

RULES

FOR TECHNICAL SUPERVISION DURING CONSTRUCTION OF SHIPS AND MANUFACTURE OF MATERIALS AND PRODUCTS FOR SHIPS

PART II TECHNICAL DOCUMENTATION

ND NO. 2-020101-130-E



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RULES FOR TECHNICAL SUPERVISION DURING CONSTRUCTION OF SHIPS AND MANUFACTURE OF MATERIALS AND PRODUCTS FOR SHIPS

Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships have been approved in accordance with the established approval procedure and come into force on 1 January 2020.

The present edition is based on the latest version of the Rules, 2019.

The Rules are published in the following parts:

Part I "General Regulations for Technical Supervision";

Part II "Technical Documentation";

Part III "Technical Supervision during Manufacture of Material";

Part IV "Technical Supervision during Manufacture of Products".

The Rules are published in electronic format in Russian and English.

REVISION HISTORY

(Purely editorial amendments are not included in the Revision History)

Amended paras/chapters/ sections	Information on amendments	Number and date of the Circular Letter	Entry-into-force date
Para 1.2	The requirements for ships in service have been specified	312-12-1405c of 29.06.2020	01.08.2020
Para 3.3	Requirements for technical documentation to be submitted for review in electronic form have been specified	312-12-1348c of 11.03.2020	01.04.2020
Para 3.5	References to the paras of RS Rules have been specified	312-12-1405c of 29.06.2020	01.08.2020
Para 3.11	Requirements have been amended so as to be in line with 8.1	312-12-1348c of 11.03.2020	01.04.2020
Paras 3.17 – 3.19	New paras containing requirements for procedures during dual classification, flag change, scope of technical documentation during class reassignment/transferring have been introduced	312-12-1405c of 29.06.2020	01.08.2020
Para 4.1	The instructions for review of certain documents, including mooring and sea trials programmes, by the RS Branch Offices without the RHO authorization have been specified	312-12-1405c of 29.06.2020	01.08.2020
Para 4.3	Requirements for the date on which the documentation shall be reviewed in the absence of a contract for construction have been specified	312-12-1348c of 11.03.2020	01.04.2020
Paras 4.5 – 4.9	New paras 4.5 – 4.7 have been introduced containing the requirements for submission to the Register of a set of copies of report documents on actual performed work upon completion of ship's construction, a set of ship operational documentation before completion of the initial survey after construction, as well as regarding the review of the repair technical documentation by the RS Branch Offices without the RHO authorization. The existing paras 4.5, 4.6 and references thereto have been renumbered 4.8, 4.9 accordingly	312-12-1405c of 29.06.2020	01.08.2020
Para 5.1	Requirements concerning review of technical documentation on products have been specified	312-12-1348c of 11.03.2020	01.04.2020
Para 5.5	Requirements concerning review of technical documentation on products have been specified	312-12-1348c of 11.03.2020	01.04.2020
Para 5.9	The requirements for the RS Rules to be applied for review of technical documentation on products have been deleted	312-12-1405c of 29.06.2020	01.08.2020

Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships (part II)

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Amended paras/chapters/ sections	Information on amendments	Number and date of the Circular Letter	Entry-into-force date
Paras 5.10 – 5.12	New para 5.10 containing requirements for the RS Rules to be applied for review of technical documentation on products has been introduced. The existing paras 5.10, 5.11 and references thereto have been renumbered 5.11, 5.12 accordingly	312-12-1405c of 29.06.2020	01.08.2020
Para 6.1	Requirements concerning review of technical documentation on materials have been specified	312-12-1348c of 11.03.2020	01.04.2020
Para 8.1	Requirements have been amended so as to be in line with 3.11	312-12-1348c of 11.03.2020	01.04.2020
Para 8.3.2	The requirements for stamps that are put on preliminary fire plan and other documents of a preliminary nature have been specified	312-12-1405c of 29.06.2020	01.08.2020
Para 12.1.1	Reference to 3.9 has been replaced by reference to 3.8	312-12-1348c of 11.03.2020	01.04.2020
Appendix 1	Appendix 1 containing the list of ship operational documentation has been introduced	312-12-1405c of 29.06.2020	01.08.2020
Appendix 1, Table 1, item 169, column "Flag MA approval"	Editorial amendment of 09.02.2026: Requirement for having the Flag MA approval has been discontinued as irrelevant	—	01.01.2020

1 APPLICATION

1.1 The provisions of the present Part are applied in review of the technical documentation on construction of ships and manufacture of materials and products for ships subject to the Register technical supervision in compliance with the General Regulations for the Classification and Other Activity.

1.2 The provisions of this Part are also applied in review of the technical documentation on ships in service, including documents on conversion, modification, changes, modernization, restoration and repair of the items of technical supervision as far as it is practicable and reasonable.

2 DEFINITIONS AND EXPLANATIONS

2.1 Definitions and explanations related to the general terminology of the RS rules are given in 1.1, Part I "Classification" of the Rules for the Classification and Construction of Sea-Going Ships.

Terms and definitions used in the present Part and related to the technical documentation are given in Section 1, Part I "General Regulations for Technical Supervision" of the present Rules.

3 GENERAL

3.1 Construction of ships and manufacture of materials and products for ships shall be in compliance with the technical documentation approved (agreed) by the Register.

3.2 Review (expertise) of the technical documentation aims at verification of the compliance of the items of technical supervision with the RS requirements.

3.3 Technical documentation on items of technical supervision shall be submitted to the Register for review and approval (agreement) prior to the commencement of construction (manufacture) of the items.

Documents shall be in the Russian or English language.

Documents shall be submitted in any way agreed with the Register, in electronic form in PDF format to ensure downloading with a view to having unrestricted off-line storage and stamping as per results of the review.

3.4 Technical documentation submitted to the Register for review shall be prepared in such a way or supplied with such additional information that enables to make sure that the appropriate provisions of the RS rules and international conventions and agreements are fulfilled.

3.5 For class assignment to a ship under construction the documentation as stated in 3.1.2 and 4 (as applicable), Part I "Classification" of the Rules for the Classification and Construction of Sea-Going Ships, applicable sections of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships, 2.1.2, Part I "General" of the Rules for the Equipment of Sea-Going Ships, 1.4 "Technical documentation" of the Rules for the Cargo Handling Gear of Sea-Going Ships, and in other rules for the classification and construction of specialized types of ships and fixed offshore platforms (refer to 1.3 of General Regulations for the Classification and Other Activity) shall be submitted to the Register for approval.

The scope of technical documentation for ships and products of special design and purpose is subject to agreement with the Register in each particular case.

Standards on individual materials and products agreed with the Register may substitute the relevant part of the documentation or documentation as a whole.

3.6 Where novel engineering solutions are used, and for the purpose of feasibility studies, tendering process, etc., the performance specification, draft proposal, tender documentation, conceptual design, engineering analysis procedure as well as experimental design and research developments (Front End Engineering Design, etc.) and other documentation of high degree of novelty may be submitted to the Register for review. Such documents are not subject to approval, and on the results of their review a written conclusion (expert opinion) of the Register is compiled ([refer to 8.5](#)). Such documents are not subject to approval, and on the results of their review a written conclusion (opinion) of the Register is compiled ([refer to 8.5](#)).

On the customer's request, the Register may review the above technical documentation as part of "Approval in Principle" (AIP) service. With regard to this service, the written conclusion (expert opinion) contains at least the following information:

- list of comments to be fulfilled at subsequent stages of the design;
- information on new RS requirements to be implemented at subsequent stages of the documentation review;

- list of limitations and conditions of use of the proposed new technical solutions based on their engineering evaluation and the research work results.

Due to the novelty of the proposed technical solutions, the scope of technical documentation submitted to the Register, and the actions required for rendering AIP service are subject to agreement between the customer and RS in each particular case.

Technical documentation shall contain general information on the item, drawings, specifications, engineering review results, test reports, etc., where applicable.

3.7 The Register reviews and agrees the national or international standards as well as standards of firms (organizations) containing norms and requirements for items of the Register technical supervision, on requests of state bodies and Administrations, firms and organizations. In case standards are submitted together with the technical documentation on items of the Register technical supervision, they are reviewed as part of that documentation, and a possibility of their application in each case is confirmed by the approval of the technical documentation without agreement of the standards themselves. The main provisions concerning agreement of standards and other normative documents are stated in [Section 7](#).

3.8 Calculations necessary for determination of parameters and values regulated by the RS rules shall be made in compliance with the provisions of these Rules or according to the standards, methods and other normative documents agreed by the Register.

The procedures and methods of calculations used shall provide an adequate accuracy of the problem solution.

Calculations shall be made in accordance with the programs having type approval of the Register.

The Register does not check the correctness of computing operations in calculations, including those made according to the programs having type approval of the Register but examines only the final results of the calculations. In separate cases, the Register may conduct additional expertise of the accuracy of the final results.

The main provisions concerning approval of calculation programs and agreement of calculation procedures are stated in [Section 12](#).

3.9 Amendments made in the technical documentation approved (agreed) by the Register and dealt with the fulfillment of the RS requirements shall be submitted to the Register for review prior to their implementation ([refer to Section 10](#)).

3.10 In case the submitted technical documentation shows full (or recognized by the Register as adequate) compliance of the items of supervision with the RS requirements, this documentation is approved (agreed).

The documentation, which does not meet the RS requirements, is returned to the design office for further work and/or updating.

3.11 Approval (agreement) relates only to that part of technical documentation that is covered by the RS requirements.

3.12 Equivalences, deviations from the RS classification requirements, alternative design and arrangements.

3.12.1 Where technical documentation contains technical solutions that differ from those regulated by the requirements of international conventions (equivalences – refer to 1.1 of the General Regulations for the Classification and Other Activity), every such solution shall be agreed upon by the Administration in accordance with the instructions contained in the conventions. Each equivalence shall be agreed upon by the Administration on a case by case basis.

3.12.2 Where technical documentation contains technical solutions that differ from those regulated by the RS classification requirements (deviations – refer to 1.1 and 1.3.4 of the General Regulations for the Classification and Other Activity), the designer shall submit to the Register the appropriate technical justification for such solutions. The deviations agreed upon by the Register shall be included in the List of Deviations from the RS Rules.

3.12.3 Where technical documentation contains alternative design and arrangements, they shall be agreed according to the procedure prescribed in 3.1.7, Part I "Classification" of the Rules for the Classification and Construction of Sea-Going Ships. Information on the agreed alternative design and arrangements shall not be included in the List of Deviations from the RS Rules, if any.

3.13 Approval of the technical documentation by any RS Branch Office is valid for all other RS Branch Offices. Such approval may be (in case of proper reasons) cancelled or altered only by the RS Branch Offices, which approved the documentation, as well as a higher RS Branch Office up to RHO.

