or inferior performance level, either by the Administration or the Society, taking into account guidelines developed by the *IMO*. The middle point of the rating level C is to be a value equivalent to the required annual operational CII set out in **3.9.2**.

3.9.4 Corrective Actions

1 Ships rated as D for three consecutive years or rated as E are to develop a plan of corrective actions for achieving the required annual operational CII.

2 SEEMPs are to be reviewed and include an appropriate plan of corrective actions, taking into account guidelines developed by the *IMO*. The revised SEEMP is to be submitted to the Administration or the Society for verification, preferably together with, but in no case later than one month after reporting the attained annual operational CII in accordance with **3.9.1-2.**

3 Ships rated as D for three consecutive years or rated as E are to duly undertake planned corrective actions in accordance with the revised SEEMP.

“Guidance for the classification and registry of ships” has been partly amended as follows:

Chapter 2 CLASSIFICATION OF SHIPS

2.1 Classification

2.1.3 Class Notations

Sub-paragraph -3 has been amended as follows.

3 The notations referred to in **2.1.3-2 of the Regulations for the Classification and Registry of Ships** are affixed to Classification Characters according to the following **(1)** and **(2)**.

(1) Based on the applications received from owners, the notations referred to in **(a)** to **(i)** are affixed to Classification Characters for the following ships based on the application from the owner according to the Guidelines issued separately by the Society or other guidelines deemed appropriate by the Society.

((a) to (g) are omitted.)

(h) Ships ~~which~~that have taken particular measures for energy efficiency (Ships whose Energy Efficiency Design Index satisfies a required value calculated using a phase reduction factor which is stricter than the phase to be applied according to **3.~~3~~4, Part 8 of the Rules for Marine Pollution Prevention Systems**; for ro-ro cargo ships and ro-ro passenger ships, however, this requirement only applies in cases where the required EEDI value is stricter): “*Energy Efficiency Design Index-phase X”* (abbreviated as *EEDI-pX* in which “X” refers to the adopted phase)

((i) is omitted.)

((2) is omitted.)

"Guidance for marine pollution prevention systems" has been partly amended as follows:

Part 2 SURVEYS

Chapter 1 GENERAL

1.1 General

1.1.3 Intervals of Surveys

Sub-paragraph -2 has been amended as follows.

2 Occasional surveys specified in **1.1.3-5(3), Part 2 of the Rules** are to be in accordance with the followings:
((1) and (2) are omitted.)
(3) Ship Energy Efficiency Management Plan (SEEMP)
(a) For ships to which **Chapter 3, Part 8 of the Rules** applies, which are existing ships as specified in **3.1.2(2) Part 8 of the Rules,** a survey is to be carried out no later than the first Intermediate or Special Survey conducted, whichever is first, on or after 1 January 2013 to confirm that a Ship Energy Efficiency Management Plan (SEEMP) which complies with **3.4~~6~~6, Part 8 of the Rules** is maintained on board.
(b) For ships to which **3.4~~6~~6-2, Part 8 of the Rules** applies which are delivered before 1 March 2018, a survey is to be carried out on or before 31 December 2018 to confirm that the Ship Energy Efficiency Management Plan (SEEMP) includes the description of the ~~the~~ methodology and processes specified in **3.4~~6~~6-2, Part 8 of the Rules**.
(c) For ships to which **3.6-4, Part 8 of the Rules** applies which are delivered before 1 November 2022, a survey is to be carried out on or before 1 January 2023 to confirm that the Ship Energy Efficiency Management Plan (SEEMP) includes the description of the methodology and processes specified in **3.6-4(1), Part 8 of the Rules**.
((4) to (8) are omitted.)
(9) Energy Efficiency Existing Ship Index (EEXI)
(a) For ships to which **Chapter 3, Part 8 of the Rules** applies, a survey is to be carried out no later than the first Annual, Intermediate, Special Survey or the initial survey specified in *Regulation 5.4.1 and 5.4.3 of Annex VI* conducted, whichever is first, on or after 1 January 2023 to confirm that the attained Energy Efficiency Existing Ship Index (attained EEXI) specified in **3.1.4(4), Part 8 of the Rules** complies with **3.3 and 3.5, Part 8 of the Rules**.
(b) Notwithstanding **(a)**, For ships to which **3.3, Part 8 of the Rules** applies, that have undergone a major conversion specified in **3.1.4(16) Part 8 of the Rules,** a general or partial survey, according to the circumstances, is to be carried out to confirm that the attained Energy Efficiency Existing Ship Index (attained EEXI) is recalculated as necessary and complies with **3.5, Part 8 of the Rules**.

