Order amending the order on Notice B from the Danish Maritime Authority The construction and equipment, etc. of ships

Section 1

In order no. 491 of 13 May 2014 on Notice B from the Danish Maritime Authority, The construction and equipment, etc. of ships, the following amendments shall be made:

1. *The introduction* shall be as follows:

"In pursuance of section 1(2) and (3), sections 3-5 and section 32(8) of the act on safety at sea (*lov om sikkerhed til søs*), cf. consolidated act no. 72 of 17 January 2014, as amended by act no. 1384 of 23 December 2013, and section 1(2) and (3), sections 3-5 and section 32(2) of decree no. 71 of 29 January 2013 on the entry into force for Greenland of the act amending the act on safety at sea, and by authority, the following provisions are laid down:

2. Chapter II-5, annex I, chapter I, regulation 2-1, shall be as follows:

"Regulation 2-1 – Authorization of recognized organizations

The Administration¹ shall authorize organizations, including classification societies, referred to in article 13 of the Convention and regulation 1(2) in accordance with the provisions of this Convention and with the Code for Recognized Organizations (RO Code), consisting of part 1 and part 2 (the provisions of which shall be treated as mandatory) and part 3 (the provisions of which shall be treated as recommendatory), as adopted by the Organization by resolution MSC.349(92), as may be amended by the Organization, provided that:

- (a) amendments to part 1 and part 2 of the RO Code are adopted, brought into force and take effect in accordance with the provisions of article VI of the Protocol to the Load Line Convention;
- (b) amendments to part 3 of the RO Code are adopted by the Maritime Safety Committee (MSC) in accordance with its Rules of Procedure; and
- (c) any amendments adopted by the Maritime Safety Committee (MSC) and the Marine Environment Protection Committee (MEPC) are identical and come into force or take effect at the same time, as appropriate."
- **3.** In *chapter II-5, annex I*, the existing footnotes shall be renumbered accordingly.

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The provision is included for practical reasons in order to ensure the consolidated nature of the reproduction of the international set of regulations. As regards the European Union, this issue is regulated by Directive 2009/15/EC of the European Parliament and of the Council on common rules and standards for ship inspection and survey organisations and for the relevant activities of maritime administrations, as amended by Commission Directive 2014/111/EU and regulation (EC) no. 391/2009 of the European Parliament and of the Council of 23 April 2009 on common rules and standards for ship inspection and survey organisations, as amended by Commission regulation (EU) no. 1335/2014.

4. *Chapter II-5 N, regulation 1,* shall be as follows:

"Regulation 1 – Application

- 1. This chapter implements the provisions of the Load Line Convention for Danish ships.
- 2. In addition, this chapter contains regulations implementing, expanding or deviating from the provisions of the Load Line Convention.
- 3. Unless expressly provided otherwise, this chapter shall apply to ships with a length of or above 24 metres the keels of which are laid on or after 1 January 2002."
- **5.** *Chapter II-5 N, regulation 5,* shall be as follows:

"Regulation 5 – Protection of the crew

Arrangements for the protection of the crew, as stipulated in regulation 25(4) and in regulation 26(2) and (3) of the Load Line Convention and in chapter II-1, regulation 3-3 of these regulations for tankers, shall be carried out in accordance with the rules of a recognized classification society, irrespective of whether the ship is in class or not."

- **6.** *Chapter III, part A, regulation 3(7),* shall be as follows:
- "7. "Immersion suit" is a protective suit which reduces the body heat loss of a person wearing it in cold water."
- 7. Chapter V, regulation I(2), shall be as follows:
- "2. The provisions of this chapter shall also apply to all ships operating solely in waters landward of the baseline established in accordance with international law."
- **8.** *Chapter XI, part A, regulation 1,* shall be as follows:

"Regulation 1 - Authorization of recognized organizations

The Administration² shall authorize organizations, referred to in regulation I/6, including classification societies, in accordance with the provisions of the SOLAS Convention and with the Code for Recognized Organizations (RO Code), consisting of part 1 and part 2 (the provisions of which shall be treated as mandatory) and part 3 (the provisions of which shall be treated as recommendatory), as adopted by the Organization by resolution MSC.349(92), as may be amended by the Organization, provided that:

- (a) amendments to part 1 and part 2 of the RO Code are adopted, brought into force and take effect in accordance with the provisions of article VIII of the SOLAS Convention;
- (b) amendments to part 3 of the RO Code are adopted by the Maritime Safety Committee (MSC) in accordance with its Rules of Procedure; and
- (c) any amendments adopted by the Maritime Safety Committee (MSC) and the Marine Environment Protection Committee (MEPC) are identical and come into force or take effect at the same time, as appropriate."
- **9.** In *chapter XI*, the existing footnotes shall be renumbered accordingly.

The provision is included for practical reasons in order to ensure the consolidated nature of the reproduction of the international set of regulations. As regards the European Union, this issue is regulated by Directive 2009/15/EC of the European Parliament and of the Council on common rules and standards for ship inspection and survey organisations and for the relevant activities of maritime administrations, as amended by Commission Directive 2014/111/EU and regulation (EC) no. 391/2009 of the European Parliament and of the Council of 23 April 2009 on common rules and standards for ship inspection and survey organisations, as amended by Commission regulation (EU) no. 1335/2014.

- **10.** *Chapter XXI, part II, regulation 6, paragraph 3.1*, shall be as follows:
- "3.1 Surveys of ships as regards the enforcement of the provisions of this chapter shall be carried out by officers of the Administration. The Administration may, however, entrust the surveys either to surveyors nominated for the purpose or to organizations recognized by it. Such organizations, including classification societies, shall be authorized by the Administration³ in accordance with the provisions of the MARPOL Convention and with the Code for Recognized Organizations (RO Code), consisting of part 1 and part 2 (the provisions of which shall be treated as mandatory) and part 3 (the provisions of which shall be treated as recommendatory), as adopted by the Organization by resolution MEPC.237(65), as may be amended by the Organization, provided that:
- amendments to part 1 and part 2 of the RO Code are adopted, brought into force and take effect in accordance with the provisions of article 16 of the MARPOL Convention concerning the amendment procedures applicable to this chapter;
- .2 amendments to part 3 of the RO Code are adopted by the Marine Environment Protection Committee (MEPC) in accordance with its Rules of Procedure; and
- .3 any amendments referred to in .1 and .2 above adopted by the Maritime Safety Committee (MSC) and the Marine Environment Protection Committee (MEPC) are identical and come into force or take effect at the same time, as appropriate."
- 11. Chapter XXII, part III, regulation 8, paragraph 2.2, shall be as follows:
- "2.2 Such organizations, including classification societies, shall be authorized by the Administration⁴ in accordance with the provisions of the MARPOL Convention and with the Code for Recognized Organizations (RO Code), consisting of part 1 and part 2 (the provisions of which shall be treated as mandatory) and part 3 (the provisions of which shall be treated as recommendatory), as adopted by the Organization by resolution MEPC.237(65), as may be amended by the Organization, provided that:
- amendments to part 1 and part 2 of the RO Code are adopted, brought into force and take effect in accordance with the provisions of article 16 of the MARPOL Convention concerning the amendment procedures applicable to this chapter;
- .2 amendments to part 3 of the RO Code are adopted by the Marine Environment Protection Committee (MEPC) in accordance with its Rules of Procedure; and
- .3 any amendments referred to in .1 and .2 above adopted by the Maritime Safety Committee (MSC) and the Marine Environment Protection Committee (MEPC) are identical and come into force or take effect at the same time, as appropriate."

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The provision is included for practical reasons in order to ensure the consolidated nature of the reproduction of the international set of regulations. As regards the European Union, this issue is regulated by Directive 2009/15/EC of the European Parliament and of the Council on common rules and standards for ship inspection and survey organisations and for the relevant activities of maritime administrations, as amended by Commission Directive 2014/111/EU and regulation (EC) no. 391/2009 of the European Parliament and of the Council of 23 April 2009 on common rules and standards for ship inspection and survey organisations, as amended by Commission regulation (EU) no. 1335/2014.