The technical documentation approved by one of the Register Branch Offices is accepted by other RS Branch Offices for carrying out technical supervision without additional approval of the documentation concerned, provided no updating is required by the production conditions of the particular firm (manufacturer).

3.14 The differences of principle on the technical documentation shall be finally resolved by:

.1 RHO in relation of technical designs, plan approval documentation, specifications and normative documents;

.2 the RS Branch Offices in relation to detailed design documentation.

3.15 The Register charges fees for review of the technical documentation in accordance with its current tariffs (irrespective of the results of review).

3.16 All the documentation submitted to the Register for review is confidential and may be handed over to a third party only upon the written consent of its legal owner.

3.17 During dual classification of a ship, both classification societies act as one. The scope of work and the authority of each society during approval of design documentation, certification of materials and products, and survey during construction are specified in detail in Dual Classification Agreement. Results of the work performed by one society are accepted by another society for the purposes of classification in the extent provided by the Agreement. The overall dual classification results are accepted by the society responsible for the issue of statutory certificates.

3.18 In case of flag change before completion of the ship construction or before completion of the initial survey of the ship under construction, the technical documentation that is subject to approval upon the Flag State MA authorization shall be re-approved by the Register on behalf of the new Flag State MA. The RS surveyor shall supervise the fulfillment of the terms of the Agreement between the RS and flag MA, as well as additional MA instructions, if any.

3.19 Requirements for the scope of technical documentation of a ship under conversion, repair or renovation, as well as during RS class assignment, reassignment or class transferring into the RS Class for a ship in service, are given in relevant sections of the Rules for the Classification Surveys of Ships in Service, Guidelines on Technical Supervision of Ships in Service.

At the same time, technical documentation for conversion of single-hull tankers to double-hull tankers or bulk carriers shall meet the relevant requirements of these Rules, applicable requirements of the Rules for the Classification and Construction of Sea-Going Ships, international conventions and IACS UI SC226 (Rev.1 Dec 2012) – refer to section "Publications" of the website www.iacs.org.uk.

4 TECHNICAL DOCUMENTATION ON SHIPS

4.1 Plan approval documentation, technical designs, projects involving major conversions of ships, passage of ships, as well as the documentation stated in [3.6](#) and [3.7](#) are subject to review and approval by RHO or by the RS Branch Office when duly authorized by RHO.

Detailed design documentation for a ship under construction, the projects involving minor conversion (outfitting, modernization) as well as technical documentation on ships of less than 100 gross tonnage (excluding high-speed craft, passenger ships, tankers, tugs, ships designed for carriage of dangerous goods, pleasure craft with passenger capacity more than 12), operational documentation of ships under construction, as well as mooring and sea trials programmes shall be reviewed by the RS Branch Offices without the RHO authorization.

The gross tonnage shall be taken based on the design ship's tonnage calculation agreed by the Register.

4.2 Requests for review of technical documentation shall be sent to the relevant RS Branch Office depending on the type of the documentation according to [4.1](#).

A request shall contain the following information:

- project number;
- ship type;
- ship purpose;
- ship main particulars;
- date of contract for construction of the ship or series of sister ships, as well as hull numbers (i.e. order numbers) of all ships included in the contract, with indication of optional ships;
- confirmation that the organization has been familiarized with the General Conditions for Rendering Services by Russian Maritime Register of Shipping;
- guarantee of payment for the RS services.

4.3 Plan approval documentation, technical designs, as well as the documentation stated in [3.6](#) submitted for the Register approval shall be reviewed by the Register for compliance with the RS requirements in effect on the date of contract for construction of a ship (series of ships).

In the absence of the contract for construction the documentation shall be reviewed for compliance with the RS requirements in effect on one of the following dates, as applicable:

- .1 keel laying date or the date on which the ship was at a similar stage of construction;
- .2 the date of the design submittal (if the terms of construction of the ship (series of ships) are not known yet).

In case of [4.3.2](#), and if new RS requirements came into force on the date of contract for construction of the ship (series of ships), or on the keel laying date, or on the date on which the ship was at a similar stage of construction (in the absence of the contract for construction), the documentation shall be amended in compliance with these new requirements.

4.4 Technical documentation shall be submitted in electronic form according to [3.3](#).

Documentation shall be submitted with a covering letter with a list of documents to be submitted for review attached.

On the Register request, the designer shall submit additional documents to support and explain the solutions adopted in the design.

Submission of the documentation by separate parts (on hull, machinery, systems, electrical equipment, etc.) may be allowed on agreement with the Register. In so doing, specification and general arrangement plans shall be submitted together with the first portion of the documentation, as well as the complete list of documents to be submitted for review.

4.5 A set of copies of the report documents for the ship that contain information on actual ship's structures, installed machinery, arrangements, equipment, systems, etc. shall be submitted to the RS after completion of its construction. The terms of submission and the scope of documentation shall be agreed upon with the RS Branch Office, which carries out technical supervision during construction of ship.

4.6 A set of ship operational documentation (refer to [Appendix 1](#), as applicable) shall be submitted to the RS for review after the completion of the ship's construction. At the initial stage of construction or earlier (when entering into the Agreement), the shipyard shall be informed by the Register about the need to provide the RS approved operational documentation to the RS surveyor on board the ship before completion of the initial survey after construction. The terms of submission and the scope of documentation shall be agreed upon with the RS Branch Office, which carries out technical supervision during construction of ship.

4.7 The repair technical documentation shall be reviewed without the RHO authorization by the RS Branch Offices, which perform the supervision of the ship repair in accordance with the requests by the shipowner or the enterprises authorized by the shipowner.

4.8 In general, the Register review of the documentation set stated in [4.1](#) takes 30 working days.

In case the documentation is submitted by parts, its review takes 30 working days from the date of receiving the last portion.

Duration of the documentation review may be reduced upon agreement with the Register in each particular case.

The procedure, place, terms and other conditions of detailed design documentation review by the Register shall be determined upon agreement with the RS Branch Office responsible for review of detailed design documentation.

4.9 Documents developed as a part of the plan approval documentation by the equipment suppliers and/or subcontractors shall be submitted for approval by the general designer under its covering letter, or a letter of the general designer shall be enclosed with the documentation to confirm its approval.

5 TECHNICAL DOCUMENTATION ON PRODUCTS

5.1 The Register reviews the technical documentation on products specified in the RS Nomenclature (refer to Appendix 1, Part I "General Regulations for Technical Supervision") taking into account provisions of Section 5 of the above stated Part.

5.2 Technical documentation on products shall be submitted for review in electronic form according to [3.3](#).

The Register confirms approval/agreement of technical documentation on products by issuing a conclusion letter and/or putting on stamps [8.2-1](#) or [8.2-3](#) accordingly, or [8.2-6](#) for various information documents (refer to [8.3.4](#)). Where the technical documentation fails to comply with the RS requirements, the comments shall be fulfilled by the designer (manufacturer) prior to its final approval (agreement).

5.3 In case products or their parts or assemblies indicated in the RS Nomenclature are produced in compliance with standards, the standards shall be agreed upon with the Register in accordance with [Section 7](#).

5.4 The technical documentation on the products of assembly unit types or on sets of products, etc., which include the component parts indicated in the RS Nomenclature and supplied by subcontractors (generators, reduction gears, prime movers of generators, compressors, pumps, deck machinery, automation systems, etc.) is approved after approval by the Register of the technical documentation on the component parts.

In particular cases, the Register may approve the technical documentation on assembly units, the technical documentation of which component parts does not have the Register approval, provided satisfactory results of testing component parts together with assembly units show their suitability for on board operation (mechanical and climatic tests) and their electromagnetic compatibility (for electrical and electronic equipment).

5.5 Where the products are designed not as type products but for a particular ship, the technical documentation on such products may be reviewed by the Register within the ship technical documentation.

5.6 Where use is made of type products manufactured in accordance with the technical documentation approved by the Register, the latter reserves the right for additional review of their possible use within the particular ship project.

5.7 In case the technical documentation for the products is presented for review and approval complete with the ship design (upon the agreement with the firm (manufacturer)), the results of its review are communicated to the designer by a separate letter.

5.8 The products referred to in the RS Nomenclature and intended for repairs and supply of the ships with spare parts shall be manufactured according to the technical documentation approved by the Register.

5.9 In case the technical documentation on spare parts for products in service is developed anew, the developer of the documentation shall present it to the RS Branch Office, in which area the documentation developer is located, for review and approval together with the information, which confirms the compliance of the design and materials of spare parts to the specifications of these products.

5.10 Technical documentation submitted to the Register shall be reviewed for compliance with the applicable requirements of the RS rules being in force on the date of the customer's request for documentation review by the Register, unless specified otherwise in the relevant sections of the RS rules.

5.11 Duration of the technical documentation review shall comply with that stated in [4.8](#).

5.12 Additional requirements for submitting the ICE documentation to the Register for review and approval are given in Appendices 2 and 3 to Section 5 "Machinery" of Part IV "Technical Supervision during Manufacture of Products".

6 TECHNICAL DOCUMENTATION ON MATERIALS

6.1 The Register reviews the technical documentation on products specified in the RS Nomenclature (refer to Appendix 1, Part I "General Regulations for Technical Supervision") taking into account provisions of [Section 5](#) of the above stated Part. Technical documentation on materials shall be submitted to the Register in electronic form in PDF format for review and approval.

6.2 Documentation shall be submitted as standards, specifications and similar documents containing necessary information on the production procedure, chemical composition, mechanical and technological properties, scope of tests and testing procedures, drawing-up of the test results and marking procedure.

6.3 Where materials are manufactured in accordance with the standards, the latter shall be reviewed and agreed upon in compliance with [Section 7](#).

6.4 Provisions of [5.5–5.11](#) concerning the products are also applicable to materials as far as it is practicable and reasonable.

7 NORMATIVE DOCUMENTS

7.1 National and international standards (refer to [3.7](#)) shall be submitted for review to RHO or the RS Branch Office, if duly authorized by RHO; standards of firms (organizations) and other normative documents – to the appropriate RS Branch Offices in the area of their activity.

7.2 Where drawings have been produced, calculations made and other documents compiled as well as various tests carried out for the purpose of development or revision of the normative document, the Register may require these documentation and test results to be submitted for review.

7.3 Where it is found in the course of the normative document review that the content of the documentation is not in full compliance with the RS requirements, the Register may require the additional documentation to be submitted for review or additional tests to be carried out.