Chapter 2 REGISTRATION SURVEYS

2.1 Registration Surveys during Construction

2.1.2 Submission of Plans and Documents for Approval

Sub-paragraph -5 has been renumbered to Sub-paragraph -6, and Sub-paragraph -5 has been added as follows.

5 Details of the documents related to existing ship energy efficiency referred to in **2.1.2-4 in Part 2 of the Rules** are as follows:

(1) The Energy Efficiency Existing Ship Index (EEXI) Technical File is a document which contains basic information related to the EEXI calculation conditions, and it is to contain the following information:

(a) Basic data such as the information in any of the following **i)** to **iii)**, the maximum continuous rating (MCR) of main and auxiliary engines, estimated ship speed and the specific fuel consumption of main and auxiliary engines (data for each is to be provided, and copies which indicate the specific fuel consumption of main and auxiliary engines are to be attached).

i) *Gross tonnage* and deadweight (DWT) for ro-ro cargo ships (vehicle carriers);

ii) *Gross tonnage* for passenger ships and cruise passenger ships that have non-conventional propulsion; or

iii) Deadweight (DWT) for ships other than those mentioned in the preceding **i)** and **ii)**.

(b) Limited installed power (MCR_{lim}) (in cases where the SHaPoLi/EPL system is installed).

(c) Approved power curves (kW – knot) estimated at the design stage under the conditions for EEDI calculation as well as power curves, if available, estimated from tank test or numerical calculations (each power curve is to be represented graphically).

(d) Power curve estimation process (explanation using process diagrams of the methodology followed from tank tests to power curve estimation at the design stage).

(e) Approximate ship speed obtained by a simplified formula and the calculation process (in cases where the speed-power curve is not available).

(f) Principal particulars as well as overviews of propulsion systems and electricity supply systems (e.g. schematic diagrams) are to be provided.

(g) Overview of energy saving equipment.

(h) Attained EEXI calculated values (including the relevant calculation outline).

(i) For LNG carriers, the information specified in the following **i)** to **vii)** is to be included:

i) Type and outline of propulsion systems (such as direct drive diesel, diesel electric, steam turbine);

ii) LNG cargo tank capacity (m^3) and the design rate of boil-off gas of entire ship per *day*, which is specified in the specification of the building contract;

iii) Shaft power of the propeller shaft after transmission gear at 100 % of the rated output of motor and the electrical efficiency for diesel electric;

iv) Shaft power of the propeller shaft after transmission gear at the de-rated output of motor (in cases where the SHaPoLi/EPL system is installed);

v) For steam turbines, maximum continuous rated power;

vi) For steam turbines, limited maximum continuous rated power (in cases where the SHaPoLi/EPL system is installed); and

vii) For steam turbines, certified specific fuel consumption of the steam turbines measured in *g/kWh*.

(j) Other documents deemed necessary by the Society.

(2) The "Onboard Management Manual (OMM) for SHaPoLi/EPL deemed appropriate by the Society" means the one that satisfies the *2021 Guidelines on the Shaft/Engine Power Limitation System to Comply with the EEXI Requirements and Use of a Power Reserve(IMO Res.MEPC.335(76))*.

Sub-paragraph -6 has been amended as follows.

~~5~~6 The wording "separately specified by the Society" in **2.1.2-~~4~~5 in Part 2 of the Rules** means as follows:
((1) to (4) are omitted.)

2.1.3 Inspections of Construction and Equipment

Sub-paragraph -13(1) has been amended as follows.

13 The wording "deemed appropriate by the Society" in **2.1.3-6(1), Part 2 of the Rules** means as follows:
(1) Ships to which **3.~~3~~4, Part 8 of the Rules** is not applied.
((2) to (4) are omitted.)

Sub-paragraph -14 has been added as follows.