The provision is included for practical reasons in order to ensure the consolidated nature of the reproduction of the international set of regulations. As regards the European Union, this issue is regulated by Directive 2009/15/EC of the European Parliament and of the Council on common rules and standards for ship inspection and survey organisations and for the relevant activities of maritime administrations, as amended by Commission Directive 2014/111/EU and regulation (EC) no. 391/2009 of the European Parliament and of the Council of 23 April 2009 on common rules and standards for ship inspection and survey organisations, as amended by Commission regulation (EU) no. 1335/2014.

- **12.** In *chapter XXVI*, part *I*, regulation 2, paragraph 21, immediately before paragraph 22, "For the purposes of part IV" shall be deleted.
- **13.** *Chapter XXVI, part I, regulation 2, paragraphs 25 and 26,* shall be as follows:
- "25 "Bulk carrier" means a ship which is intended primarily to carry dry cargo in bulk, including such types as ore carriers as defined in SOLAS, chapter XII, regulation 1, but excluding combination carriers.
- "Gas carrier" in relation to part IV means a cargo ship, other than an LNG carrier as defined in paragraph 38 of this regulation, constructed or adapted and used for the carriage in bulk of any liquefied gas."
- **14.** In *chapter XXVI*, part *I*, regulation 2, the following is inserted after paragraph 37:
- "38 "LNG carrier" in relation to part IV means a cargo ship constructed or adapted and used for the carriage in bulk of liquefied natural gas (LNG).
- 39 "Cruise passenger ship" in relation to part IV means a passenger ship not having a cargo deck, designed exclusively for commercial transportation of passengers in overnight accommodations on a sea voyage.
- "Conventional propulsion" in relation to part IV means a method of propulsion where a main reciprocating internal combustion engine(s) is the prime mover and coupled to a propulsion shaft either directly or through a gear box.
- "Non-conventional propulsion" in relation to part IV means a method of propulsion, other than conventional propulsion, including diesel-electric propulsion, turbine propulsion, and hybrid propulsion systems.
- "Cargo ship having ice-breaking capability" in relation to part IV means a cargo ship which is designed to break level ice independently with a speed of at least 2 knots when the level ice thickness is 1.0 metres or more having ice bending strength of at least 500 kPa.
- 43 "A ship delivered on or after 1 September 2019" means a ship:
 - .1 for which the building contract is placed on or after 1 September 2015; or
 - .2 in the absence of a building contract, the keel of which is laid, or which is at a similar stage of construction, on or after 1 March 2016; or
 - .3 the delivery of which is on or after 1 September 2019."
- **15.** In *chapter XXVI*, part II, regulation 5, paragraph 4.2, the first sentence, the words "a ship" are replaced with the words "a new ship".
- **16.** *Chapter XXVI, part III, regulation 13, paragraph 2.2,* shall be as follows:
- "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. 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 guidelines developed by the Organization.⁵"

- 17. Chapter XXVI, part III, regulation 13, paragraphs 5.1 and 5.2, shall be as follows:
- "5.1 Subject to regulation 3 of this chapter, in an emission control area designated for Tier III NOx control under paragraph 6 of this regulation, the operation of a marine diesel engine that is installed on a ship:
 - .1 is prohibited except when the emission of nitrogen oxides (calculated as the total weighted emission of NOx) from the engine is within the following limits, where n = rated engine speed (crankshaft revolutions per minute):
 - .1 3.4 g/kWh when n is less than 130 rpm;
 - .2 9 x $n^{(-0.2)}$ g/kWh when n is 130 or more but less than 2,000 rpm;
 - .3 2.0 g/kWh when n is 2,000 rpm or more;

when:

.2 that ship is constructed on or after 1 January 2016 and is operating in the North American Emission Control Area or the United States Caribbean Sea Emission Control Area;

when:

- .3 that ship is operating in an emission control area designated for Tier III NOx control under paragraph 6 of this regulation, other than an emission control area described in paragraph 5.1.2 of this regulation, and is constructed on or after the date of adoption of such an emission control area, or a later date as may be specified in the amendment designating the NOx Tier III emission control area, whichever is later.
- **5.2** The standards set forth in paragraph 5.1.1 of this regulation shall not apply to:
 - a marine diesel engine installed on a ship with a length (*L*), as defined in regulation 1.19 of Annex I to the MARPOL Convention, of less than 24 metres when it has been specifically designed, and is used solely, for recreational purposes; or
 - .2 a marine diesel engine installed on a ship with a combined nameplate diesel engine propulsion power of less than 750 kW if it is demonstrated, to the satisfaction of the Administration, that the ship cannot comply with the standards set forth in paragraph 5.1.1 of this regulation because of design or construction limitations of the ship; or
 - .3 a marine diesel engine installed on a ship constructed prior to 1 January 2012 of less than 500 gross tonnage, with a length (L), as defined in regulation 1.19 of chapter XXI, of 24 metres or over when it has been specifically designed, and is used solely, for recreational purposes."
- **18.** *Chapter XXVI, part III, regulation 13, paragraph 10,* shall be deleted.
- **19.** In *chapter XXVI*, part *IV*, regulation 19, paragraph 2, the following shall be inserted:
- ".2 ships not propelled by mechanical means, and platforms including FPSOs and FSUs and drilling rigs, regardless of their propulsion."

Refer to the "2013 Guidelines as required by regulation 13.2.2 of MARPOL Annex VI in respect on non-identical replacement engines not required to meet the Tier III limit", adopted by the MEPC by resolution MEPC.230(65).

- **20.** *Chapter XXVI, part IV, regulation 19, paragraph 3,* shall be as follows:
- "3 Regulations 20 and 21 of this chapter shall not apply to ships which have non-conventional propulsion, except that regulations 20 and 21 shall 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, as defined in paragraph 43 of regulation 2. Regulations 20 and 21 shall not apply to cargo ships having ice-breaking capability."
- **21.** *Chapter XXVI, part IV, regulation 20, paragraph 1,* shall be as follows:
- "1 The attained EEDI shall be calculated for:
 - .1 each new ship;
 - .2 each new ship which has undergone a major conversion; and
 - each new or existing ship which has undergone a major conversion, that is so extensive that the ship is regarded by the Administration as a newly-constructed ship, which falls into one or more of the categories in regulations 2.25 to 2.35, 2.38 and 2.39. The attained EEDI shall be specific to each ship and shall indicate the estimated performance of the ship in terms of energy efficiency, and be accompanied by the EEDI technical file that contains the information necessary for the calculation of the attained EEDI and that shows the process of calculation. The attained EEDI shall be verified, based on the EEDI technical file, either by the Administration or by any organization duly authorized by it.⁶"
- **22.** *Chapter XXVI, part IV, regulation 21, paragraph 2,* shall be as follows:
- "1 For each:
 - .1 new ship;
 - .2 new ship which has undergone a major conversion; and
 - .3 new or existing ship which has undergone a major conversion that is so extensive that the ship is regarded by the Administration as a newly-constructed ship, which falls into one of the categories in regulations 2.25 to 2.31, 2.33 to 2.35, 2.38 and 2.39 and to which this part is applicable, the attained EEDI shall be as follows:

Attained EEDI \leq Required EEDI = (1-X/100) x reference line value)

where X is the reduction factor specified in table 1 for the required EEDI compared to the EEDI reference line."

- **23.** Table 1 in chapter XXVI, part IV, regulation 21, paragraph 2, shall be as shown in annex 1 to this order.
- **24.** Table 2 in chapter XXVI, part IV, regulation 21, paragraph 3, shall be as shown in annex 2 to this order.

Refer to "Code for Recognized Organizations (RO Code), adopted by the MEPC by resolution MEPC.237(65), as may be amended.

Section 2

Subsection 1. This order shall enter into force on 1 May 2015, cf. however subsection 2. Subsection 2. Section 1(xii)-(xxiv) shall enter into force on 1 September 2015.