7.4 When the normative documents are reviewed and agreed upon, one shall be guided by the following:

.1 newly developed documents for the items subject to the Register technical supervision during manufacture are agreed upon by the Register, provided their requirements are at least as stringent as those of the RS requirements;

.2 where the requirements of the previously published documents do not meet the RS requirements, their application is subject to special consideration of the Register. In the subsequent revision of these documents, their requirements shall be brought in compliance with the RS requirements.

8 PREPARATION OF RESULTS OF TECHNICAL DOCUMENTATION REVIEW

8.1 Depending on the type of documentation, the results of the technical documentation review by the Register are finalized by appropriate stamping of the documents and/or drawing up a conclusion letter.

When reviewing the technical documentation in electronic form, stamping is carried out by software tools and is certified by digital signature of the Register authorized specialist.

8.2 The Register applies stamps shown in [Figs. 8.2-1 – 8.2-11](#). In case of documentation review within dual classification of a ship with another classification society (hereinafter referred to as "ACS") and further assignment of character of classification according to 2.2.2.4, Part I "Classification" of the Rules for the Classification and Construction of Sea-Going Ships, the stamps shown in [Figs. 8.2-7 – 8.2-11](#) are applied.

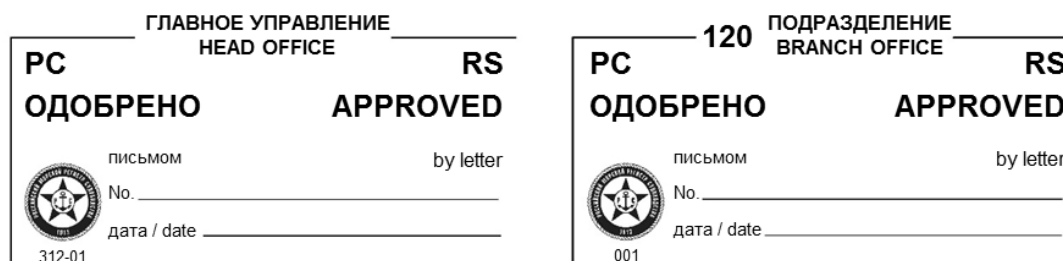


Fig. 8.2-1

<p style="text-align: center;">HEAD OFFICE</p> <p>RS</p> <p style="text-align: center;">APPROVED</p> <p>in scope of Dual classification Agreement with _____</p> <div style="display: flex; align-items: center;"> <p>by letter No. _____</p> </div> <p>date _____</p> <p style="font-size: small;">312-07</p>	<p style="text-align: center;">120 BRANCH OFFICE</p> <p>RS</p> <p style="text-align: center;">APPROVED</p> <p>in scope of Dual classification Agreement with _____</p> <div style="display: flex; align-items: center;"> <p>by letter No. _____</p> </div> <p>date _____</p> <p style="font-size: small;">007</p>
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Fig. 8.2-7

<p style="text-align: center;">HEAD OFFICE</p> <p>RS</p> <p style="text-align: center;">APPROVED</p> <p>in scope of Dual classification Agreement with _____</p> <p>subject to comments in letter</p> <div style="display: flex; align-items: center;"> <p>No. _____</p> </div> <p>date _____</p> <p style="font-size: small;">312-08</p>	<p style="text-align: center;">120 BRANCH OFFICE</p> <p>RS</p> <p style="text-align: center;">APPROVED</p> <p>in scope of Dual classification Agreement with _____</p> <p>subject to comments in letter</p> <div style="display: flex; align-items: center;"> <p>No. _____</p> </div> <p>date _____</p> <p style="font-size: small;">008</p>
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Fig. 8.2-8

<p style="text-align: center;">HEAD OFFICE</p> <p>RS</p> <p style="text-align: center;">AGREED</p> <p>in scope of Dual classification Agreement with _____</p> <div style="display: flex; align-items: center;"> <p>by letter No. _____</p> </div> <p>date _____</p> <p style="font-size: small;">312-09</p>	<p style="text-align: center;">120 BRANCH OFFICE</p> <p>RS</p> <p style="text-align: center;">AGREED</p> <p>in scope of Dual classification Agreement with _____</p> <div style="display: flex; align-items: center;"> <p>by letter No. _____</p> </div> <p>date _____</p> <p style="font-size: small;">009</p>
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Fig. 8.2-9

<p style="text-align: center;">HEAD OFFICE</p> <p>RS</p> <p style="text-align: center;">AGREED</p> <p>in scope of Dual classification Agreement with _____</p> <p>subject to comments in letter</p> <div style="display: flex; align-items: center;"> <p>No. _____</p> </div> <p>date _____</p> <p style="font-size: small;">312-10</p>	<p style="text-align: center;">120 BRANCH OFFICE</p> <p>RS</p> <p style="text-align: center;">AGREED</p> <p>in scope of Dual classification Agreement with _____</p> <p>subject to comments in letter</p> <div style="display: flex; align-items: center;"> <p>No. _____</p> </div> <p>date _____</p> <p style="font-size: small;">010</p>
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Fig. 8.2-10

<p style="text-align: center;">HEAD OFFICE</p> <p>RS</p> <p style="text-align: center;">DULY NOTED</p> <p>in scope of Dual classification Agreement with _____</p> <div style="display: flex; align-items: center;"> <p>by letter No. _____</p> </div> <p>date _____</p> <p style="font-size: small;">312-11</p>	<p style="text-align: center;">120 BRANCH OFFICE</p> <p>RS</p> <p style="text-align: center;">DULY NOTED</p> <p>in scope of Dual classification Agreement with _____</p> <div style="display: flex; align-items: center;"> <p>by letter No. _____</p> </div> <p>date _____</p> <p style="font-size: small;">011</p>
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Fig. 8.2-11

8.3 The stamp to be applied is determined by the Register depending on a document type, result of its review as well as participation of ACS in the documentation review within dual classification.

Upon approval (agreement) of the technical documentation, the Register puts the appropriate stamps, namely:

.1 stamps shown in [Figs. 8.2-1](#) and [8.2-2](#) are put on the structural drawings, (basic and functional) circuits, test programs, other similar documents;

.2 stamps shown in [Figs. 8.2-3](#) and [8.2-4](#) are put on the List of Deviations from the RS Rules, preliminary fire plan and other similar documents of a preliminary nature, various calculations, descriptions, technical backgrounds, lists of spare parts, research reports and test results, etc., as well as on the normative documents (standards, including the shipyard and firm (manufacturer) standards, regulations, etc.);

.3 stamps shown in [Fig. 8.2-5](#) are put on the documents approved on behalf of Administrations if it is regulated by the RS requirements;

.4 stamp shown in [Fig. 8.2-6](#) is put on the various information documents not subject to review for compliance with the RS requirements;

.5 stamps shown in [Figs. 8.2-7](#) and [8.2-8](#) are put on the structural drawings, (basic and functional) circuits, test programs, other similar documents reviewed by the Register together with ACS in the scope stipulated in the Dual Classification Agreement at assignment of character of classification according to 2.2.2.4, Part I "Classification" of the Rules for the Classification and Construction of Sea-Going Ships;

.6 stamps shown in [Figs. 8.2-9](#) and [8.2-10](#) are put on the List of Deviations from the RS Rules, various calculations, descriptions, technical backgrounds, lists of spare parts, research reports and test results, etc., as well as on the normative documents (standards, including the shipyard and firm (manufacturer) standards, regulations, etc.), reviewed by the Register together with ACS in the scope stipulated in Dual Classification Agreement at assignment of character of classification according to 2.2.2.4, Part I "Classification" of the Rules for the Classification and Construction of Sea-Going Ships;

.7 stamps shown in [Fig. 8.2-11](#) are put on the documents reviewed by ACS and not subject to review by the Register under the Dual Classification Agreement at assignment of character of classification according to 2.2.2.4, Part I "Classification" of the Rules for the Classification and Construction of Sea-Going Ships.

8.4 Stamp on the first page of electronic document certified by digital signature applies to all pages of the document.

8.5 Based on the results of review of the technical documentation referred to in [3.6](#) and [3.7](#), the Register compiles a conclusion letter (expert opinion) without stamping or signing the documents.

8.6 In case of negative results of review (the review status is "not approved"), the document is not stamped and the comments to the document are sent to the designer.

8.7 In case of a single approval of the technical documentation on materials and products (refer to Section 1, Part I "General Regulations for Technical Supervision"), a conclusion letter shall contain an entry on limitation of the material or product application by a particular ship project or hull numbers.

8.8 The comments raised in the course of approval of the plan approval documentation shall be fulfilled to the satisfaction of the Register.

The RS Branch Offices in charge of control over comments fulfillment shall communicate information on their fulfillment to the RS Branch Office, which has approved the plan approval documentation as a whole.

8.9 The detailed design documentation for a ship under construction as well as documentation on materials and products shall be approved without any comments. The approval is issued only upon fulfillment all the comments by the designer.

8.10 A set of the approved technical documentation together with a conclusion letter is sent to the customer and the RS Branch Office, which will be in charge of review of the detailed design documentation or technical supervision during construction (manufacture) of the item.

8.11 Upon review and agreement of the final wording of the normative document, the Register sends to the organization, which submitted the document, an appropriate written confirmation on agreement of the document; the document itself with the Register stamp is kept in the RS Branch Office files as a master copy.

8.12 The order of the technical documentation review in RHO and the RS Branch Offices is established by the appropriate RS internal normative documents (procedures, instructions).

9 DURATION OF VALIDITY OF TECHNICAL DOCUMENTATION APPROVAL (AGREEMENT)

9.1 The period of validity of the Register approval for plan approval documentation as well as technical design is limited by the period of validity of the contract for construction of the ship or series of sister ships.

In this case, it is mandatory to meet the requirements of international conventions and RS circulars with due regard for the dates set for their implementation during construction of ships according to the Register-approved technical documentation (refer to [9.5](#)), and the RS Branch Office in charge of technical supervision during construction of the ship checks the implementation.

9.2 The validity of the Register approval of the technical documentation on materials and products in case of a single approval (refer to Section 1, Part I "General Regulations for Technical Supervision") is limited by the time of delivery of the materials and products or construction of ships, for which the materials and products are intended.

9.3 The Register approval of the technical documentation on materials and products in case of type approval and/or recognition of a manufacturer (refer to Section 1, Part I "General Regulations for Technical Supervision"), including technical specifications, is valid for a period of six years.

Approval of the technical documentation for the products specified in [5.8](#) has no duration of validity.

9.4 Standards and other normative documents on materials and products shall be agreed for the period of their validity.

When revising the standards and normative documents they shall be checked to take account of the current RS rules.

9.5 Irrespective of the approval validity, the technical documentation on ships, materials and products, as well as agreed standards and other normative documents are subject to mandatory updating with regard to adopted requirements of international conventions and agreements that have come into force after approval (agreement) of the documentation. All approved and agreed documentation is also subject to updating, having regard to the requirements of the RS circular letters that require their mandatory fulfillment.