14 The "guidelines deemed appropriate by the Society" specified in **2.1.3-7, Part 2 of the Rules** refers to the *2021 Guidelines on the Shaft/Engine Power Limitation System to Comply with the EEXI Requirements and Use of a Power Reserve (IMO Res.MEPC.335(76))*.

Chapter 4 OCCASIONAL SURVEYS

4.1 General

4.1.2 Inspection

Sub-paragraph -6 has been amended as follows.

6 The occasional surveys of ships undergoing a major conversion specified in **3.1.~~2~~4(~~3~~16), Part 8 of the Rules** are as follows:

(1) For any ship intending to undergo an occasional survey, the revised EEDI Technical File or EEXI Technical File as well as supporting documents including at least the following **(a)** to **(d)** are to be submitted to the Society for approval before any conversion work is started.
   (a) Documents explaining the details of the conversion
   (b) EEDI or EEXI parameters changed after the conversion as well as the technical justifications for each respective parameter
   (c) Reasons for changes, other than those in **(b)** above, made to the EEDI Technical File or EEXI Technical File, if any
   (d) Calculated value of the attained EEDI or EEXI and a calculation overview (This is to contain, at a minimum, each calculation parameter value as well as the calculation process used to determine the attained EEDI or EEXI after the conversion.)

(2) In cases where a new ship specified in **3.1.~~2~~4(1), Part 8 of the Rules** undergoes a major conversion, it is to be verified that the attained EEDI is recalculated as necessary and satisfies~~the requirements in~~ **3.~~3~~4, Part 8 of the Rules**, with a reduction factor applicable to the type and size of the converted ship in a phase corresponding to the date of contract or keel laying or delivery determined for the original ship.

(3) In cases where a major conversion of a new or existing ship is so extensive that the ship is regarded as newly constructed by the Administration and said Administration determines that an initial survey related to the EEDI is necessary, the attained EEDI is to be calculated and satisfy ~~the requirements in~~ **3.~~3~~4, Part 8 of the Rules** with the reduction factor applicable corresponding to the type and size of the converted ship at the date of the contract for the conversion, or in the absence of such a contract, the commencement date of the conversion. In addition, it is to be verified that the SEEMP required by **3.~~4~~6, Part 8 of the Rules** is maintained on board.

(4) For ships deemed necessary, sea trial speed tests are to be conducted to verify the attained EDDI or EEXI.

(5) For ships to which **3.~~4~~6-2, Part 8 of the Rules** applies, it is to be verified that the Ship Energy Efficiency Management Plan (SEEMP) has been revised appropriately to reflect a major conversion in those cases where the major conversion affects the methodology used to collect the data and/or the processes used to report the data specified in **3.~~4~~6-2, Part 8 of the Rules**.

Part 8 EQUIPMENT FOR THE PREVENTION OF AIR POLLUTION FROM SHIPS

Chapter 3 ENERGY EFFICIENCY FOR SHIPS

3.1 General

Paragraphs 3.1.1 and 3.1.2 have been renumbered to Paragraphs 3.1.3 and 3.1.4, and Paragraph 3.1.1 has been added as follows.

3.1.1 Goal

The "Initial IMO Strategy" specified in **3.1.1, Part 8 of the Rules** refers to the *Initial IMO Strategy on Reduction of GHG Emissions from Ships (IMO Res. MEPC.304(72)).*

Paragraph 3.1.3 has been amended as follows.

3.1.~~1~~3 Application

The wording "where deemed appropriate by the Society" in **3.1.~~1~~3-~~4~~6, Part 8 of the Rules** means those cases where the ship ~~which~~ is not normally engaged on international voyages but which, in exceptional circumstances, is required to undertake a single international voyage is exempted by the Administration from ~~any of the requirements in c~~Chapter 4 of *Annex* ~~IV~~VI.

Paragraph 3.1.4 has been amended as follows.

3.1.~~2~~4 Terminology (*Regulation* 2 of *Annex* VI)

1 In the case of the application of a major conversion specified in **3.1.~~2~~4(~~3~~16), Part 8 of the Rules**, the following are to apply, except in cases where specified by the Society or Administration:

(1) "A conversion that substantially alters the dimensions, carrying capacity or engine power of the ship" specified in **3.1.~~2~~4(~~3~~16)(a), Part 8 of the Rules**; for example, it refers to (but is not limited to) change of length between perpendiculars (LPP), change of assigned freeboard, increase of assigned freeboard (excluding temporary increases), or increase of total engine power for propulsion by ~~5~~five percent or more.

