RULES

FOR THE CLASSIFICATION SURVEYS OF SHIPS IN SERVICE

WITH ANNEXES

ND No. 2-020101-012-E

RULE CHANGE NOTICE

ENTERS INTO FORCE:

01.01.2025

St. Petersburg
2024

RULES FOR THE CLASSIFICATION SURVEYS OF SHIPS IN SERVICE WITH ANNEXES

The present Rule Change Notice to the Classification Surveys of Ships in Service with Annexes (hereinafter — RCN) has been approved in accordance with the established approval procedure, comes into force on 1 January 2025 and contains earlier approved amendments published by the Urgent Rule Change Notices after entering into force of the previous version of Urgent Rule Change Notice after entering into force of the previous version of the Classification Surveys of Ships in Service with Annex (these amendments are specified in the Revision History and highlighted in yellow).

REVISION HISTORY

RULES FOR THE CLASSIFICATION SURVEYS OF SHIPS IN SERVICE

Item	Applicability	Description	Remarks
Part I, para 2.1	Ships in service Ships with double or dual class Definitions	New definition "Bilateral agreement" has been introduced. Definitions "Double class" and "Dual class" have been amended	IACS PR1B (Rev.7 June 2024)
Part I, para 5.12.3.4	Ships in service Periodical surveys Structures of hatch covers of cargo holds	References to the applicable requirements have been updated	IACS UR Z7 (Rev.29 Corr.1 May 2024), IACS UR 7.1 (Rev.15 Corr.1 May 2024); IACS UR S21 (Rev.5 May 2023) **Entry-into-force date: 28.08.2024** (Urgent Rule Change Notice No. 311-05-2031 of 28.08.2024)
Part II, Table 2.1.1-2, item 3.21	Ships in service Periodical survey Survey of navigational equipment	Requirements for survey of navigational devices and instruments have been deleted	Due to the absence of the requirements in Part V "Navigational Equipment" of the Rules for the Equipment of Sea-Going Ships

Item	Applicability	Description	Remarks
Part II, para 2.2.3.3.3 (new)	Ships in service Annual survey Mooring arrangement (mooring equipment, mooring machinery, mooring lines)	New para has been introduced containing requirements regarding procedure for survey of mooring equipment, including mooring machinery and mooring lines	IMO resolution MSC.474(102), IMO circulars MSC.1/Circ.1362/Rev.2 and MSC.1/Circ.1620
Part II, para 2.2.7.11	Ships in service Annual surveys Electrical equipment	The requirement for annual measurement of the value of total harmonic distortion of ships where harmonic filters are not installed on main busbars of electrical distribution system has been deleted	IACS UR E24 (Rev 1, Dec 2018) **Entry-into-force date: 11.09.2024** (Urgent Rule Change Notice No. 311-05-2034 of 11.09.2024)
Part II, para 2.2.8.11 (new)	Ships in service Annual survey Survey of computer based systems	New para has been introduced containing requirements for survey of computer based systems on ships with the distinguishing mark **CYBER** or **CYBER-A** in the class notation	
Part II, para 2.4.3.5.1	Ships in service Special survey Mooring arrangement (mooring equipment, mooring machinery, mooring lines)	Para has been amended with respect to procedure for survey of mooring equipment, including mooring machinery and mooring lines	IMO resolution MSC.474(102), IMO circulars MSC.1/Circ.1362/Rev.2 and MSC.1/Circ.1620

Item	Applicability	Description	Remarks
Part II, para 2.4.3.5.2 (new)	Ships in service Special survey Mooring arrangement (mooring equipment, mooring machinery, mooring lines)	New para has been introduced containing requirements for examination and testing in operation of mooring arrangement. Existing paras 2.4.3.5.2 and 2.4.3.5.3 as well as references thereto have been renumbered 2.4.3.5.3 and 2.4.3.5.4 accordingly	
Part II, para 2.4.4.3.10	Ships in service Fixed high-pressure carbon dioxide smothering system Hydraulic tests of carbon dioxide cylinders	Para has been amended regarding performance of internal survey and hydraulic tests of carbon dioxide cylinders of fixed high-pressure carbon dioxide smothering systems	IACS recommendation No. 53 (Rev.1 Oct 2023) IMO circular MSC.1/Circ.1318/Rev.1
	Sea-going ships Special survey Fire extinguishing systems	Requirements for checking the presence of carbon dioxide in the cylinders during their examination have been amended	
Part II, para 2.4.5.7.2.1	Ships in service Heat exchangers and pressure vessels Internal survey and hydraulic tests of heat exchangers and pressure vessels other than those of the fire extinguishing systems	Requirements for internal survey and hydraulic tests of heat exchangers and pressure vessels other than those of the fire extinguishing systems have been specified	IACS recommendation No. 53 (Rev.1 Oct 2023) IMO circular MSC.1/Circ.1318/Rev.1
Part II, para 2.4.8.11 (new)	Ships in service Special survey Survey of computer based systems	New para has been introduced containing requirements for survey of computer based systems on ships with the distinguishing mark **CYBER** or **CYBER-A** in the class notation	