9.6 The requirements of the RS rules as well as of international conventions and agreements that are in effect on the date of submission of the documents shall be taken into consideration in the technical documentation submitted for re-approval (re-agreement) upon expiry of validity of its previous approval.

9.7 The Register approval (agreement) of the technical documentation loses its validity:

- .1** upon expiry of approval validity (where the term is indicated);
- .2** upon expiry of the documentation validity (where the term is indicated);
- .3** in case amendments were introduced without consent of the Register into the approved (agreed) documentation dealing with the issues, which are within the Register terms of reference.

9.8 The Register may cancel its approval (agreement) of the technical documentation or change the terms of approval (agreement) in the following cases:

.1 if the documentation has not been timely brought in line with the provisions of international conventions and agreements, as well as with the requirements of the RS circular letters as set forth under [10.1](#);

.2 if the quality and reliability of materials and items are regularly low and do not meet the RS requirements.

10 INTRODUCTION OF AMENDMENTS INTO APPROVED (AGREED) TECHNICAL DOCUMENTATION

10.1 Any amendments to the technical documentation approved (agreed) by the Register that may relate to the requirements regulated by the RS rules or international conventions shall be approved (agreed) by the Register based on the results of review of the appropriate notifications on the amendments or of the reissued amended documents.

The amendments shall be detailed or specified in the amended documents, plans.

10.2 Review and approval of amendments to the design documentation shall be carried out by the RS Branch Office, which has approved this documentation.

10.3 Any amendments to the detailed design documentation made during the construction of the ship or the manufacture of the product that might affect solutions adopted in the design documentation shall be reviewed and approved by the RS Branch Office, which has approved the design documentation.

Amendments to the detailed design documentation that do not affect the solutions adopted in the design documentation shall be reviewed and approved by the RS Branch Office in charge of technical supervision of the development of the detailed design documentation or the construction of the ship or the manufacture of the product.

10.4 Any amendments to the normative documents agreed by the Register shall be reviewed and agreed by the RS Branch Office, which has agreed these documents.

10.5 Any amendments to the specifications for the materials and products approved by the Register shall be reviewed and approved by the Register Branch Office, which has approved these specifications.

10.6 The procedure for review and approval (agreement) of amendments to the technical documentation referred to in [10.1 – 10.5](#) above may be altered or updated when necessary at the discretion of RHO in each particular case.

10.7 The RS Branch Office that is in charge of approval of the amendments made in the technical documentation approved earlier shall timely inform to that effect the RS Branch Office, which carries out technical supervision during construction of ship or manufacture of materials and products, respectively.

11 GRANTING THE SHIP UNDER CONSTRUCTION WITH AN EXEMPTION (WAIVER) FROM COMPLIANCE WITH THE REQUIREMENTS OF INTERNATIONAL CONVENTIONS

11.1 GENERAL

11.1.1 Review to confirm the possibility of granting the ship under construction with an exemption (waiver) from compliance with the requirements of international conventions and specifying the conditions thereof is entirely an exclusive right of the Administration.

11.1.2 If necessary, the Register shall provide the Administration with the conclusion on the conditions for granting an exemption (waiver) to a ship under construction from compliance with the requirements of the international conventions. The procedure for the Register in this case, for ships flying the flag of the Russian Federation (RF) shall be defined in [11.2](#) and for ships flying the flag other than the RF flag – in [11.3](#).

11.2 GRANTING THE SHIP UNDER CONSTRUCTION FOR THE RF FLAG WITH AN EXEMPTION (WAIVER) FROM COMPLIANCE WITH THE REQUIREMENTS OF INTERNATIONAL CONVENTIONS

11.2.1 Granting the ship under construction for RF flag with an exemption (waiver) from compliance of the requirements of international conventions shall be performed compliant to the appropriate documents¹ of the Maritime Administration of the Russian Federation (RF MA).

11.2.2 The prospective shipowner or its legal representative (designer or shipyard) (hereinafter referred to as "the applicant") shall send an application for granting an exemption (waiver) to the RF MA² and a copy to RHO.

11.2.3 Within three working days from receipt of the copy of the application, RHO shall send it to the RS Branch Office for supervision during design to get a conclusion on the possibility of granting an exemption (waiver) indicating the conditions under which it may be granted. The preparation of such conclusion takes three working days.

11.2.4 The RS conclusion on the possibility of granting an exemption (waiver) indicating the conditions under which it may be granted, approved by the RS Director General, shall be sent to the RF MA².

11.2.5 Within three working days from receipt of the relevant decision of the RF MA², RHO shall inform about it the RS Branch Office for supervision during design, which shall immediately bring the decision of the RF MA² to the notice of the applicant and the RS Branch Office for supervision under construction.

11.2.6 The decision of the RF MA² shall be included by the RS Branch Office for supervision under construction in the ship's file.

11.2.7 The decision of the RF MA² on granting an exemption (waiver) shall be issued in compliance with 4.3.4 of Part III "Survey of Ships in Compliance with International Conventions, Codes, Resolutions and Rules for the Equipment of Sea Going Ships" of the Guidelines on Technical Supervision of Ships in Service.

11.3 GRANTING THE SHIP UNDER CONSTRUCTION FOR THE FLAG OTHER THAN THE RF FLAG WITH AN EXEMPTION (WAIVER) FROM COMPLIANCE WITH THE REQUIREMENTS OF INTERNATIONAL CONVENTIONS

11.3.1 The prospective shipowner or his legal representative (designer or shipyard) (hereinafter referred to as "the applicant") shall send an application on granting an exemption (waiver) to the Administration and, at the applicant's discretion, a copy to the RS Branch Office for supervision during design. In this regard, the additional instructions of the Administration (if any) concerning the application form shall be taken into account.

11.3.2 When the Administration requests the RS opinion regarding the conditions of granting an exemption (waiver), the preparation of response shall not exceed 5 working days,

¹ RF Government Regulation No. 1012 of December 24, 2008 "On granting the ship flying the RF flag with an exemption (waiver) from compliance with the requirements of the International Convention on Load Lines 1966, Convention on the International Regulations for Preventing Collisions at Sea, 1972, International Convention for the Prevention of Pollution from Ships, 1973 (as amended by Protocol of 1978 thereto) and the International Convention for the Safety of Life at Sea, 1974";

"Administration regulations of the Federal Agency for Maritime and River Transport on granting the ship with an exemption (waiver) from compliance with the requirements of the International Convention on Load Lines 1966, Convention on the International Regulations for Preventing Collisions at Sea, 1972, International Convention for the Prevention of Pollution from Ships 1973 (as amended by Protocol of 1978 thereto) and the International Convention for the Safety of Life at Sea, 1974" approved by Order of the Ministry of Transport of the Russian Federation No. 239 of July 17, 2012;

² The Federal Agency for Maritime and River Transport (Rosmorrechflot), and in addition, regarding the fishing vessels – the Federal Agency for Fishery (Rosrybolovstvo).

and the review of such a request and sending the RS opinion regarding the conditions of granting an exemption (waiver) are the RHO responsibility.

11.3.3 When the decision of the Administration is sent to RS only, RHO within three working days shall inform about it the RS Branch Office for supervision during design, which shall immediately bring the decision of the Administration to the notice of the applicant and the RS Branch Office for supervision under construction.

11.3.4 When the decision of the Administration is sent to the applicant only, the latter shall inform the Register of such a decision. In this regard, the RS Branch Office/RHO Location on receipt of such information shall bring it to the notice of other interested RS Branch Offices/RHO Locations performing technical supervision during design and construction of the ship.

11.3.5 The decision of the Administration shall be included by the RS Branch Office for supervision under construction in the ship's file.

11.3.6 The decision of the Administration on granting an exemption (waiver) shall be issued in compliance with 4.3.4 of Part III "Survey of Ships in Compliance with International Conventions, Codes, Resolutions and Rules for the Equipment of Sea Going Ships" of the Guidelines on Technical Supervision of Ships in Service.

12 SOFTWARE

12.1 TYPE APPROVAL OF SOFTWARE

12.1.1 Software which is capable of performing calculations which results are part of technical documentation to be submitted to the Register for approval according to [3.8](#), shall be approved by the Register.

12.1.2 The software used for counting assistance, which comes down to performance of a number of separate calculations for determination of auxiliary values, shall be brought to the notice of the Register.

12.1.3 The software which shall be approved, is submitted to the Register for review before its application.

In separate cases, the software may be submitted to the Register together with the technical documentation on the ship.

12.1.4 The software is approved by RHO.

12.1.5 The Type Approval Certificate for Software (СТОП) (form 6.8.5) is issued for the software reviewed and verified in accordance with the requirements of these Rules, for the period not exceeding 5 years.

Upon expiry of the validity period the Type Approval Certificate for Software (СТОП) is renewed on request of the software designer. Renewal shall be done within the period limited by thirty (30) days from the date of СТОП expiry. Upon expiry of this period, СТОП becomes invalid.

Validity of СТОП may be suspended for a period agreed upon with the software designer but not more than ninety (90) days in case the Register has not received a request before the СТОП expiry date.

12.1.6 Type approval of the software for ship theory shall be carried out according to [12.2.2](#).

12.1.7 When submitting to the Register the calculations which are performed using the software being type approved by RS, a reference to the number of the Type Approval Certificate for Software (СТОП) (form 6.8.5) issued by the Register shall be made in these calculations.

12.1.8 The Type Approval Certificate for Software (СТОП) issued by the Register for a software loses its validity if changes affecting the subject agreed have been done in the software.

12.2 APPROVAL OF ONBOARD SOFTWARE FOR STABILITY CALCULATIONS

12.2.1 Definitions.

Onboard software for stability calculations (stability software) is a software which calculates the stability for actual loading condition and which is installed onboard of a ship and a floating unit.

Active software is a software that uses, data from sensors automatically reading the contents of tanks and other ship loading parameters as input information.

Passive software is a software that requires manual entry of input data for calculation.

12.2.2 General.

12.2.2.1 In order to obtain the Type Approval Certificate for Software (CTOP) (form 6.8.5), the software designer shall apply to the Register with a request. The request shall be submitted with technical documentation containing the following data:

name of the software;

hardware/operation system requirements;

User Manual;

results of test calculations;

input data for test calculations (ship's hull form data, compartmentation data, lines plan, offset tables, hydrostatic tables, capacity tables, etc.).

12.2.2.2 Test calculations may be performed on the basis of input data provided by the Register or selected by the software designer and agreed upon with the Register.

Test calculations shall be carried out for two types of ships for which approval is requested. Where approval is requested for only one type of ship, a minimum of two data sets for different hull forms of that type of ship are required to be tested.

