



# RUSSIAN MARITIME REGISTER OF SHIPPING

**CIRCULAR LETTER**

**No. 312-09-1853c**

dated 16.11.2022

Re:

amendments to the Rules for the Classification and Construction of Sea-Going Ships, 2022, ND No. 2-020101-152-E

Item(s) of supervision:

ships under construction

Entry-into-force date:

**01.01.2023**

~~Cancels / amends /~~ adds Circular Letter No.

312-11-1273c

dated 16.10.2019

Number of pages: 1 + 9

Appendices:

Appendix 1: information on amendments introduced by the Circular Letter

Appendix 2: text of amendments to Part I "Classification" and Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships"

Acting Director General

Sergey A. Kulikov

Text of CL:

We hereby inform that the Rules for the Classification and Construction of Sea-Going Ships shall be amended as specified in the Appendices to the Circular Letter.

It is necessary to do the following:

1. Bring the content of the Circular Letter to the notice of the RS surveyors, interested organizations and persons in the area of the RS Branch Offices' activity.
2. Apply the provisions of the Circular Letter during review and approval of the technical documentation on ships contracted for construction of conversion on or after 01.01.2023, in the absence of a contract, during review of the technical documentation on ships requested for review on or after 01.01.2023.

List of the amended and/or introduced paras/chapters/sections:

Part I: para 2.2.42.2 and Table 2.5;

Part XVII: paras 18.2.1.1 — 18.2.1.4, 18.2.3, 18.2.4.7, 18.2.4.9 and 18.2.5 — 18.2.7

Person in charge: Elena V. Budnikova 312

+7 (812) 314-07-48

"Thesis" System No. 22-203956

**Information on amendments introduced by the Circular Letter  
(for inclusion in the Revision History to the RS Publication)**

Nos.	Amended paras/chapters/ sections	Information on amendments	Number and date of the Circular Letter	Entry-into-force date
1	Part I, para 2.2.42.2	Para has been supplemented with the requirements regarding conditions for assignment of mandatory distinguishing mark <b>COMF(N – S)</b>	312-09-1853 of 16.11.2022	01.01.2023
2	Part I, Table 2.5	New item 1.33 containing requirements for assignment of mandatory distinguishing mark <b>COMF (N – S)</b> has been introduced. In item 2.24, for distinguishing mark <b>COMF (N – 1 or 2, or 3)</b> , the references to the RS requirements have been specified	312-09-1853 of 16.11.2022	01.01.2023  01.01.2023
3	Part XVII, para 18.2.1.1	Requirements regarding conditions for assignment of the distinguishing mark <b>COMF(N – 1 or 2, or 3)</b> have been specified	312-09-1853 of 16.11.2022	01.01.2023
4	Part XVII, para 18.2.1.2	Scope of application of Chapter 18.2 has been specified	312-09-1853 of 16.11.2022	01.01.2023
5	Part XVII, para 18.2.1.3	New para has been introduced containing requirements regarding conditions for assignment of mandatory distinguishing mark <b>COMF(N – S)</b>	312-09-1853 of 16.11.2022	01.01.2023
6	Part XVII, para 18.2.1.4	New para has been introduced containing clarifications regarding measurement of noise level taking into account requirements of the ship's flag MA	312-09-1853 of 16.11.2022	01.01.2023
7	Part XVII, para 18.2.3	Requirements for documentation on noise measurement results to be submitted to RS have been specified	312-09-1853 of 16.11.2022	01.01.2023
8	Part XVII, para 18.2.4.7	Reference to the Code on Noise Levels on Board Ships adopted by IMO resolution MSC.337(91) as amended has been specified	312-09-1853 of 16.11.2022	01.01.2023
9	Part XVII, para 18.2.4.9	Reference to the Code on Noise Levels on Board Ships adopted by IMO resolution MSC.337(91), as amended, has been specified	312-09-1853 of 16.11.2022	01.01.2023
10	Part XVII, para 18.2.5	Scope of application of para has been specified. Note has been added to Table 18.2.5.1 in accordance with the instructions in IACS UI SC296 (May 2022) and IMO circular MSC.1/Circ.1654	312-09-1853 of 16.11.2022	01.01.2023