Danish Maritime Authority, 23 April 2015

Per Sønderstrup / Steen Møller Nielsen

Table 1. Reduction factors (in percentage) for the EEDI relative to the EEDI Reference line

Ship type	Size	Phase 0 1 Jan2013-	Phase 1 1 Jan 2015-	Phase 2 1 Jan 2020-	Phase 3 1 Jan 2025
		31 Dec 2014	31 Dec 2019	31 Dec 2024	and onwards
Bulk carrier	20,000 DWT	0	10	20	30
Buik carrier	and above	O	10	20	30
	10,000-	n/a	0-10*	0-20*	0-30*
	20,000 DWT	11/ α	0-10	0-20	0-30
Gas carrier	10,000 DWT	0	10	20	30
	and above	V	10	20	30
	2,000-	n/a	0-10*	0-20*	0-30*
	10,000 DWT	11/ 54	0 10	0 20	0.20
Tanker	20,000 DWT	0	10	20	30
	an above	Ů	10		
	4,000-	n/a	0-10*	0-20*	0-30*
	20-000 DWT	11/ 54	0 10	0 20	0.50
Container ship	15,000 DWT	0	10	20	30
	and above			-	
	10,000-	n/a	0-10*	0-20*	0-30*
	15,000 DWT				
General cargo	15,000 DWT	0	10	15	30
ship	and above				
	3,000-	n/a	0-10*	0-15*	0-30*
	15,000 DWT				
Refrigerated	5,000 DWT	0	10	15	30
cargo carrier	and above				
	3,000-	n/a	0-10*	0-15*	0-30*
	5,000 DWT				
Combination carrier	20,000 DWT	0	10	20	30
	and above				
	4,000-	n/a	0-10*	0-20*	0-30*
	20,000 DWT				
LNG carrier***	10,000 DWT	n/a	10**	20	30
	and above				
Ro-ro cargo	10,000 DWT	n/a	5**	15	30
ship (vehicle	and above				
carrier)***					
Ro-ro cargo ship***	20,000 DWT	n/a	5**	20	30
	and above				
	1,000-	n/a	0-5***	0-20*	0-30*
	2,000 DWT				
Ro-ro passenger ship***	1,000 DWT	n/a	5**	20	30
	and above				0.55
	250-	n/a	0-5* **	0-20*	0-30*
	1,000 DWT	·			
Cruise passenger	85,000 GT	n/a	5**	20	30
ship*** having	and above	,	0.50.00	0.00	0.201
non-conventional	25,000-	n/a	0-5* **	0-20*	0-30*
propulsion * Reduction t	85,000 GT			dependent upon sl	

^{*} Reduction factor to be linearly interpolated between the two values dependent upon ship size. The lower value of the reduction factor is to be applied to the smaller ship size.

Note: n/a means that no required EEDI applies."

^{**} Phase 1 commences for those ships on 1 September 2015.

^{***} Reduction factor applies to those ships delivered on or after 1 September 2019, as defined in paragraph 43 of regulation 2.

Table 2. Parameters for determination of reference values for the different ship types

Ship type defined in regulation 2	a	b	c
2.25 Bulk carrier	961.79	DWT of the ship	0.477
2.26 Gas carrier	1120.00	DWT of the ship	0.456
2.27 Tanker	1218.80	DWT of the ship	0.488
2.28 Container ship	174.22	DWT of the ship	0.201
2.29 General cargo ship	107.48	DWT of the ship	0.216
2.30 Refrigerated cargo carrier	227.01	DWT of the ship	0.244
2.31 Combination carrier	1219.00	DWT of the ship	0.488
2.33 Ro-ro cargo ship (vehicle carrier)	(DWT/GT)-0.7 • 780.36	DWT of the ship	0.471
	where DWT/GT<0.3		
	1812.63		
	where DWT/GT≥0.3		
2.34 Ro-ro cargo ship	1405.15	DWT of the ship	0.498
2.35 Ro-ro passenger ship	752.16	DWT of the ship	0.381
2.38 LNG carrier	2253.7	DWT of the ship	0.474
2.39 Cruise passenger ship having non- conventional propulsion	170.84	GT of the ship	0.214