For approval of software which is based on a hull form model, test calculations shall be carried out for three types of ships, or of three data sets for different hull forms, if approval is requested for only one type of ship.

12.2.2.3 For renewal of the Type Approval Certificate for Software (CTOP), the results of test calculations confirming that calculation procedure has not been changed since CTOP issue shall be submitted to the Register. Calculations approved by the Register and carried out during the period of validity of CTOP using the software, may be submitted for confirmation.

12.2.3 Onboard software approval for a specific ship.

12.2.3.1 For review of the onboard software, documentation specified in [12.2.2.1](#) and approved documentation on stability shall be submitted to the Register.

12.2.3.2 The approval procedure includes:

.1 verification of the availability of CTOP: software name including version number;

.2 verification that the input data is consistent with the approved documentation: main dimensions, hydrostatic particulars and, if applicable, the ship profile;

the position of the forward and after perpendiculars, and if appropriate, the calculation method to derive the forward and after draughts at the actual position of the ship's draught marks;

ship lightweight and centre of gravity derived from the most recently approved inclining test or light-weight check;

lines plan, offset tables or other suitable presentation of hull form data;

compartment definitions, including frame spacing, and centres of volume, together with capacity tables (sounding/ullage tables), free surface corrections, if appropriate;

.3 verification of the test conditions;

cargo and consumables distribution for each loading;

output data specified in [12.2.7.2.8](#) taking into account the acceptable tolerances stated in [12.2.8](#);

.4 verification that the software type is appropriate for the type of ship and stability calculations required;

.5 verification of functional requirements under [12.2.4](#).

12.2.3.3 The test loading conditions normally shall cover the range of load draughts from the deepest envisaged loaded condition to the light ballast condition and shall include at least one departure and one arrival condition. Calculations shall be provided for at least four loading conditions, taken from the ship's approved documentation on stability. For tankers and ships carrying grain in bulk at least one of the conditions shall include partially filled cargo spaces. Within the selected loading conditions each cargo hold shall be loaded at least once.

For Type 4 stability software (refer to [12.2.6.6](#)), at least three damage cases shall be selected, each of them associated with at least three test loading conditions taken from the ship's approved Stability Booklet.

12.2.3.4 In case of satisfactory verifications results the Report (form 6.3.29) is issued, the test loading conditions are approved.

The satisfactory operation of the software with the onboard computer(s) for stability calculations shall be verified by testing upon installation. The software operation shall be verified in the presence of the RS surveyor in accordance with [12.2.10](#). The approved test loading conditions, the User Manual and the Report (form 6.3.29) shall be available on board.

12.2.3.5 Approval by the Register does not absolve the software designer and shipowner of responsibility for ensuring that the information programmed into the onboard computer software is consistent with the current condition of the ship.

12.2.4 Approval of the ship computer model used in shore-based emergency response service.

12.2.4.1 For review of the ship computer model used by shore-based emergency response service, the test loading conditions complying with the requirements of [12.2.3.3](#) as well as approved documentation on stability and strength shall be submitted to the Register.

12.2.4.2 The procedure for review of the ship computer model includes verifications specified in [12.2.3.2.1 – 12.2.3.2.3](#).

12.2.4.3 In case of satisfactory verifications results, the Report (form 6.3.29) is drawn up, the test loading conditions are approved.

12.2.4.4 After drawing up the Report (6.3.29), the prompt access to shore-based emergency response service shall be verified in the presence of the RS surveyor in accordance with [12.2.10](#). Agreement with a shore-based emergency response service undertaking damage stability and residual structural strength calculations, user manual for a system of prompt access to shore-based emergency response service and the Report (form 6.3.29) shall be available on board.

12.2.5 General requirements for onboard stability software.

12.2.5.1 The scope of a stability calculation software shall be in accordance with the approved Stability Booklet and shall at least include all information and perform all calculations or checks which are necessary to ensure compliance with the applicable stability requirements.

12.2.5.2 Approved stability software is not a substitute for the approved Stability Booklet, and is used as a supplement to the approved Stability Booklet to facilitate stability calculations.

12.2.5.3 Content and format of the input/output information shall be easily comparable with the approved Stability Booklet.

12.2.5.4 The User Manual shall be provided for the onboard computer stability software, the language in which the User Manual is written shall be the same as used in the approved Stability Booklet.

12.2.5.5 The language of displayed and printed out information shall be the same as used in the approved Stability Booklet.

12.2.5.6 The onboard computer software for stability calculations shall be ship specific and the results of the calculations shall be only applicable to the ship for which it has been approved.

12.2.5.7 In case of modifications implying changes in the main data or internal arrangement of the ship as well as in the Stability Booklet, the approval of stability software is not valid. The software shall be modified accordingly and reapproved.

12.2.6 Types of onboard stability software.

12.2.6.1 These requirements apply only to passive software and to the off-line operation mode of active software.

12.2.6.2 Four types of stability software are acceptable depending upon a ship's stability requirements.

12.2.6.3 Type 1. Software calculating intact stability only.

12.2.6.4 Type 2. Software calculating intact stability and checking damage stability on basis of a limit curve or checking all the stability requirements (intact and damage stability) on the basis of a limit curve.

12.2.6.5 Type 3. Software calculating intact stability and damage stability by direct application of preprogrammed damage cases based on the applicable requirements.

12.2.6.6 Type 4. Software calculating damage stability associated with an actual loading condition and actual flooding case, using direct application of user defined damage, for the purpose of providing operational information for safe return to port (SRtP).

12.2.6.7 Damage stability of both Type 3 and Type 4 stability software shall be based on a hull form model, that is, directly calculated from a full three-dimensional geometric model.

12.2.7 Functional requirements for onboard stability software.

12.2.7.1 General requirements for any type of stability software.

12.2.7.1.1 The stability software shall present relevant parameters of each loading condition. The following parameters shall be presented for a given loading condition:

deadweight data;

light-ship data;

trim;

draught at the draught marks and perpendiculars;

summary of loading condition displacement, vertical centre of gravity, longitudinal centre of gravity and, if applicable, transverse centre of gravity;

downflooding angle and corresponding downflooding opening (not applicable for Type 2 software which uses limit curve for checking all the stability requirements);

compliance with stability criteria: Listing of all calculated stability criteria, the limit values, the obtained values and the conclusions (criteria fulfilled or not fulfilled) (not applicable for Type 2 software which uses limit curve for checking all the stability requirements).

12.2.7.1.2 A clear warning shall be given on screen and in hard copy printout if any of the loading limitations are not complied with.

Loading limitations shall include, but may not be limited to:

trim, draught, liquid densities, tank filling levels, initial heel;

limiting value of vertical centre of gravity/metacentric height in conjunction with above for Type 2;

restrictions to the stowage height for timber.

12.2.7.1.3 Type 3 software shall include pre-defined relevant damage cases based on the applicable requirements for location and extent of damages, intended for automatic check of a given loading condition.

12.2.7.1.4 The date and time of a saved calculation shall be part of the screen display and hard copy printout.

12.2.7.1.5 Each hard copy printout shall contain identification of the calculation program including version number.

12.2.7.1.6 Units of measurement shall be clearly identified and used consistently within a loading condition.

12.2.7.1.7 For Type 3 and Type 4 software, the system shall be pre-loaded with a detailed computer model of the complete hull, including appendages, all compartments, tanks and the relevant parts of the superstructure considered in the damage stability calculation, wind profile, down-flooding and up-flooding openings, cross-flooding arrangements, internal compartment connections and escape routes, as applicable and according to the type of stability software.

12.2.7.1.8 For Type 1 and Type 2 software, in case a full three dimensional model is used for stability calculations, the requirements of the computer model shall be as per [12.2.7.1.7](#) above to the extent as applicable and according to the type of stability software.

12.2.7.2 Additional requirements for Type 4 stability software.

12.2.7.2.1 Where the normal (Type 1, 2 or 3) and SRtP (Type 4) software are not totally separated:

the function of switching between normal software and Type 4 software shall be provided;

the actual intact loading condition shall be the same for both functions (normal operation and SRtP); and

the SRtP module needs only to be activated in case of an incident.

Approval of Type 4 (SRtP) software is for stability only.

12.2.7.2.2 In passenger ships which are subject to SRtP and have an onboard stability computer and prompt access to shore-based emergency response service, such software need not be identical.

12.2.7.2.3 Each internal space shall be assigned its permeability as shown in [Table 12.2.7.2.3](#) below, unless a more accurate permeability has been reflected in the approved Stability Booklet.

Table 12.2.7.2.3

Spaces	Permeability			
	Default	Full	Partially filled	Empty
container spaces	0,95	0,70	0,80	0,95
dry cargo spaces	0,95	0,70	0,80	0,95
ro-ro spaces	0,95	0,90	0,90	0,95
cargo liquids	0,95	0,70	0,80	0,95
intended for consumable liquids	0,95	0,70	0,80	0,95
stores	0,95	0,60	0,60	0,95
occupied by machinery	0,85			
void spaces	0,95			
occupied by accommodation	0,95			

12.2.7.2.4 The stability software shall be capable of accounting for applied moments such as wind, lifeboat launching, cargo shifts and passenger relocation.

12.2.7.2.5 The stability software shall account for the effect of wind by using the method in 2.5.4.1.2, Part V "Subdivision" of the Rules for the Classification and Construction of Sea-Going Ships as the default, but allow for manual input of the wind speed/pressure.

12.2.7.2.6 The stability software shall be capable of assessing the impact of open main watertight doors on stability.

12.2.7.2.7 The stability software shall utilize the latest light-ship parameters stated in the approved Stability Booklet.

12.2.7.2.8 The output of the software shall be such that it provides the sufficient clear unambiguous information to enable quick and accurate assessment of the stability of the ship

for any actual damage, the impact of flooding on the means of escape and the controls of devices necessary for managing and/or controlling the stability of the ship.

When the actual loading condition is input in the Type 4 software, the following output (intact stability) shall be available: deadweight data;

light-ship data;

trim;

heel;

draught at the draught marks and perpendiculars;

summary of loading condition displacement, vertical centre of gravity, longitudinal centre of gravity and, if applicable, transverse centre of gravity;

downflooding angle and corresponding downflooding opening;

free surfaces;

metacentric height;

righting lever corrected for free surfaces values relevant to an adequate range of heeling (not less than 60°) available indicatively at the following intervals: 0°, 5°, 10°, 15°, 20°, 25°, 30°, 40°, 50°, 60°;

compliance with relevant intact stability criteria: listing of all calculated intact stability criteria, the limiting values, the obtained values and the conclusions (criteria fulfilled or not fulfilled);

stability limiting curve.