Nos.	Amended paras/chapters/ sections	Information on amendments	Number and date of the Circular Letter	Entry-into-force date
11	Part XVII, para 18.2.6	Requirements for noise levels in ship spaces for the assignment of mandatory distinguishing mark <b>COMF(N – S)</b> have been introduced	312-09-1853 of 16.11.2022	01.01.2023
12	Part XVII, para 18.2.7	New para has been introduced containing requirements for measures for abatement of noise levels on board the ship based on IMO resolution MSC.337(91), as amended	312-09-1853 of 16.11.2022	01.01.2023

## RULES FOR THE CLASSIFICATION AND CONSTRUCTION OF SEA-GOING SHIPS, 2022,

ND No. 2-020101-152-E

### PART I. CLASSIFICATION

#### 2 CLASS OF A SHIP

1 **Para 2.2.42.2** is replaced by the following text:

**"2.2.42.2** If ships comply with the requirements for noise level in ship's spaces specified in 18.2.1.1 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", the distinguishing mark **COMF(N – 1 or 2, or 3)** may be added to the character of classification, where grades **1, 2, 3** indicate the noise comfort level in ship's spaces (with grade **1** corresponding to the most comfortable level).

If ships of 1600 gross tonnage and upwards engaged on international voyages comply with the requirements for noise level in ship's spaces specified in 18.2.1.3 of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", the distinguishing mark **COMF(N – S)** shall be mandatorily added to the character of classification, where **"S"** means compliance of the noise comfort level with the requirements of SOLAS-74."

2 **Table 2.5. New item 1.33** is introduced reading as follows:

"

1.33 Distinguishing mark for a ship complying with SOLAS-74 requirements for noise level in ship's spaces		
<b>COMF(N – S)</b>	Ship complies with the requirements for noise level in ship's spaces. Grade <b>S</b> indicates the noise comfort level in ship's spaces ( <b>S</b> — compliance of the noise comfort level with SOLAS-74 requirements). For ships of 1600 gross tonnage and upwards engaged on international voyages, the distinguishing mark is mandatory;  N o t e . For ships of 1600 gross tonnage and upwards engaged on international voyages contracted for construction before 1 January 2023 and which comply with SOLAS-74 reg. II-2/3-12 and relevant provisions specified in the column "References to RS requirements", the distinguishing mark may be assigned at the shipowner's discretion	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.42.2 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", 18.2.1.3

"

In **item 2.24**, the requirements for distinguishing mark **COMF(N – 1 or 2, or 3)** are replaced by the following text:

"

<b>COMF(N – 1 or 2, or 3)</b>	Ship complies with the requirements for noise level in ship's spaces. Grades <b>1, 2, 3</b> indicate the noise comfort level in ship's spaces (with grade <b>1</b> corresponding to the most comfortable level)	<b>Rules for the Classification and Construction of Sea-Going Ships</b> Part I "Classification", 2.2.42.2 Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", 18.2.1.1
-------------------------------	--	---

"

## PART XVII. DISTINGUISHING MARKS AND DESCRIPTIVE NOTATIONS IN THE CLASS NOTATION SPECIFYING STRUCTURAL AND OPERATIONAL PARTICULARS OF SHIPS

### 18 INDOOR HYGIENE AND SANITARY CONDITIONS

1 **Para 18.2.1.1** is replaced by the following text:

"**18.2.1.1** If ships, irrespective of gross tonnage, not engaged on international voyages, comply with the requirements of this Chapter for noise level in all passenger and crew spaces, with account of 18.2.1.2 and 18.2.1.3, the distinguishing mark **COMF(N – 1 or 2, or 3)** may be added to the character of classification, where **1, 2, 3** indicate the noise comfort level in ship's spaces (with 1 corresponding to the most comfortable level)."