Item	Applicability	Description	Remarks
Part II, Chapter 2.7	Ships in service Annual survey Surveys of computerized systems	Chapter has been renamed to reflect the extended scope of application	
Part II, para 2.7.1.1.5 (new)	Ships in service Periodical surveys Survey under PMS	New requirements have been introduced for integrating Planned Maintenance Scheme (PMS) into the software that contains a list of items included by the shipowner in the maintenance monitoring and planning system	
Part II, para 2.7.1.2.1	Ships in service Periodical surveys Survey under PMS	New requirements for intervals for PMS have been introduced	
Part II, para 2.7.2.1.4	Ships in service Periodical surveys Survey under PMS	Requirements for necessity of submitting a written statement confirming that the system functionality provides the PMS maintenance have been deleted. Requirements for integration of PMS into the software installed on board the ship have been introduced	
Part II, para 2.7.3.1.2 (deleted)	Ships in service Periodical surveys Survey under PMS	Requirements for verification of additional documentation to be available onboard have been deleted. Paras 2.7.3.1.3 — 2.7.3.1.5 and references thereto have been renumbered 2.7.3.1.2 — 2.7.3.1.4 accordingly	

Item	Applicability	Description	Remarks
Part II, para 2.10.2.2.2	Ships in service Survey of boilers Boiler survey schedule and scope	The requirement that internal survey of steam boilers shall be concurrent with periodical survey of the ship machinery installation has been excluded	The dates of internal survey of steam boilers may not coincide with the dates of periodical survey of machinery installation
Part II, para 2.12	Ships in service Periodical surveys Structures of hatch covers of cargo holds	References to the applicable requirements have been updated	IACS UR Z7 (Rev.29 Corr.1 May 2024), IACS UR 7.1 (Rev.15 Corr.1 May 2024) **Entry-into-force date: 28.08.2024** (Urgent Rule Change Notice No. 311-05-2031 of 28.08.2024)
Part II, para 4.6.2.2	Ships in service Ships with dual class Definitions	The term "agreement on a dual class" has been replaced by the term "bilateral agreement"	IACS PR1B (Rev.7 June 2024)

Item	Applicability	Description	Remarks
Part III, para 1.9.1.1.3 (new)	ESP ships Special surveys Evaluation of longitudinal strength of the ship's hull girder	In connection with the necessity to generate a database of digital models of ships classed by RS, a surveyor shall conduct a verification of the ship's hull transverse sectional characteristics evaluation with the use of the RS software designed for checking the ship hull structures. Para 1.9.1.1.3 and references thereto have been renumbered 1.9.1.1.4 accordingly	
Part III, para 1.9.1.1.3 (renumbered 1.9.1.1.4)	ESP ships Special surveys Reporting documents	The results of checking calculations conducted by RS with the use of the RS software during verification of evaluation results of the ship's hull girder longitudinal strength, shall be taken into account in the Executive Hull Summary	
Part III, para 1.9.2.3.6 (deleted)	ESP ships Special surveys Evaluation of longitudinal strength of the ship's hull girder	The requirement has been deleted due to transfer of the provisions to a new para 1.9.1.1.3	

Item	Applicability	Description	Remarks
Part III, Appendices 5.2-1 and 5.2-2	Ships in service Periodical surveys Structures of hatch covers of cargo holds	Appendix 5.2-1 has been deleted. References to Appendix 5.2-1 have been replaced by the references to 4.2.7 of Annex 2 to these Rules. Appendix 5.2-2 and references thereto have been renumbered 5.2	IACS UR Z7 (Rev.29 Corr.1 May 2024), IACS UR 7.1 (Rev.15 Corr.1 May 2024) **Entry-into-force date: 28.08.2024** (Urgent Rule Change Notice No. 311-05-2031 of 28.08.2024)
Part III, para 5.3.2.3.4	Ships in service Periodical surveys Structures of hatch covers of cargo holds	References to the applicable requirements have been updated	IACS UR Z7 (Rev.29 Corr.1 May 2024), IACS UR 7.1 (Rev.15 Corr.1 May 2024) **Entry-into-force date: 28.08.2024** (Urgent Rule Change Notice No. 311-05-2031 of 28.08.2024)

Item	Applicability	Description	Remarks
Part III, para 6.3.2.3.4	Ships in service Periodical surveys Structures of hatch covers of cargo holds	References to the applicable requirements have been updated	IACS UR Z7 (Rev.29 Corr.1 May 2024), IACS UR 7.1 (Rev.15 Corr.1 May 2024) **Entry-into-force date: 28.08.2024** (Urgent Rule Change Notice No. 311-05-2031 of 28.08.2024)
Part III, Table 25.1.3, item 11.24	Ships in service Periodical survey Survey of navigational equipment	Requirements for survey of navigational equipment and devices have been deleted	Due to the absence of the requirements in Part V "Navigational Equipment" of the Rules for the Equipment of Sea-Going Ships