When the actual loading condition is associated to the actual damage case(s), the following output (damage stability) shall be available:

trim;

heel;

draught at the draught marks and perpendiculars;

progressive flooding angle and corresponding progressive flooding openings;

metacentric height;

righting levers relevant to an adequate range of heeling (not less than 60°) available indicatively at the following intervals: 0°, 5°, 10°, 15°, 20°, 25°, 30°, 40°, 50°, 60°;

compliance with stability criteria: listing of all calculated stability criteria, the limit values, the obtained values and the conclusions (criteria fulfilled or not fulfilled);

the survivability criteria (if required by the Administration);

relevant flooding points (unprotected or weathertight) with the distance from the damage waterline to each point;

list of all flooded compartments with the permeability considered;

amount of water in each flooded compartment;

escape route immersion angles;

a profile view, deck views and cross-sections of the ship indicating the flooded waterplane and the damaged compartments.

12.2.7.2.9 For ro-ro passenger ships there shall be algorithms in the software for estimating the effect of water accumulation on deck (WOD)¹¹.

In addition to the predefined significant wave height taken from the approved Stability Booklet, there shall be possibility for the crew to input manually the significant wave height of the ship navigation area in the stability software.

In addition to the predefined significant wave height taken from the approved Stability Booklet, calculations with two additional significant wave heights shall be submitted.

¹¹ These requirements apply to ro-ro passenger ships subject to the Stockholm Agreement (IMO circular letter No. 1891).

12.2.8 Acceptable tolerances.

12.2.8.1 Depending on the type of program and scope of calculations, the acceptable tolerances shall be determined according to [12.2.8.2](#) or [12.2.8.3](#).

Examples of pre-programmed input data include the following:

hydrostatic data: displacement, longitudinal center of flotation, longitudinal center of buoyancy and vertical center of buoyancy, transverse metacentric height and moment to change trim 1 cm versus draught;

stability data: cross curves of stability at appropriate heel/trim angles, stability limits versus displacement;

compartment data: volume, longitudinal centre of gravity, vertical centre of gravity, transverse centre of gravity and free surface moment/grain heeling moments versus level of the compartment's contents.

Examples of output data include the following:

hydrostatic data: displacement, longitudinal centre of flotation, longitudinal centre of buoyancy and vertical centre of buoyancy, transverse metacentric height, moment to change trim 1 cm versus draught as well as actual draughts and trim;

stability data: free surface correction, righting levers, vertical centre of gravity, metacentric height, metacentric height/vertical centre of gravity limiting values, allowable grain heeling moments, derived stability criteria;

compartment data: calculated volume, vertical centre of gravity, transverse centre of gravity, longitudinal centre of gravity and free surface moment/grain heeling moments versus level of the compartment's contents.

The computational accuracy of the calculation program results shall be within the acceptable tolerances, specified in [12.2.8.2](#) or [12.2.8.3](#), of the results using an independent program or the approved Stability Booklet with identical input.

12.2.8.2 Programs which use only pre-programmed data from the approved Stability Booklet as the basis for stability calculations, shall have zero tolerances for the printouts of input data.

Output data tolerances shall be close to zero, however, small differences associated with calculation rounding or abridged input data are acceptable.

Additionally differences associated with the use of hydrostatic and stability data for trims that differ from those in the approved Stability Booklet, are acceptable subject technical background for obtained data.

12.2.8.3 Programs which use hull form models as their basis for stability calculations, shall have tolerances for the printouts of basic calculated data established against either data from the approved Stability Booklet in accordance with [Table 12.2.8.3](#).

Table 12.2.8.3

Parameter	Acceptable tolerances
Hull form dependent	
Displacement	± 2 %
Longitudinal center of buoyancy, from AP (after perpendicular)	± 1 % / 50 cm
Vertical center of buoyancy	± 1 % / 5 cm
Transverse center of buoyancy	± 0,5 % of B (breadth) / 5 cm
Longitudinal center of flotation, from AP	± 1 % / 50 cm
Moment to trim 1 cm	± 2%
Transverse metacentric height	± 1 % / 5 cm
Longitudinal metacentric height	± 1 % / 50 cm
Cross curves of stability	± 5 cm

Parameter	Acceptable tolerances
Compartment dependent	
Volume or deadweight	±2%
Longitudinal center of gravity, from AP	± 1 % / 50 cm
Vertical centre of gravity	± 1 % / 5 cm
Transverse center of gravity	± 0,5 % of B / 5 cm
Free surface moment	± 2%
Shifting moment	± 5%
Level of contents	± 2%
Trim and stability	
Draughts (forward, aft, mean)	± 1 % / 5 cm
Transverse metacentric height (both initial and corrected)	± 1 % / 5 cm
Righting levers	5 % / 5 cm
Downflooding angle	± 2°
Equilibrium angles	± 1°
Distance from WL (waterline) to unprotected and weathertight openings, or other relevant point, if applicable	± 5 % / 5 cm
Areas under righting arm curve	± 5 % / 0,0012 mrad
<p>Notes : 1. Deviation in % = {(base value-applicant's value) / base value} x 100. Where the "base value" may be from the approved Stability Booklet or control calculation.</p> <p>2. When applying the tolerances in Table 12.2.8.3 having two values, the allowable tolerance is the greater of the two values.</p> <p>3. Where differences in calculation methodology exist between the software used in the comparison, this may be a basis for accepting deviations greater than those specified in Table 12.2.8.3 provided a software examination is carried out in sufficient detail to clearly document that such differences are technically justifiable.</p> <p>4. Deviation from these tolerances shall not be accepted unless the Register considers that there is a technical background (satisfactory explanation) for the difference and that it is clearly evident that the deviation does not impact compliance with the applicable stability criteria.</p>	

12.2.9 User manual.

12.2.9.1 The User Manual shall contain the following information:

- instructions for installation of software on the computer;
- description of the main functions;
- a sample of each displayed screen with explanatory text;
- input and output data;
- required minimum hardware to operate the software;
- description of use of the test loading conditions;
- example of the calculation accompanied by explanations;
- list of warnings.

12.2.10 Onboard verification.

12.2.10.1 Acceptance tests of the software shall be conducted on board the ship in the presence of the RS surveyor with drawing up the Report on Survey of the Ship (form 6.3.10) or with the relevant entries made in the Survey Checklist (form 6.1.01), as applicable. From the approved test loading conditions at least one load case (other than light-ship) shall be calculated. Actual loading condition results are not suitable for checking the correct working of the computer.

12.2.10.2 Steps to be performed:

- .1** retrieve the test loading condition and start a calculation run. Compare the calculation results with the approved test loading conditions;
- .2** change several items of deadweight (tank weights and the cargo weight) sufficiently to change the draught or displacement by at least 10 %. The results shall be reviewed to ensure that they differ in a logical way from those of the approved test condition;

.3 revise the above modified loading condition to restore the initial test loading condition and compare the results. Confirm that the relevant input and output data of the approved test loading condition have been replicated;

.4 alternatively, one or more test loading conditions shall be selected and the test calculation performed by entering all deadweight data for each selected test loading condition into the program. The results shall be verified as identical to the results in the approved test loading conditions.

12.2.10.3 The software shall be installed on the onboard computer of a type approved by the Register or on two unapproved computers.

12.2.11 Onboard verification of prompt access to shore-based emergency response service.

12.2.11.1 Prompt access to shore-based emergency response service shall be verified on board the ship in the presence of the RS surveyor with drawing up the Report on Survey of the Ship (form 6.3.10) or with the relevant entries made in the Survey Checklist (form 6.1.01), as applicable.

12.2.11.2 Onboard verification of prompt access to shore-based emergency response service shall include:

.1 verification of availability of an agreement with a shore-based emergency response service undertaking calculations;

.2 verification of availability of user manual for a system of prompt access to shore-based emergency response service;

.3 verification of presence of information relating to a shore-based emergency response service recorded in the Shipboard Oil Pollution Emergency Plan (SOPEP)/Shipboard Marine Pollution Emergency Plan for Noxious Liquid Substances (SMPEP);

.4 verification of availability of Report (form 6.3.29) on ship computer model used by shore-based emergency response service with approved test loading conditions;

.5 verification Stability Booklet, Damage Stability Booklet and Loading Manual, which are stated in the Report (form 6.3.29) have not been updated since the date of issuance of the above Report;

.6 verification that the prompt access to shore-based emergency response service may be provided at any time;

.7 verification that results of test calculations, received from the shore-based emergency response service, comply with test loading conditions attached to the Report (form 6.3.29).

12.2.12 Periodical verifications.

12.2.12.1 At annual, intermediate and renewal survey, the software installed onboard shall be verified in the presence of the RS surveyor.

12.2.12.2 The verification shall be carried out in accordance with [12.2.10](#).

12.2.12.3 At annual, intermediate and renewal survey, the prompt access to shore-based emergency response service shall be verified in the presence of the RS surveyor. The verification shall include:

.1 verification that the Stability Booklet, Damage Stability Booklet and Loading Manual, which are stated in the Report (form 6.3.29) on ship computer model used by shore-based emergency response service, have not been updated since the date of issuance of the above Report;

.2 verification that the prompt access to shore-based emergency response service is / may be provided at any time.

12.2.13 Other requirements.

12.2.13.1 Protection against unintentional or unauthorised modification of the software and preprogrammed data shall be provided.

12.2.13.2 The software shall warn the user of any input errors (with regard to limitations such as filling a compartment beyond capacity, or exceeding the assigned load line, etc.) and

in cases where the calculation results do not comply with the applicable criteria, as well as in case of a wrong use of the very program.

12.2.13.3 The program and any data stored in the system shall be protected from corruption by loss of power.

SHIP OPERATIONAL DOCUMENTATION FOR THE ITEMS OF RS TECHNICAL SUPERVISION

The minimum list of mandatory ship operational documentation (as applicable) with information on its approval by the RS and/or Flag State MA is given in [Table 1](#). For ships covered by the requirements of international conventions (SOLAS, International Load Line Convention, MARPOL 73/78, etc.) one shall also be guided by the List of documents to be available on board the ship given in Appendix 12, IMO resolution A.1138(31) as amended – as applicable. For all ships one also shall be guided by the national MA requirements, if any, regarding the availability of additional ship documents.

As regards the approval of the MA, one shall be guided by the provisions of agreements with particular MA concerning the RS authorizations for review and approval of technical documentation. If MA authorization is available, the appropriate RS stamp shall apply to confirm approval/agreement on behalf of the MA.