2 **Para 18.2.1.2** is replaced by the following text:

"**18.2.1.2** The requirements of this Chapter do not apply to:

- .1 dynamically supported craft;
- .2 high-speed craft;
- .3 fishing vessels;
- .4 pipe-laying vessels and pipe-laying barges;
- .5 mobile offshore drilling units and fixed offshore platforms;
- .6 pleasure craft (non-commercial use);
- .7 auxiliary ships of war;
- .8 pile driving vessels;
- .9 dredgers;
- .10 floating cranes;
- .11 ships not propelled by mechanical means."

3 **New paras 18.2.1.3 and 18.2.1.4** are introduced reading as follows:

"**18.2.1.3** If ships of 1600 gross tonnage and upwards engaged on international voyages, with account of 18.2.1.2, comply with the requirements of this Chapter for noise level in passenger and crew spaces (refer also to Notes), the distinguishing mark **COMF(N – S)** shall be mandatorily added to the character of classification, where "**S**" means compliance of the noise comfort level with the requirements of SOLAS-74.

**Notes:** 1. Taking into account SOLAS-74 regulation II-1/3-12, as amended, ships of 1600 gross tonnage and upwards engaged on international voyages shall comply with the requirements of the Code on Noise Levels on Board Ships, adopted by IMO resolution MSC.337(91) as may be amended (hereinafter referred to as "the Code").

The requirements of the Code are not intended to apply to passenger cabins and other passenger spaces, except in so far as they are work spaces and are covered by the provisions of the Code.

2. In case of repairs, alterations and modifications of a major character and outfitting related thereto of existing ships (ships that are not new in relation to the scope of application of SOLAS-74

regulation II-1/3-12), it shall be ensured that areas, in which changes have been made, meet the requirements of the Code for new ships, insofar as the ship's flag Maritime Administration (MA) deems reasonable and practicable.

3. The Code covers only noise sources related to the ship such as machinery and propulsion but does not include wind/wave/ice noise, alarms, public address systems, etc.

4. Dispensations from certain requirements may in special circumstances be granted by the ship's flag MA, if it is documented that compliance will not be possible despite relevant and reasonable technical noise reduction measures. Such dispensations shall not include cabins, unless exceptional circumstances prevail.

5. For ships designed for and employed on voyages of short duration, or on other services involving short periods of operation of the ship, to the satisfaction of the flag MA, requirements of 4.2.3 and 4.2.4 of the Code may be applied only with the ship in the port condition, provided that the periods under such conditions are adequate for seafarers' rest and recreation.

**18.2.1.4** Where the ship's flag MA has established instructions governing the measurement of noise level on board ships, other than those given in this Chapter and the Code, the ship's flag MA instructions shall apply."

4 **Para 18.2.3** is replaced by the following text:

**"18.2.3 Documentation.**

**18.2.3.1** In addition to technical documentation specified in Section 3 of Part I "Classification", a measurement program shall be submitted to the RS Branch Office carrying out technical supervision during construction of a ship for approval prior to the commencement of the sea trials.

On completion of the construction of the ship, but before a ship is put into service, measurement of noise levels in all spaces specified in the measurement program taking into account 18.2.5 or 18.2.6 (as applicable) shall take place under the operating conditions at sea trials and in port (refer to 3.3 and 3.4 of the Code). Measurement results shall be submitted to the RS Branch Office for information in the form of a noise survey report.

**18.2.3.2** A noise survey report shall be made for each ship. The report shall comprise information on the noise levels in the various spaces on board. The report shall show the reading at each specified measuring point. The points shall be marked on a general arrangement plan, or on accommodation drawings attached to the report, or shall otherwise be identified. The recommended format for noise survey reports is set out in Appendix 1 to the Code. The noise survey report shall confirm the effectiveness of noise reduction measures and shall always be carried on board and be accessible for the crew."

5 **Para 18.2.4.7** is replaced by the following text:

**"18.2.4.7** Operating conditions at sea trials for noise level measurements shall comply with 3.3 and 3.5 of the Code."

6 **Para 18.2.4.9** is replaced by the following text:

**"18.2.4.9** Measurement positions shall comply with 3.10 — 3.14 of the Code. For spaces exceeding 20 m<sup>2</sup>, noise measurements shall be performed for every 20 m<sup>2</sup>."