(2) The effect on attained EEDI as a result of any change of ship parameters, particularly any increase in total engine power for propulsion, is to be investigated.

2 "Reference lines" specified in **3.1.2(8), Part 8 of the Rules** refers to those calculated in accordance with the ~~"~~*2013 Guidelines for Calculation of Reference Lines for Use with the Energy Efficiency Design Index (EEDI) (IMO Res. MEPC.215(63))* as amended)~~"~~ as well as the ~~"~~*2013 Guidelines for Calculation of Reference Lines for Use with the Energy Efficiency Design Index (EEDI) for Cruise Passenger Ships Having Non-Conventional Propulsion (IMO Res. MEPC.233(65))* as amended)~~"~~.

3 Ships dedicated to the carriage of fruit juice in refrigerated cargo tanks are to be categorized as the "refrigerated cargo carrier" referred to in **3.1.~~2~~4(~~9~~21), Part 8 of the Rules**.

Section 3.2 has been amended as follows.

3.2 Attained Energy Efficiency Design Index (Attained EEDI) (*Regulation* 2~~0~~2 of *Annex* VI)

1 The "~~G~~guidelines deemed appropriate by the Society" specified in **3.2-1, Part 8 of the Rules** refers to the ~~"~~*2014 Guidelines on Survey and Certification of the Energy Efficiency Design Index (EEDI) (IMO Res. MEPC.254(67))*~~,~~ as amended~~)~~" (consolidated text: *MEPC.1/Circ.855/Rev.2* as amended) as well as IACS Procedural Requirement (PR) No. 38 "Procedure for calculation and verification of the Energy Efficiency Design Index (EEDI)".
2 The "~~G~~guidelines deemed appropriate by the Society" specified in **3.2-3, Part 8 of the Rules** refers to the ~~"~~*2018 Guidelines on the Method of Calculation of the Attained Energy Efficiency Design Index (EEDI) for New Ships (IMO Res.MEPC.308(73))*~~"~~ as well as IACS Procedural Requirement (PR) No. 38 "Procedure for calculation and verification of the Energy Efficiency Design Index (EEDI)".

Sections 3.3, 3.4 and 3.5 have been renumbered to Sections 3.4, 3.5 and 3.6, and Section 3.3 has been added as follows.

3.3 Attained Energy Efficiency Existing Ship Index (Attained EEXI) (*Regulation* 23 of *Annex* VI)

1 The "guidelines deemed appropriate by the Society" specified in **3.3-1, Part 8 of the Rules** refers to the *2021 Guidelines on Survey and Certification of the attained Energy Efficiency Existing Ship Index (EEXI) (IMO Res.MEPC.334(76)).*
2 The "guidelines deemed appropriate by the Society" specified in **3.3-3, Part 8 of the Rules** refers to the *2021 Guidelines on the method of calculation of the attained Energy Efficiency Existing Ship Index (EEXI)(IMO Res.MEPC.333(76)).*
3 The "guidelines deemed appropriate by the Society" specified in **3.3-4, Part 8 of the Rules** refers to the *2021 Guidelines on the Shaft/Engine Power Limitation System to Comply with the EEXI Requirements and Use of a Power Reserve (IMO Res.MEPC.335(76)).*

Section 3.4 has been amended as follows.

3.~~3~~4 Required Energy Efficiency Design Index (Required EEDI) (*Regulation* 2~~1~~4 of *Annex* VI)

(-1 to -5 are omitted.)
6 The "~~G~~guidelines deemed appropriate by the Society" specified in **3.~~3~~4-4, Part 8 of the Rules** refers to the ~~"~~*2013 Interim Guidelines for Determining Minimum Propulsion Power to Maintain the Manoeuvrability of Ships in Adverse Conditions (IMO Res. MEPC.232(65)*~~,~~*)* as amended~~)~~" (consolidated text: *MEPC.1/Circ.850/Rev.2*) and the *Guidelines for Determining Minimum Propulsion Power to Maintain the Manoeuvrability of Ships in Adverse Conditions (MEPC.1/Circ.850/Rev.3)* as amended.