The table essentially provides references to the Rules for the Classification and Construction of Sea-Going Ships, as well as to the main international conventions and codes. For specialized types of ships, MODU, FOP, FPU one shall also be guided by the rules for construction of the corresponding types of ships and offshore installations. For certain categories of descriptive notations and distinguishing marks in the class notation the information provided in the list of operational documentation is additional to the main documentation required in accordance with 3.1.2, Part I "Classification" of the Rules for the Classification and Construction of Sea-Going Ships, as well as the relevant requirements of the rules for construction of specialized types of ships and offshore installations.

The list of operational documentation for ships of inland navigation (for European inland waterways), nuclear ships and floating facilities, nuclear support vessels, auxiliary ships of war, small craft, pleasure craft, small sea fishing vessels, sport sailing vessels shall be determined by the Branch Office for supervision of construction of ships, taking into account the relevant RS Rules and Guidelines for these types of ships and [Table 1](#) below, as applicable.

Table 1

Nos.	Document name	RS approval	Flag MA approval	Stamp	Application
General					
1	Documentation related to list of equivalents	+	+	Depending on type of approved documentation	3.12, Part II "Technical documentation" of these Rules
2	List and justification of deviations from the requirements of RS Rules	+	-	Agreed	1.3.4 of the General Regulations for the Classification and other Activity; 3.12, Part II "Technical documentation" of these Rules
3	Engineering analysis or evaluation of the alternative design and arrangements	+	+	Approved	3.1.8, Part I "Classification" of the Rules for the Classification and Construction of Sea-Going Ships; 3.12, Part II "Technical documentation" of these Rules

Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships (part II)

Nos.	Document name	RS approval	Flag MA approval	Stamp	Application
4	Asbestos free declaration	-	-	nil	(required during initial survey under construction as well as during replacement/installation of new materials, products, equipment in service) SOLAS 74 as amended, reg. II-1/3-5 (with account of IMO resolution MSC.282(86)), IMO circulars MSC/ Circ.1045 "Guidelines for maintenance and monitoring of on-board materials containing asbestos", MSC.1/ Circ.1374 "Information on prohibiting the use of asbestos on board ships", MSC.1/Circ.1379 "Unified Interpretation of SOLAS Regulation II-1/3-5" and MSC.1/Circ.1426/rev.1 "Unified Interpretation of SOLAS Regulation II-1/3-5"; Annex 48 to the Guidelines on Technical Supervision of Ships in Service; IACS Recommendation No. 130; 2.10.3, Chapter 2 of the MODU Code 2009 (IMO resolution A.1023(26))
5	As-built structural drawings and other plans, showing the latest subsequent changes in ship's structures	+	-	Stamps depending on type of approved documentation within the design	(for ships built on or after 01.01.2007) SOLAS as amended, reg. II-1/3-7; IMO circular MSC/Circ.1135
6	Mooring and sea trials programme	+	-	Approved	3.5, Part I "Classification" of the Rules for the Classification and Construction of Sea-Going Ships; 2.5, Part I of the Rules for the Equipment of Sea-Going Ships; some sections of Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships; applicable paras of the Guidelines on Technical Supervision of Ships under Construction (for instance, 5.16, 5.17, 6.6, 7.8, 7.9, 8.4, 9.7, 9.8, 10.4, 12.4, 15.4, 16.4, 17.6, 18 etc.); 2.3, 2.4, Part II "Survey schedule and scope" of the Rules for the Classification Surveys of Ships in Service
7	Noise survey report in accordance with the Code on Noise Levels on Board Ships	-	-	nil	SOLAS 1974 as amended, reg. II-1/3-12
8	List of operational limitations	-	-	nil	SOLAS 74 reg. V/30.2 (for passenger ships)
9	Ship conversion, modernization, modification project (containing measures and arrangements for ship conversion, modernization, modification)	+	+ (when required as per the terms of agreement)	Depending on type of approved documentation within the design	3.1.5, Part I "Classification" of the Rules for the Classification and Construction of Sea-Going Ships; 4.9, Part II "Survey schedule and scope" of the Rules for the Classification Surveys of Ships in Service; Sect. 3, Part II "Carrying out classification surveys of ships" of the Guidelines on Technical Supervision of Ships in Service
10	Passage plan	+	-	Approved	Sect. 8, Part II "Carrying out classification surveys of ships" of the Guidelines on Technical Supervision of Ships in Service
11	Ship Security Plan and associated records	+	+	Approved	SOLAS 74 reg. XI-2/9 and ISPS Code part A/9 and 10

Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships (part II)

Nos.	Document name	RS approval	Flag MA approval	Stamp	Application
Stability, subdivision, strength of ship's hull, carriage of cargoes					
12	Inclining Test Report	+ (when inclining is performed under the RS supervision)	-	Endorsed by RS surveyor	(during inclining experiment, required by RS Rules) 1.5, Part IV "Stability" of the Rules for the Classification and Construction of Sea-Going Ships; part IV "Stability" of the Rules for Classification, Construction and Equipment of Mobile Offshore Drilling Units and Fixed Offshore Platforms; part IV "Stability" of the Rules for the Classification, Construction and Equipment of Floating Offshore Oil-and-Gas Production Units (FPU); Sect. 3, Part IV "Stability" of the Rules for the Classification and Construction of Type A WIG Craft; Sect. 5, Part IV "Stability" of the Rules for the Classification and Construction of High-Speed Craft
13	Maneuvering booklet and information	+	-	Approved	SOLAS 74 as amended, reg. II-1/28, IMO resolution A.601(15), IMO resolution MSC.137(76), IMO circular MSC/Circ.1053
14	Stability Booklet	+	+	Approved	Part IV "Stability" of the Rules for the Classification and Construction of Sea-Going Ships; SOLAS 74 regs. II-1/5 and II-1/5-1, and LL 1966/LL PROT 1988 reg. 10; MARPOL 73/78, Annex I, regs. 27 and 28; 2.2.5, Chapter II, IGC Code, as amended (for ships intended for the carriage of liquefied gases in bulk); 2.2.5, Chapter II, IBC Code, as amended (for ships intended for the carriage of dangerous chemicals in bulk); 1.4.8.1, Part IV "Stability" of the Rules for Classification, Construction and Equipment of Mobile Offshore Drilling Units and Fixed Offshore Platforms; 1.4, Part IV "Stability" of the Rules for the Classification, Construction and Equipment of Floating Offshore Oil-and-Gas Production Units (FPU); 2.8, Part IV "Stability" of the Rules for Classification and Construction of Type A WIG Craft; Sect. 5, Part IV "Stability" of the Rules for Classification and Construction of High-Speed Craft
15	Information on the Effect of Flooding	+	+	Approved	(if applicable) – refer to 1.4.9, Part V "Subdivision" of the Rules for the Classification and Construction of Sea-Going Ships
16	Light-Weight Check Report (if the ship is exempted from inclining test)	+	+	Endorsed by RS surveyor	(during light-weight check of a ship) 1.5, Part IV "Stability" of the Rules for the Classification and Construction of Sea-Going Ships; 1.5, Part IV "Stability" of the Rules for Classification, Construction and Equipment of Mobile Offshore Drilling Units and Fixed Offshore Platforms; Part IV "Stability" of the Rules for the Classification, Construction and Equipment of Floating Offshore Oil- and-Gas Production Units (FPU); Sect. 3, Part IV "Stability" of the Rules for Classification and Construction of Type A WIG Craft; Sect. 5, Part IV "Stability" of the Rules for Classification and Construction of High-Speed Craft

Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships (part II)

Nos.	Document name	RS approval	Flag MA approval	Stamp	Application
17	Damage Stability Booklet	+	+	Approved	1.4.6, Part V "Subdivision" of the Rules for the Classification and Construction of Sea-Going Ships; SOLAS regs. II-1/8, II-1/19; MARPOL, Annex I, reg. 28; 1.4, Part V "Subdivision" of the Rules for the Classification, Construction and Equipment of Floating Offshore Oil-and-Gas Production Units (FPU); 1.4.4, Part V "Subdivision" of the Rules for Classification, Construction and Equipment of Mobile Offshore Drilling Units and Fixed Offshore Platforms; Part V "Reserve of buoyancy and subdivision" of the Rules for Classification and Construction of Type A WIG Craft; Part V "Reserve of buoyancy and subdivision" of the Rules for Classification and Construction of High-Speed Craft
18	Booklet (Information) on stability and strength during carriage of bulk cargoes other than grain	+	+	Approved	1.4.9.7, Part II "Hull" of the Rules for the Classification and Construction of Sea-Going Ships; SOLAS as amended, regs. VI/7.2 and XII/8 and Code of Practice for the Safe Loading and Unloading of Bulk Carriers (BLU Code); IMO resolution A.862(20)
19	Loading Manual	+	+	Approved	1.4.9 and 3.3.6, Part II "Hull" of the Rules for the Classification and Construction of Sea-Going Ships; reg. 10(1), Chapter II, LL-66 as amended; SOLAS 74 as amended, reg. XII/11; 1.4.9, Part IV "Stability" of the Rules for Classification, Construction and Equipment of Mobile Offshore Drilling Units and Fixed Offshore Platforms (the Guidance for the ballast system arrangement plan)
20	Grain Stability Booklet	+	+	Approved	1.4.11.4, Part IV "Stability" of the Rules for the Classification and Construction of Sea-Going Ships; 3.5.6 of Appendix 1 to Part IV "Stability" of the Rules for the Classification and Construction of Sea-Going Ships; SOLAS 74 reg. VI/9 and Grain Code, section 3
21	Damage Control Plan	+	+	Approved	1.4.6 and 1.4.9, Part V "Subdivision" of the Rules for the Classification and Construction of Sea-Going Ships; SOLAS 74 reg. II-1/19 and circular MSC.1/Circ.1245, as amended
22	Loading instrument with the User's manual	+	-	Approved	1.4.9, 3.3.6 and Appendix 2 to Part II "Hull" of the Rules for the Classification and Construction of Sea-Going Ships

Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships (part II)