7 Heading of **para 18.2.5** is replaced by the following text:

**"18.2.5 Permissible noise levels and requirements for sound insulation on board ships specified in 18.2.1.1."**

8 **Para 18.2.5.1** is replaced by the following text:

**"18.2.5.1** Maximum permissible noise levels in the crew accommodations shall not exceed the values specified in Table 18.2.5.1.

Table 18.2.5.1

Noise level requirements for crew accommodations			
Location	A-weighted equivalent continuous sound level A, $L_{Aeq}(T)$ , in dB(A)		
	Noise comfort level 1	Noise comfort level 2	Noise comfort level 3
Wheel house	60	63	65
Radio room <sup>1</sup>	55	57	60
Cabins	52	55	60
Offices	57	60	65
Public spaces, mess rooms	57	60	65
Hospital	56	58	60
Main machinery control room and switchboard rooms continuously manned at sea <sup>2</sup>	70	73	75
Open recreation areas <sup>3,4</sup>	70	73	75
Galleys <sup>2</sup>	70	73	75
Workshops other than those forming part of machinery spaces <sup>2,5</sup>	85	85	85
Staircases and corridors in crew areas	70	73	75
<sup>1</sup> Equipment switched on but not emitting. <sup>2</sup> Equipment switched on but not processing. <sup>3</sup> Measurement carried out with a windscreen microphone protection. <sup>4</sup> A tolerance of 5 dB(A) may be accepted for measurements at less than 3 m from ventilation inlet/outlet. <sup>5</sup> "Workshops other than those forming part of machinery spaces" are enclosed workshops that are separated from the engine room with bulkheads, which may include access doors of the equivalent acoustic insulating properties as the bulkhead. Workbenches and workstations located inside the machinery space are not to be considered as workshops other than those forming part of machinery spaces.			

9 New para 18.2.6 is introduced reading as follows:

**"18.2.6 Permissible noise levels and requirements for sound insulation on board ships specified in 18.2.1.3.**

**18.2.6.1** Maximum permissible noise levels in the crew accommodations shall not exceed the values specified in Table 18.2.6.1.

Table 18.2.6.1

Noise level requirements for crew accommodations		
Location	A-weighted equivalent continuous sound level A, $L_{Aeq}(T)$ , in dB(A)	
	Noise comfort level S	
	1600 ≤ GT < 10000	GT ≥ 10000
Work spaces		
Machinery spaces <sup>1</sup>	110	110
Main machinery control room and switchboard rooms continuously manned at sea <sup>2</sup>	75	75
Workshops other than those forming part of machinery spaces <sup>3</sup>	85	85
Non-specified work spaces <sup>3</sup> (other work areas)	85	85
Navigation spaces		
Look-out posts, incl. navigating bridge wings <sup>4</sup> and windows	70	70
Navigating bridge and wheelhouse	65	65
Radar room	65	65
Radio rooms <sup>5</sup>	60	60
Accommodation spaces		
Cabins and hospitals <sup>6</sup>	60	55
Offices	65	60
Public spaces, mess rooms	65	60
Open recreation areas <sup>7,8</sup>	75	75
Recreation rooms	65	60
Service spaces		
Galleys <sup>2</sup>	75	
Serveries and pantries	75	75