ANNEXES TO THE RULES FOR THE CLASSIFICATION SURVEYS OF SHIPS IN SERVICE

Item	Applicability	Description	Remarks
Annex 2, titie	Ships under repair and conversion Determination of the technical condition and repair Hull structures, pipelines, arrangements and other ship components	Annex has been renamed to reflect extended scope of application	
Annex 2, para 4.2.7	Ships in service Periodical surveys Structures of hatch covers of cargo holds	Para has been renamed to reflect the applicability of the requirements set forth therein	IACS UR Z7 (Rev.29 Corr.1 May 2024), IACS UR 7.1 (Rev.15 Corr.1 May 2024) **Entry-into-force date: 28.08.2024** (Urgent Rule Change Notice No. 311-05-2031 of 28.08.2024)
Annex 2, para 4.2.7.1	Ships in service Periodical surveys Structures of hatch covers of cargo holds	Requirements concerning the assessment of technical condition of structures of hatch covers and hatch coamings of cargo holds as well as their repair have been amended in accordance with the IACS unified requirements that have entered into force	IACS UR S21 (Rev.5 May 2023) **Entry-into-force date: 28.08.2024** (Urgent Rule Change Notice No. 311-05-2031 of 28.08.2024)

Item	Applicability	Description	Remarks
Annex 2, para 4.5.3	Ships in service Periodical surveys Structures of hatch covers of cargo holds	References to the applicable requirements have been updated	IACS UR Z7 (Rev.29 Corr.1 May 2024), IACS UR 7.1 (Rev.15 Corr.1 May 2024) **Entry-into-force date: 28.08.2024** (Urgent Rule Change Notice No. 311-05-2031 of 28.08.2024)
Annex 2, Section 5	Ships under repair and conversion Determination of the technical condition and repair Hull structures	Section has been renamed to reflect extended scope of application	
Annex 2, para 5.1.6	Ships in service Periodical surveys Structures of hatch covers of cargo holds	References to the applicable requirements have been updated	IACS UR Z7 (Rev.29 Corr.1 May 2024), IACS UR 7.1 (Rev.15 Corr.1 May 2024) **Entry-into-force date: 28.08.2024** (Urgent Rule Change Notice No. 311-05-2031 of 28.08.2024)
Annex 2, Para 5.1.15 (new)	Ships under repair and conversion Welded joints Non-destructive testing	New requirements for non-destructive testing of welded joints of hull structures performed during repair and conversion have been introduced	

Item	Applicability	Description	Remarks
Annex 2-1, para 2.4	Ships in service Periodical surveys Structures of hatch covers of cargo holds	References to the applicable requirements have been updated	IACS UR Z7 (Rev.29 Corr.1 May 2024), IACS UR 7.1 (Rev.15 Corr.1 May 2024) **Entry-into-force date: 28.08.2024** (Urgent Rule Change Notice No. 311-05-2031 of 28.08.2024)

RULES FOR THE CLASSIFICATION SURVEYS OF SHIPS IN SERVICE

PART I. GENERAL PROVISIONS

2 DEFINITIONS AND EXPLANATIONS

2.1 DEFINITIONS APPLIED TO ALL SHIPS

Para 2.1. The **definition "Double class"** is amended as follows:

"D o u b l e c l a s s is a class of a ship classed by two societies not entered into ~~an agreement on dual class~~ a bilateral agreement. In this case, one classification society when performing classification survey of the ship for confirmation/renewal of its class, acts independently of the other society and in conformity with the requirements of its rules as it would act in the case of the ship being classed with the society alone.".

After the definition "Double class" **new definition "Bilateral agreement"** is introduced reading as follows:

"B i l a t e r a l a g r e e m e n t is an agreement adopted by the two classification societies with dual class ships/to share works for classification of dual class ships.".

The **definition "Dual class"** is amended as follows:

"D u a l c l a s s is a class of a ship classed by two societies entered into ~~an agreement on dual class~~ a bilateral agreement. In this case, one such classification society when performing classification survey for confirmation/renewal of its class, acts also on behalf of the other classification society and confirms/renews the second class under ~~the agreement on dual class~~ the bilateral agreement.".

5 ASSESSMENT OF THE SHIP TECHNICAL CONDITION

Para 5.12.3.4 is amended as follows:

"**.4** standards (acceptance criteria) determined according to IACS UR S18, S19, S21, ~~S21A,~~ S31, etc. — specific IACS URs and their subsequent revisions or corrigenda apply ~~for~~ to ships depending on the ship's age and structural elements concerned (e.g. for UR S19; S21, S31 refer to instructions in Part III "Additional Surveys of Ships Depending on their Purpose and Hull Material", for UR S21~~A~~ refer to Annex 2 to these Rules, etc.);".

PART II. SURVEY SCHEDULE AND SCOPE

2 PERIODICAL SURVEYS

2.1 SUMMARIZED SCOPE OF PERIODICAL SURVEYS OF A SHIP IN TABULAR FORM

Table 2.1.1-2. **Item 3.21** and references thereto are deleted.

Items 3.22 — 3.30 are renumbered **3.21 — 3.29** accordingly.