Section 3.6 has been amended as follows.

3.~~4~~6 Ship Energy Efficiency Management Plan (SEEMP) (*Regulation* 2~~2~~6 of *Annex* VI)

1 The "~~gross tonnage~~ *gross tonnage*" referred to in **3.~~4~~6-2, Part 8 of the Rules** means the ~~gross tonnage~~ *gross tonnage* calculated in accordance with the *International Convention on Tonnage Measurements of Ships, 1969*.

~~**2** In applying **3.4-2, Part 8 of the Rules**, confirmation of compliance (refer to *MEPC*.1/*Circ*.876) is to be provided to and retained on board the ship.~~

~~**3**~~**2** The "guidelines deemed appropriate by the Society" specified in **3.~~4~~6-3, Part 8 of the Rules** refers to the ~~"~~*2016 Guidelines for the Development of a Ship Energy Efficiency Management Plan (SEEMP) (IMO Res. MEPC.282(70))*~~",~~ as amended.

~~**4**~~**3** (Omitted)

Section 3.8 has been amended as follows.

3.~~5~~8 ~~Statements of Compliance~~ Data Collection, Reporting and Retained related to Fuel Oil Consumption Reporting ~~and Others,~~ etc. (*Regulation* ~~22A~~27 of *Annex* VI)

~~**3.5.1 Statements of Compliance to be Kept and Data to be Retained** (*Regulation* 22A.8 of *Annex* VI)~~

~~The "data" specified in **3.5.1-2, Part 8 of the Rules** is not required to be kept onboard the ship provided that the data can be made available by the Company.~~

~~**3.5.2 Data Collection and Reporting, etc.** (*Regulations* 22A.1 to 22A.7 of *Annex* VI)~~

1 The data required to be collected and reported set forth in **~~3.5.2~~3.8-1, Part 8 of the Rules** includes data relating to boil-off gas consumed on board ~~the ship~~ for propulsion or operation.

2 The "standardized format deemed appropriate by the Society" specified in **~~3.5.2~~3.8-1(2)(a), Part 8 of the Rules** refers to the ~~"~~*2016 Guidelines for the Development of a Ship Energy Efficiency Management Plan (SEEMP) (IMO Res. MEPC.282(70))*~~",~~ as amended.

3 The "guidelines to be developed by the IMO" referred to in **~~3.5.2~~3.8-1(3), Part 8 of the Rules** means the ~~"~~*2017 Guidelines for Administration of Ship Fuel Oil Consumption Data (IMO Res. MEPC.292(71))*~~",~~ as amended.

4 The "data" specified in **3.8-2, Part 8 of the Rules** is not required to be maintained on board provided that the same data can be made available by the company.

Section 3.9 has been added as follows.

3.9 Operational Carbon Intensity (*Regulations* 28 of *Annex* VI)

3.9.1 Attained Annual Operational Carbon Intensity Indicator (attained Annual Operational CII)

The "guidelines deemed appropriate by the IMO" specified in **3.9.1-1 and 3.9.1-3, Part 8 of the Rules** refers to the *2021 Guidelines on Operational Carbon Intensity Indicators and the Calculation Methods (CII Guidelines, G1) (IMO Res. MEPC.336(76)* as amended.

3.9.2 Required Annual Operational Carbon Intensity Indicator (Required Annual Operational CII)

The "guidelines deemed appropriate by the IMO" specified in **3.9.2-2, Part 8 of the Rules** refers to the *2021 Guidelines on the Reference Lines for Use with Operational Carbon Intensity Indicators (CII Reference lines Guidelines, G2) (IMO Res. MEPC.337(76))* as amended and "*2021 Guidelines on the Operational Carbon Intensity Reduction Factors Relative to Reference Lines (CII Reduction Factors, G3) (IMO Res. MEPC.338(76))* as amended.

3.9.3 Operational Carbon Intensity Rating

The "guidelines deemed appropriate by the IMO" specified in **3.9.3, Part 8 of the Rules** refers to the *2021 Guidelines on the Operational Carbon Intensity Rating of Ships (CII Rating Guidelines, G4) (IMO Res. MEPC.339(76))* as amended.