Location	A-weighted equivalent continuous sound level A, $L_{Aeq}(T)$ , in dB(A)	
	Noise comfort level <b>S</b>	
	$1600 \leq GT < 10000$	$GT \geq 10000$
Normally unoccupied spaces		
Spaces referred to in 3.14 of the Code	90	90
<p>GT – gross tonnage.</p> <p>The limits specified in this Table shall be regarded as maximum levels and not as desirable levels. Where reasonably practicable, it is desirable for the noise level to be lower than the maximum levels specified.</p> <p>Personnel entering spaces with nominal noise levels greater than 85 dB(A) shall be required to wear hearing protectors while in those spaces (refer to Section 5 of the Code).</p> <p>The limit of 110 dB(A) assumes that hearing protectors are used giving protection that meets the requirements for hearing protectors in Section 7 of the Code.</p> <p><sup>1</sup> If the maximum noise levels are exceeded when machinery is operating (only permitted if dispensation is granted in accordance with 1.3.6 of the Code), stay shall be limited to very short periods or not allowed at all. The area shall be marked according to 7.4 of the Code.</p> <p><sup>2</sup> Equipment switched on but not processing.</p> <p><sup>3</sup> "Workshops other than those forming part of machinery spaces" are enclosed workshops that are separated from the engine room with bulkheads, which may include access doors of the equivalent acoustic insulating properties as the bulkhead. Workbenches and workstations located inside the machinery space are not to be considered as workshops other than those forming part of machinery spaces (refer also to IACS UI SC296 (May 2022), the document is available on the IACS website (<a href="http://www.iacs.org.uk">www.iacs.org.uk</a>), and IMO circular MSC.1/Circ.1654). The permissible noise level limit for workshops, which are forming part of machinery space, shall be as for the machinery space: 110dB(A).</p> <p><sup>4</sup> Reference is made to the "Recommendation on methods of measuring noise levels at listening posts" (IMO resolution A.343(IX)) which also applies.</p> <p><sup>5</sup> Equipment switched on but not emitting.</p> <p><sup>6</sup> Treatment rooms with beds.</p> <p><sup>7</sup> Measurement carried out with a windscreen microphone protection.</p> <p><sup>8</sup> A tolerance of 5 dB(A) may be accepted for measurements at less than 3 m from ventilation inlet/outlet.</p>		

**18.2.6.2** Between two adjacent crew accommodation spaces, the apparent weighted sound reduction index  $R'_w$  shall not be less than the values specified in Table 18.2.6.2 with a tolerance of up to 3 dB. Measurements shall be performed in situ, ship at quay or at anchorage. The airborne sound insulation properties shall be determined by laboratory tests in accordance with ISO 10140-2:2010, to the satisfaction of the ship's flag MA.

Table 18.2.6.2

Apparent weighted sound reduction index $R'_w$ , in dB	
Location	Noise comfort level <b>S</b>
Cabin to cabin	35
Corridor to cabin	30
Stairs to cabin/cabin to cabin with communicating door	30
Messrooms, recreation rooms, public spaces and entertainment areas to cabins or hospitals	45
Note. Field measurements shall be performed according to ISO 140-4:1998. When the area of the materials tested is $<10 \text{ m}^2$ , a minimum value of $10 \text{ m}^2$ shall be considered for the calculation of the $R'_w$ index.	

10 New para **18.2.7** is introduced reading as follows:

**"18.2.7 Measures for noise abatement on board ships.**

**18.2.7.1** Design measures for noise abatement.

In the design phase, it is recommended to calculate expected noise levels in spaces likely to have noise levels over those specified in 18.2.6.1 and to assign the necessary design measures for abatement of noise level in the space.

The appropriateness of these measures on a ship shall be determined for each ship (or series of ships) by the designer or shipyard, taking into account the structural features of the ship and the technical feasibility of their implementation.

The following design measures for reduction of noise levels can be considered effective.

**18.2.7.1.1** Isolation of sources of noise.

Where practicable, any engines or machinery producing noise levels in excess of the limits set out in 18.2.6.1 shall be installed in spaces which do not require continuous operator attendance.



Accommodation spaces shall be sited both horizontally and vertically as far away as is practicable from sources of noise such as propellers and propulsion machinery.

Machinery casings shall, where practicable, be arranged outside superstructures and deckhouses containing accommodation spaces. Where this is not feasible, passageways are recommended to be arranged between the casings and accommodation spaces.

Accommodation spaces shall not be placed in deckhouses, and they are not recommended to be placed in superstructures extending from side to side.

Accommodation spaces, if structurally possible, shall be separated from machinery spaces by service spaces (e.g. showers, toilets, storerooms).

If suitable partitions, baffles or bulkheads are installed to prevent the spread of sound, it is important that these be of the correct location in relation to the source of sound and of the correct construction to take into account the frequency of the sound to be attenuated. Good seamanship shall also be taken into account when locating such structures.

Where a machinery space is being divided into noisy (not continually manned) and less noisy (capable of being continually manned) spaces, it is preferable to have complete separation.