2.2 ANNUAL SURVEY

New para 2.2.3.3.3 is introduced reading as follows:

"**2.2.3.3.3** It shall be confirmed that the following documentation developed and kept updated by the shipowner is available on board:

.1 procedure for mooring operations, examination and maintenance of mooring equipment, including mooring machinery and mooring lines;

.2 procedure allowing the identification of mooring equipment, including mooring machinery and mooring lines;

.3 the periodic inspection of mooring equipment, including mooring machinery and mooring lines, shall be included in the onboard maintenance plan or equivalent maintenance management system;

.4 manufacturers' criteria allowing the assessment of mooring line condition to determine whether the replacement of mooring lines is necessary;

.5 records of the original design concept, equipment, arrangement and specifications[1], as well as records of inspection and maintenance of mooring equipment, including mooring machinery and mooring lines, or replacement of mooring lines. For ships the keels of which were laid before 1 January 2007 and without appropriate documentation, the ship design minimum breaking load MBL_{SD} for mooring equipment, including mooring machinery and mooring lines, may be established based on the safe working load (*SWL*) of mooring equipment, including mooring machinery and mooring lines, provided on board;

.6 manufacturers' test certificates for mooring lines, joining shackles with an opportunity to identify them with the corresponding equipment.

A system for gathering and filing the information listed above shall be provided on board. Ship-specific information shall be provided and kept on board.

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[1] For ships constructed on or after 1 January 2007, such records, as a rule, are included in the onboard maintenance plan.".

Para 2.2.7.11 is amended as follows:

"**2.2.7.1** Values of the total harmonic distortion <u>of ships where harmonic filters are installed</u> on ~~the~~ main busbars of electrical distribution system shall be measured annually on board the ship under seagoing conditions according to the methods given in Appendix 10 to Section 10 of the Guidelines on Technical Supervision of Ships under Construction. The date of measurements shall be as close to the annual survey as possible so as to provide the RS surveyor with the information about the total harmonic distortion on the main busbars of electrical distribution system. The total harmonic distortion shall be measured in operating mode with the greatest amount of distortion. Based on the measurement results, an entry showing which equipment was running and/or filters in service shall be recorded in the engine log book. The measurement results shall be stored on board the ship for at least 5 years and shall be made available at the next periodical survey. The results may be submitted and stored both in hard copy and electronic format. The total harmonic distortion shall be measured following any modification to the ship's electric power plant or ship's electric power users comprising semi-conductor convertors. Measurements shall be taken by a qualified technical

crew personnel or an outside organization. Records of the measurements taken shall be made available upon request of the RS surveyor at each periodical survey.".

New para 2.2.8.11 is introduced reading as follows:

"**2.2.8.11** For ships with the distinguishing mark **CYBER** or **CYBER-A** in the class notation, survey of computer based systems (CBS) is carried out in the scope of annual survey in compliance with the requirements of Part XXI "Cyber Resilience" of the Rules for the Classification and Construction of Sea-Going Ships.".

2.4 SPECIAL SURVEY

Para 2.4.3.5.1 is amended as follows:

"**2.4.3.5.1** At special survey of the ship, ~~the machinery, systems, electrical equipment forming part of the mooring arrangement shall be thoroughly examined and operationally tested~~ the availability on board of the documentation according to 2.2.3.3.3 shall be confirmed.

New para 2.4.3.5.2 is introduced reading as follows:

"**2.4.3.5.2** The machinery, systems, electrical equipment forming part of the mooring arrangement shall be thoroughly examined and operationally tested.".

Existing paras 2.4.3.5.2 and **2.4.3.5.3** are renumbered **2.4.3.5.3** and **2.4.3.5.4** accordingly.

Para 2.4.4.3.10 is amended as follows:

"**2.4.4.3.10** When surveying high-pressure carbon dioxide smothering system, the valves of carbon dioxide cylinders shall be examined together with their safety devices and control appliances indicating the actuation of safety devices, performance of audible device signalling about the damage of safety membranes, devices for individual, group and remote opening of cylinder valves.

When examining the cylinders, presence of carbon dioxide therein shall be checked according to the weighing report (or measurement by any other approved procedure) submitted by the ship's officers. The total carbon dioxide quantity shall not be less than 0,9 of the design value, at that the quantity of carbon dioxide in each cylinder may be increased by not more than 0,5 kg.

~~The system may be operationally tested by discharge of compressed air instead of carbon dioxide.~~The hydraulic test date of all carbon dioxide cylinders and storage containers (tanks) shall be checked.

~~At least 10 % of all high - pressure carbon dioxide cylinders shall be subjected to hydraulic testing starting from the second special survey and then after two intervals between special surveys having regard that the maximum interval between hydraulic tests shall not exceed~~ High-pressure cylinders shall be subjected to periodical tests at intervals not exceeding 10 years. After the first 10 years, starting from the second special survey, at least 10 % of all high-pressure cylinders shall be subjected to internal survey and hydraulic test. If one or more carbon dioxide cylinders fail, a total of 50 % of the onboard cylinders shall be subjected to hydraulic test~~s~~. If further cylinders fail, all cylinders shall be subjected to

internal survey and hydraulic test. Upon reaching the 20-year anniversary, starting from the fourth special survey, and every 10-year anniversary thereafter, all cylinders shall be subjected to internal survey and hydraulic test.

New internal survey and hydraulic tests dates are assigned in the following way: for cylinders that have undergone hydraulic tests at the recognised test station, on the basis of stamps of these test stations, and for cylinders that have not undergone hydraulic tests, on the basis of the previous Register survey reports.

Flexible hoses shall be replaced at the intervals recommended by the manufacturer and not exceeding 10 years, except for bellows-type flexible metal hoses. Bellows-type flexible metal hoses shall be subject to annual visual examination and when required upon examination results, replaced.

~~When surveying the cylinders, internal survey and hydraulic testing dates shall be assigned in the following way: for cylinders that have undergone hydraulic tests at the recognised test station (10 %), on the basis of stamps of these test station and for cylinders that have not undergone hydraulic tests (90 %), on the basis of the previous Register survey reports.~~

In well-grounded cases and depending on the service life, survey results, repairs and replacements effected, checking of the safety valves of low-pressure carbon dioxide smothering system tank may be required, as well as heat insulation in compliance with the requirements of 3.8.3.6 of Part VI "Fire Protection" of the Rules for the Classification and Construction of Sea-Going Ships.

The tanks of low-pressure carbon dioxide smothering system shall be subjected to the internal survey after repair and after discharge of the carbon dioxide if the tank is older than 5 years.

Hydraulic ~~testing~~ tests of the tank may be requested by the surveyor based on the internal survey results. At that, the surface under heat insulation shall be checked at random for corrosion. Where necessary, insulation removal shall be carried out according to the procedure recommended by the tank manufacturer.

Aboard ship the availability of the ship's maintenance plan for carbon dioxide smothering systems shall be checked. Maintenance of carbon dioxide smothering systems in accordance with the ship's maintenance plan shall be performed by the organizations (firms) recognized by the Register, at least once every two years (at intervals 2 years + 3 months) on passenger ships or at each special survey on cargo ships.

Hydraulic tests, maintenance works and etc. may be carried out by the organizations recognized by ACS — IACS member (taking into account Section 7 of Part I "General Provisions" of these Rules).".

Para 2.4.4.3.10. The **second paragraph** is replaced by the following text:

"**2.4.4.3.10** When examining the cylinders, presence of carbon dioxide therein shall be checked according to the weighing report or measurement of the level of carbon dioxide in the cylinders by the approved method submitted by the ship's officers, or on each cylinder an automatic device shall be installed for control of carbon dioxide (fire extinguishing medium) mass and pressure. The total carbon dioxide quantity shall not be less than 0,9 of the design value (when filling the cylinders, a deviation of not more than ±0,5 kg from the design quantity of gas per cylinder is allowed).".

Para 2.4.5.7.2.1 is amended as follows:

"**2.4.5.7.2.1** Internal survey of heat exchanger and pressure vessel, other than that of the fire extinguishing system (refer also to 2.4.4.3.10), shall be carried out at each special survey of the ship, hydraulic tests are assigned based on the internal survey results.

~~Internal surveys and hydraulic tests of cylinders of carbon dioxide extinction station may be carried out by competent organizations recognized by the Register or ACS — IACS member (taking into account Section 7 of Part I "General Provisions"). Not less than 10 % of all high pressure CO_2 cylinders shall undergo hydraulic tests once in 10 years.~~

~~If during internal examination of cylinders defects have been revealed, the defective cylinders shall be subjected to hydraulic test so that, based on the results of this test, the necessity for hydraulic test of all remaining cylinders can be identified (refer also to 2.4.4.3.10). If one or more carbon dioxide cylinders fail, a total of 50 % of onboard cylinders shall be subject to hydraulic tests. Flexible hoses shall be replaced at intervals recommended by the manufacturer and not exceeding 10 years.~~

~~Aboard ship the availability of the ship's maintenance plan for carbon dioxide smothering systems shall be checked.~~

~~Maintenance of carbon dioxide smothering systems in accordance with the ship's maintenance plan shall be performed by the organizations recognized by the Register or ACS — IACS member (taking into account Section 7 of Part I "General Provisions") at least once every two years (at interval 2 years + 3 months) on passenger ships or at each special survey on cargo ships.~~".

New para 2.4.8.11 is introduced reading as follows:

"**2.4.8.11** Computer based systems.

2.4.8.11.1 For ships with the distinguishing mark **CYBER** or **CYBER-A** in the class notation, survey of computer based systems (CBS) is carried out in the scope of special survey in compliance with the requirements of Part XXI "Cyber Resilience" of the Rules for the Classification and Construction of Sea-Going Ships.

2.4.8.11.2 In addition, for ships with the distinguishing mark **CYBER-A** in the class notation, cyber security of the CBS onboard and information networks shall be verified by the RS-recognized firm.

During verification by the RS-recognized firm, at least the following works shall be carried out:

inventory of CBS;

review of the CBS documentation as well as organizational and regulatory documentation on cyber resilience;

analysis of software and hardware settings, including the information security tools;

identification of software and hardware deficiencies, including the information security tools, by analyzing the configuration of installed software and security updates using security monitoring (analysis) tools and (or) other information security tools;

identification of software and hardware deficiencies, including the information security tools, network services available for networking using security monitoring (analysis) tools.

In case the deficiencies in CBS are identified, the shipowner shall implement measures to eliminate these deficiencies and/or reduce the impact from cyber incidents which may occur due to identified deficiencies.

2.4.8.11.3 The works listed in 2.4.8.11.2 shall be performed during special survey. Upon completion of the above verifications the RS surveyor shall be provided with a report issued

by the RS-recognized firm confirming that there are no deficiencies on the ship or measures have been implemented to reduce the impact from cyber incidents which may occur due to identified deficiencies.".