It may be advisable to provide sound absorbing insulation on bulkheads and decks in rooms where necessary.

#### **18.2.7.1.2 Exhaust and air intake silencing.**

Exhaust and air intake devices of machinery spaces shall be located away from continually manned locations. Silencers, noise-cancelling structures or equipment shall be installed where necessary.

Air ducts in accommodation areas as well as ventilation casing walls are recommended to be insulated with sound absorbing insulation in order to reduce structure-borne noise. Flexible or resilient connections to decks and bulkheads are recommended for mounting air ducts in the crew recreation and accommodation areas.

#### **18.2.7.1.3 Machinery enclosure.**

In continuously manned machinery spaces or spaces where seafarers might reasonably be expected to spend lengthy periods of time on maintenance or overhaul work, and where separation as detailed in 18.2.7.1.1 is structurally impossible, consideration shall be given to the fitting of sound insulating enclosures or partial enclosures to engines or machinery producing sound pressure levels in excess of the limits set out in 18.2.6.1. When sound insulating enclosures are fitted, they shall entirely enclose the noise source.

#### **18.2.7.1.4 Enclosure of the operator in machinery spaces.**

It is recommended that a sound reducing control room be installed in the machinery spaces for continuous watchkeeping in the machinery space.

#### **18.2.7.1.5 Noise reduction in accommodation spaces.**

To reduce noise levels in accommodation spaces, when designing a ship, consideration shall be given to installing deckhouses on resilient mountings or other structures that eliminate the transmission of vibration to the deckhouse from the main hull.

Flexible or resilient connections to decks and bulkheads are recommended for mounting of lining systems within crew recreation and accommodation spaces.

The use of "floating floor" systems in all crew recreation and accommodation spaces is recommended.

The provision of curtains to side scuttles and windows and the use of carpets over plating also assist in absorbing noise.

#### **18.2.7.1.6 Inspection and maintenance.**

Machinery and associated working spaces shall be periodically inspected as part of the onboard safety management system with respect to any noise control/reduction features.

#### **18.2.7.1.7 Vibration isolation.**

Where necessary, engines and machinery, hydraulic units, fans, pumps, etc., shall be supported on resilient mountings.

When sound insulating enclosures are fitted as specified in 18.2.7.1.3, such engines and machinery shall be installed on resilient mountings, and it is also recommended that all pipe and cable connections to them be made with flexible or vibration-absorbing connections.

#### **18.2.7.2 Personal hearing protection equipment.**

In spaces where the noise level is less than 85 dB(A), personal hearing protection equipment with an attenuation of at least 25 dB(A) shall be provided.

In spaces where the noise level is 85 to 110 dB(A), personal hearing protection equipment with an attenuation of at least 25 dB(A) shall be provided.

In spaces where the noise level is greater than 110 dB(A), personal hearing protection equipment with an attenuation of 25 to 35 dB(A) shall be provided.

Personal hearing protection equipment is a passive means of protection and its presence cannot be considered as an effective measure to reduce the negative impact of noise on humans.

#### **18.2.7.3 Warning signs and information notices.**

Where the noise level in spaces is greater than 85 dB(A), entrances to such spaces shall carry warning signs and information notices in the working language of the ship crew. If equipment with a noise level greater than 85 dB(A) is only installed in a portion of the space, such warning signs and information notices shall be located at its installation place at eye level, and visible from each direction of access to this equipment.

The following are examples of information notices:

80 — 85 dB(A)	"HIGH NOISE LEVEL — USE HEARING PROTECTORS"
85 — 110 dB(A)	"DANGEROUS NOISE LEVEL — USE OF HEARING PROTECTORS MANDATORY"
110 — 115 dB(A)	"CAUTION! DANGEROUS NOISE LEVEL — USE OF HEARING PROTECTORS MANDATORY. SHORT STAY ONLY"
более 115 dB(A)	"CAUTION! CRITICAL NOISE LEVEL — USE OF HEARING PROTECTORS MANDATORY. NO STAY LONGER THAN 10 MINUTES"

".