2.7 PLANNED MAINTENANCE SCHEME FOR MACHINERY

Chapter 2.7 is renamed as follows:

"**2.7 PLANNED MAINTENANCE SCHEME ~~FOR MACHINERY~~**".

New para 2.7.1.1.5 is introduced reading as follows:

"**2.7.1.1.5** PMS forms part of a computerized ship maintenance management system, or can be integrated into the software that contains a list of items included by the shipowner in the maintenance monitoring and planning system.".

Para 2.7.1.2.1 is amended as follows:

"**2.7.1.2.1** The intervals for PMS ~~shall not exceed those specified for CSS~~ shall coincide with the intervals for maintenance of components/machinery depending on the running hours, established by maintenance manuals and technical documentation of equipment manufacturers. In the absence of instructions from the equipment manufacturer, the intervals for PMS shall not exceed those for CSS.".

Para 2.7.2.1.4 is replaced by the following text:

"**2.7.2.1.4** Ship maintenance management software shall ensure efficient management of ship maintenance processes and shall cover all the items onboard that require accounting and monitoring by the shipowner. When used, it shall allow to create a separate list of PMS items subject to mandatory RS survey.".

Para 2.7.3.1.2 is deleted.

Paras 2.7.3.1.3 — 2.7.3.1.5 and **references thereto** are renumbered **2.7.3.1.2 — 2.7.3.1.4** respectively.

2.10 SURVEY OF BOILERS

Para 2.10.2.2.2 is amended as follows:

"**2.10.2.2.2** During each 5-year special survey period, there shall be a minimum of two internal examinations of each steam boiler operated for not more than 10 years. One such survey (examination) shall be carried out during special survey of the ship, the other shall be carried out at intervals not exceeding 36 months ~~and shall be concurrent with periodical survey of the ship machinery installation~~.".

2.12 ANTICORROSIVE PROTECTION AND COATINGS

Para 2.12. **The last sentence** is amended as follows:

"A record on the coating application/renewal shall be made by the RS surveyors in the List of Survey's Status for the ships with protective coatings applied/renewed in accordance with the RS rules and international documents, including a reference to the appropriate requirement of the RS rules and/or international standard (in particular, this also applies to the cases described in ~~Appendix 5.2-1,~~ 5.2.4.2, 5.3.3.2.3, 5.4.2.2.3, 5.9.6, 5.12.3.1.2.1.4, 5.12.3.2, 6.1.1.7, 6.2.2.4.5, 6.2.4.2, 6.3.2.3.11 ~~and etc.~~ of Part III ~~"Technical Supervision during Manufacture of Materials" of RTSCS~~ "Additional Surveys of Ships Depending on their Purpose and Hull Material" of these Rules, as well as 3.3.5 of Part II "Hull" ~~and Section 6 of Appendix 3 to~~ of the Rules ~~for the Construction~~ for the Classification and Construction of Sea-Going Ships).".

4 OTHER SURVEYS

4.6 SURVEY OF SHIPS ASSOCIATED WITH CHANGE OF SHIPOWNER, PORT OF REGISTRY AND SHIP'S NAME

Para 4.6.2.2 is amended as follows:

"**4.6.2.2** In case of changing the shipowner, occasional survey of a ship shall be carried out by external examination to confirm that all necessary equipment and outfit are fitted in their regular places and no changes have been made.

For ship with dual class, ~~the agreement on dual class~~ the bilateral agreement becomes invalid after change of shipowner. In this connection, it is necessary to request a new shipowner whether he intends to continue the ship operation in a dual class or to retain the ship only in the RS class. In case of further ship operation in a dual class, it is required to sign ~~an agreement on dual class~~ a bilateral agreement for five years. In case of intention to retain only the RS class, it is required to send to the RHO official notification about this in English. Based on this notification, the class of the second classification society will be withdrawn.".

PART III. ADDITIONAL SURVEYS OF SHIPS DEPENDING ON THEIR PURPOSE AND HULL MATERIAL

1 GENERAL

1.9 REPORTING ON HULL SURVEY OF ESP SHIPS IN ACCORDANCE WITH SECTIONS 2 — 6 OF THIS PART AND EVALUATION OF SURVEY

New para 1.9.1.1.3 is introduced reading as follows:

«**1.9.1.1.3** In the cases specified in 1.9.1.1.1 and 1.9.1.1.2, prior to special survey completion, evaluation results of longitudinal strength of the ship's hull girder shall be submitted to the RS surveyor. When reviewing the evaluation results of the ship' hull girder section modulus and, if applicable, ultimate section modulus (ultimate bending moments), the RS Branch Office performing the survey of the ship shall conduct a verification of the ship's

hull transverse sectional characteristics evaluation with the use of the RS software designed for checking the ship hull structures.».

Existing para 1.9.1.1.3 and references thereto are renumbered **1.9.1.1.4** accordingly.

Existing para 1.9.1.1.3 is amended as follows:

«~~**1.9.1.1.3**~~**1.9.1.1.4** The final results of evaluation of the ship's longitudinal strength required in 1.9.1.1.1 and 1.9.1.1.2, including after renewal or reinforcement of structural members (if carried out as a result of initial evaluation), taking into account results of the RS review in accordance with 1.9.1.1.3, shall be reported as a part of the Executive Hull Summary (Condition Evaluation Report) (form 6.3.41).».

Para 1.9.2.3.6 and references thereto are deleted.

5 SURVEYS OF BULK CARRIERS

5.2 SPECIAL SURVEY

Appendix 5.2-1 is deleted. **References thereto** in **Note 4 of Table 5.2.3.2**, **paras 5.3.2.3.9**, **6.2.2.4.5** and **6.3.2.3.11** as well as in **Note 3 of Table 6.2.3.2-1** are replaced by the following text:

"4.2.7 of Annex 2 to these Rules.".

Appendix 5.2-2 and references thereto are renumbered **5.2**.

5.3 ANNUAL SURVEY

Para 5.3.2.3.4 is amended as follows:

"**5.3.2.3.4** Where the cargo hatch securing system does not function properly, repairs shall be carried out under the supervision of the Register. Where hatch covers and/or coamings undergo significant repairs, the strength of securing devices shall be upgraded to comply with the requirements of ~~S21.5 of IACS UR S21 (refer to~~ 7.13~~0~~ of Part III "Equipment, Arrangements and Outfit" of the Rules for the Classification and Construction of Sea-Going Ships~~)~~.".

6 SURVEYS OF DOUBLE SKIN BULK CARRIERS

6.3 ANNUAL SURVEY

Para 6.3.2.3.4 is amended as follows:

"**6.3.2.3.4** Where the cargo hatch securing system does not function properly, repairs shall be carried out under the supervision of the Register. Where hatch covers and/or coamings undergo significant repairs, the strength of securing devices shall be upgraded to comply with the requirements of ~~S21.5 of IACS UR S21 (refer to~~ 7.13~~0~~ of Part III "Equipment,

Arrangements and Outfit" of the Rules for the Classification and Construction of Sea-Going Ships~~)~~.".

25 SURVEY OF HIGH-SPEED CRAFT

25.1 GENERAL

Table 25.1.3. **Item 11.24** and references thereto are deleted.

Items 11.25 — 11.29 are renumbered **11.24 — 11.2**8 accordingly.

ANEXES TO THE RULES FOR THE CLASSIFICATION SURVEYS OF SHIPS IN SERVICE

ANNEX 2

INSTRUCTIONS FOR DETERMINATION OF THE TECHNICAL CONDITION AND REPAIR OF THE HULLS OF SEA-GOING SHIPS

Annex 2 is renamed reading as follows:

"**INSTRUCTIONS FOR DETERMINATION OF THE TECHNICAL CONDITION AND REPAIR OF HULL STRUCTURES, PIPELINES, ARRANGEMENTS AND OTHER SHIP COMPONENTS**".

4 STANDARDS FOR HULL WITH DEFECTS

4.2 STRUCTURES WITH WEAR

Para 4.2.7 is renamed as follows:

"**4.2.7 Requirements for determination of permissible residual ~~plate~~ thickness of cargo hold hatch covers~~s~~ structures.**".

Para 4.2.7.1 is amended as follows:

"**4.2.7.1** For cargo ships contracted for construction on or after 1 July 2012, ~~except for~~ other than bulk carriers, ore carries, combination carriers, as well as for bulk carriers, ore carriers and combination carriers contracted for construction on or after 1 January 2024 except for CSR ships ~~and **CSR** ships, the requirements of Section 7 of IACS UR S21A (refer to 7.10.6.53 of Part III "Equipment, Arrangements and Outfit" of the Rules for the Classification and Construction of Sea-Going Ships) shall be met~~ when determining the permissible residual ~~plate~~ thickness of structures of hatch covers and hatch coamings of cargo holds, the following requirements shall be met.

Renewal of structures of hatch covers and hatch coamings of cargo holds is required where the actual residual thickness is less than $t_{net} + 0{,}5$ for:

single skin hatch covers;

the plating of double skin hatch covers, and

coaming structures.

Where the actual residual thickness is within the range $t_{net} + 0{,}5$ mm and $t_{net} + 1{,}0$ mm, as an alternative to renewal, the following may be performed:

application of hard protective coating (in accordance with the coating manufacturer's requirements), herewith, the coating shall be maintained in GOOD technical condition; or

annual thickness measurements.

Thickness measurements for the internal structure of double skin hatch covers shall be performed in case of hatch cover top or bottom plating renewal or when this is deemed necessary, at the discretion of the RS surveyor, on the basis of the plating corrosion or deformation condition. In these cases, renewal of the internal structures is required where the actual residual thickness is less than t_{net}.

Corrosion additions are given in 7.10.6.44 of Part III "Equipment, Arrangements and Outfit" of the Rules for the Classification and Construction of Ships.

For corrosion addition $t_s = 1{,}0$ mm, the thickness for structure to be renewed shall be not less than t_{net} and the thickness for coating or annual thickness measurements is when measured thickness is between t_{net} and $t_{net} + 0{,}5$ mm.".

4.5 STRUCTURES WITH SUBSTANTIAL CORROSION

Para 4.5.3 is amended as follows:

"**4.5.3** Formula (4.5.2-2) shall not apply to hull structures, which scantlings are determined using net scantling approach (for example, according to the Common Structural Rules~~,~~ as well as IACS UR S21~~, S21A, etc.~~).".

5 INSTRUCTIONS AND GUIDELINES FOR THE HULL REPAIRS

Section 5 is renamed reading as follows:

"**5 INSTRUCTIONS AND GUIDELINES FOR SHIP REPAIR AND CONVERSION**".

5.1 GENERAL

Para 5.1.6. **The second paragraph** is amended as follows:

"It is permitted not to restore a structure to its as-built condition~~ (not applicable to CSR ships, as well as to structures which scantlings are determined using net scantling approach, for example, according to IACS UR S21, S21A and etc.)~~. When determining structural scantlings, the conditions and period of subsequent ship service shall be considered (not applicable to CSR ships, as well as to structures which scantlings are determined using net scantling approach, for example, according to IACS UR S21~~, S21A and etc.~~).".

New para 5.1.15 is introduced reading as follows:

"**5.1.15 Non-destructive testing of welded joints of structures during repair and conversion of ships.**

5.1.15.1 Non-destructive testing of welded joints shall be carried out in the scope of visual testing along the whole length of welds at both sides (where technically possible) and further radiographic or ultrasonic testing performed on separate sections of welds during repair of hull structures. Where it is not technically possible to conduct visual testing of welded joint from the inaccessible side, the RS surveyor may assign random sections for non-destructive testing by a method applicable for this structure taking into account the requirements of 5.1.15.6.

5.1.15.2 The non-destructive testing (NDT) plan for different welded structures to be replaced during repair shall be developed by the ship repair yard and approved by the Register.

5.1.15.3 In case of doubt in visual testing results, the RS surveyor may determine a distribution of non-destructive testing weld lengths other than that specified in the approved NDT plan.

5.1.15.4 Radiographic or ultrasonic testing (at thickness of structural elements being welded equal to 8 mm and above) of technologically independent welded joints shall be performed in the scope determined by the length of the joint but not less than one checkpoint for each technologically independent welded joint taking into account the requirements of 5.1.15.6.1.

N o t e . Technologically independent welded joint is a continuous joint with the same section and edge preparation performed according to the same welding procedure specification in one or continuously changing welding position.

5.1.15.5 At radiographic or ultrasonic testing of short welds (less than 1 m) at least one butt joints of members of each structural section to be replaced shall be checked taking into account the requirements of 5.1.15.6.2.

N o t e . Butt welds of flat bulb, flat and T-section steel parts as well as T-joints with full penetration of branches with plating, decks or bulkheads are considered as short welds.

5.1.15.6 The extent of non-destructive testing shall be assigned in accordance with the following conditions:

.1 in general, the extent of radiographic or ultrasonic testing of welded joints of steel plate structures to be replaced shall be assigned assuming 1 checkpoint for 6 m of length of technologically independent welded joint. In case if the welded joint length of separately replaced element of hull structure on the perimeter is more than 1 m and less than 6 m in length, 1 checkpoint of radiographic or ultrasonic testing shall be assigned;

.2 in general, the extent of radiographic or ultrasonic testing of welded joints of hull members shall be assigned assuming 1 control butt joint for each 5 butt joints of members of structure to be replaced;

.3 when structural elements are welded into a rigid contour, cut-outs where the ratio of the minimum size (width) or cut-out diameter to the plate thickness is 60 and less, butt welds and T-joints with full penetration of the base hull shall be tested over their full length and for other structures — in the scope not less than 20 % of the length using radiographic or ultrasonic testing (for thicknesses of 8 mm and above). The base hull is a ship's hull bounded by the upper deck.

5.1.15.7 When impermissible defects are found at the weld checkpoint, additional testing shall be performed on both sides of this weld checkpoint until satisfactory results are obtained. The results of additional testing should be submitted together with the documents of initial testing before the elimination of defects. In case, the scope of initial and additional testing of welded joint has exceeded 50 % of its length, this joint shall be additionally tested over the entire weld length. Impermissible defects of welded joints shall be detected and eliminated taking into account the requirements of 3.2.1.2 — 3.2.1.11 of Part XIV "Welding" of the Rules for the Classification and Construction of Sea-Going Ships.".

ANNEX 2-1

PROCEDURE FOR CHECKING AVAILABLE/UPDATING INFORMATION ON PERMISSIBLE SCANTLINGS OF HULL STRUCTURES

Para 2.4 is amended as follows:

"**2.4** For ships, to which the standards according to 5.12.3.4 of Part I "General Provisions" apply (i.e. when the appropriate IACS URs S18, S19, S21, ~~S21A,~~ S22~~,~~ and S31~~, etc.~~ are applicable), an additional file shall be included in the ship's file, containing information on permissible scantlings of hull structures, which shall be supplemented by the information specifying the structure, standards, appropriate values and calculations for technical condition assessment and repairs, as well as the technical condition assessment procedure determined in accordance with the applicable IACS UR. The file shall have the following format: "reg. No._S[IACS UR No.].pdf". The appropriate option shall be selected additionally in the TM software for entering such standards.".

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