Nos.	Document name	RS approval	Flag MA approval	Stamp	Application
23	Stability instrument with User's manual (software for stability calculations)	+	+	Agreed	1.4.12, Part IV "Stability" of the Rules for the Classification and Construction of Sea-Going Ships; 3.2.7, Part IV "Stability" of the Rules for the Classification and Construction of Sea-Going Ships; 3.4.6, Part IV "Stability" of the Rules for the Classification and Construction of Sea-Going Ships (for oil tankers); 2.7.5, Part V "Subdivision" of the Rules for the Classification and Construction of Sea-Going Ships; 1.2, Part IV "Stability, subdivision and freeboard" of the Rules for the Classification and Construction of Chemical Tankers; 1.4, Part III "Stability, subdivision and freeboard" of the Rules for the Classification and Construction of Ships Carrying Liquefied Gases in Bulk; 1.4.9, Part V of the Rules for Classification, Construction and Equipment of Mobile Offshore Drilling Units and Fixed Offshore Platforms; IMO resolutions MEPC.248(66), MEPC.249(66), MEPC.250(66), MSC.369(93), MSC.370(93), MSC.376(93), MSC.377(93)
24	Test loading conditions of the loading instrument	+	-	Approved	(if applicable, refer to item 22 above) – refer also to 1.4.9, 3.3.6 and Appendix 2 to Part II "Hull" of the Rules for the Classification and Construction of Sea-Going Ships
25	Test loading conditions of the stability instrument (software for stability calculations)	+	-	Approved	(if applicable, refer to item 23 above) – refer also to 1.4.12, Part IV "Stability" of the Rules for the Classification and Construction of Sea-Going Ships
26	Onboard damage stability software or rapid access to shore-based computerized support organization, recognized by RS, which makes damage stability and residual strength assessments	+	-	Approved	SOLAS reg. II-1/8-1 as amended by IMO resolution MSC.325(90) (for passenger ships); 2.7.5, Part V "Subdivision" of the Rules for the Classification and Construction of Sea-Going Ships
27	Determination (calculation) of the ship's hull scantlings according to the RS Rules	+	-	Agreed	For ships under construction – information shall be submitted within the design (no separate document is needed); for existing ships – information shall be submitted in case of change of ship's type, its main particulars, cargo capacity, extension of the area of navigation, boundaries of navigation within the prescribed area, conversion of a ship, assignment of RS class (in applicable cases), etc.; Sect. 5, Part I "General provisions", 3.2, Part II "Survey schedule and scope" and Sect. 4 of Annex 2 to the Rules for the Classification Surveys of Ships in Service
28	Calculation of permissible residual scantlings for hull members	+	-	Agreed	(if applicable) – refer to Sect. 5, Part I, 3.2, Part II "Survey schedule and scope" and Sect. 4 of Annex 2 to the Rules for Classification Surveys of Ships in Service

Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships (part II)

Nos.	Document name	RS approval	Flag MA approval	Stamp	Application
29	Calculation of ship's hull overall longitudinal strength	+		Agreed	1.4, Part II "Hull" of the Rules for the Classification and Construction of Sea-Going Ships; 3.2, Part II "Survey schedule and scope" of the Rules for Classification Surveys of Ships in Service; Sect. 2 of Annex 2 of the Rules for Classification Surveys of Ships in Service
30	Justifying the purpose of ice class assignment	+	-	Agreed	For ships under construction – information shall be submitted within the design (no separate document is needed); for existing ships – information shall be submitted in case of assignment/changing of ice class of a ship
31	Flooding Detection System Manual	+	+	Approved	For bulk carriers – refer to SOLAS reg. XII/12, IMO resolution MSC.145(77) and 3.4.11, Part V "Subdivision" of the Rules for the Classification and Construction of Sea-Going Ships; for cargo ships having length < 100 m, which are not bulk carriers – refer to IMO resolution MSC.216(82), 3.4.13, Part V "Subdivision" of the Rules for the Classification and Construction of Sea-Going Ships; cargo ships having one cargo hold and which are not bulk carriers, built before 01.01.2007, shall comply with relevant requirements not later than 31.12.2009
32	Ship's structure access manual	+	+	Approved	7.14, Part III "Equipment, arrangements and outfit" of the Rules for the Classification and Construction of Sea-Going Ships (SOLAS 74/04 reg. II-1/3-6.4)
33	Document on condition assessment of the transverse watertight corrugated bulkhead between cargo holds No. 1 and No. 2	+	-	Agreed	5.9, Part III "Additional surveys of ships depending on their purpose and hull material" of the Rules for Classification Surveys of Ships in Service (SOLAS 74/04 reg. XII/6.1 and IACS UR S19) (for bulk carriers with single skins of 150 m in length and above)
34	Document on evaluation of allowable hold loading of cargo hold No. 1	+	-	Agreed	5.10, 5.11, Part III "Additional surveys of ships depending on their purpose and hull material" of the Rules for Classification Surveys of Ships in Service (SOLAS 74/04 reg. XII/6.1 and IACS UR S22, S23) (for bulk carriers with single skins 150 m long and above)
35	Document on condition assessment of side frames in cargo holds	+	-	Agreed	5.12, Part III "Additional surveys of ships depending on their purpose and hull material" of the Rules for Classification Surveys of Ships in Service (SOLAS 74/04 reg. XII/5.1 and IACS UR S31) (for bulk carriers with single skins)
Machinery, propulsion, systems					
36	Torsional vibration calculation	+	-	Agreed	3.2.7.5.11, Part I "Classification" of the Rules for the Classification and Construction of Sea-Going Ships; Sect. 8, Part VII "Machinery installations" of the Rules for the Classification and Construction of Sea-Going Ships; 6.7 of the Guidelines on Technical Supervision of Ships under Construction; 2.4, 2.11, Part II "Survey schedule and scope" of the Rules for Classification Surveys of Ships in Service
37	Torsional vibration measurements results	+	-	Agreed	6.7 of the Guidelines on Technical Supervision of Ships under Construction; 2.4, Part II "Schedule and scope of surveys" of the Rules for Classification Surveys of Ships in Service

Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships (part II)

Nos.	Document name	RS approval	Flag MA approval	Stamp	Application
38	Programme on the machinery and equipment vibration measurements	+		Approved	9.1.2, Part VII "Machinery installations" of the Rules for the Classification and Construction of Sea-Going Ships; 18.6 of the Guidelines on Technical Supervision of Ships under Construction
39	Results of vibration measurements	+	-	Agreed	Sect. 18 of the Guidelines on Technical Supervision of Ships under Construction; 2.4, 2.11, Part II "Survey schedule and scope" of the Rules for Classification Surveys of Ships in Service
40	AMSS Service Manual	+	-	Agreed	7.2.9, Part VII "Machinery installations" of the Rules for the Classification and Construction of Sea-Going Ships
Equipment, arrangements and outfit					
41	Manual on operation and repair of doors in shell plating	+		Approved	7.15, Part III "Equipment, arrangements and outfit" of the Rules for the Classification and Construction of Sea-Going Ships
42	Cargo Securing Manual	+	+	Approved	SOLAS 74 regs. VI/5.6 and VII/5 and MSC.1/Circ.1353/Rev.1 (for ships intended for the carriage of general dry cargoes)
43	Towing and mooring arrangements plan (for the master of a ship)	+	-	Approved	1.4.2, Part III "Equipment, arrangements and outfit" of the Rules for the Classification and Construction of Sea-Going Ships; SOLAS 74 as amended, reg. II-1/3-8, IMO circular MSC/Circ.1175
44	Emergency towing procedure	+	-	For information	5.7.11, Part III "Equipment, arrangements and outfit" of the Rules for the Classification and Construction of Sea-Going Ships (SOLAS 74 as amended, reg. II-1/3-4, IMO circular MSC.1/Circ.1255)
45	Cargo Safe Access Plan (CSAP)	+	+	Approved	(for ships which are specifically designed and fitted for the purpose of carrying containers) SOLAS 74 as amended, regs. VI/5.6 and VII/5, IMO circular MSC.1/Circ.1353/Rev.1, the Code of safe practice for cargo stowage and securing (CSS Code)
Fire protection					
46	Fire protection scheme and safety plan	+	+	Approved	1.4, Part VI "Fire protection" of the Rules for the Classification and Construction of Sea-Going Ships (SOLAS 74 as amended, regs. II-2/15.2.4, II-2/15.3.2, II-2/16.2, IMO resolutions A.952(23), A.756(18)); 1.5, Part VI "Fire and explosion protection" of the Rules for the Classification, Construction and Equipment of Floating Offshore Oil-and-Gas Production Units; 1.3, Part VI "Fire protection" of the Rules for the Classification, Construction and Equipment of Mobile Offshore Drilling Units and Fixed Offshore Platforms; MODU Code 2009; Part VI, "Fire protection" of the Rules for the Classification and Construction of Type A WIG Craft
47	Guidelines for maintenance, testing and inspection of fire protection systems and appliances	+	+	Approved	1.4, Part VI "Fire protection" of the Rules for the Classification and Construction of Sea-Going Ships (SOLAS 74 as amended, regs. II-2/14.2.2, 14.3, 14.4); 1.5, Part VI "Fire and explosion protection" of the Rules for Classification, Construction and Equipment of Floating Offshore Oil-and-Gas Production Units; 1.3, Part VI "Fire protection" of the Rules for the Classification, Construction and Equipment of Mobile Offshore Drilling Units and Fixed Offshore Platforms; MODU Code 2009

Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships (part II)

Nos.	Document name	RS approval	Flag MA approval	Stamp	Application
48	Document of approval of alternative design and arrangements for fire safety (SOLAS 74/02/08 reg. II-2/17)	+	+	Approved	1.7, Part VI "Fire protection" of the Rules for the Classification and Construction of Sea-Going Ships (SOLAS 74 as amended, reg. II-2/17)
Life-saving appliances and equipment					
49	Ship-specific plans and procedures for recovery of persons from the water (SOLAS reg. III/17-1, MSC.1/Circ.1447)	-	-	nil	SOLAS reg. III/17-1, MSC.346(91), MSC.1/Circ.1447 (if applicable)
50	Training manual	-	-	nil	SOLAS 74 as amended, reg. III/35
Electrical and electronic equipment					
51	The list of electrical and electronic equipment intended to be operated on the bridge or in the vicinity of the bridge, and evidence of their electromagnetic compatibility (EMC)	+	-	Agreed	Annex 4, Part V of the Rules for the Equipment of Sea-Going Ships; Appendix 3, Sect. 16 of the Guidelines on Technical Supervision of Ships under Construction; IACS UI SC194
Cargo handling gear					
52	Instructions for derricks operating in union purchase rig with indication of the working range, safe working load, types, sizes and scheme of rigging	+	-	Agreed	1.4 of the Rules for the Cargo Handling Gear of Sea-Going Ships
Marine pollution prevention (by oil, noxious substances, sewage, wastage), atmosphere pollution prevention					
53	Shipboard Oil Pollution Emergency Plan	+	+	Approved	MARPOL 73/78 as amended, Annex I, reg. 37.1, IMO resolution MEPC.54(32) as amended by IMO resolution MEPC.86(44)
54	Shipboard Marine Pollution Emergency Plan for Noxious Liquid Substances	+	+	Approved	MARPOL 73/78, Annex II, reg. 17
55	Shipboard Pollution Emergency Plan (combined, refer to items 53 and 54 above)	+	+	Approved	MARPOL 73/78 as amended, Annex I, reg. 37.3
56	Prompt access to shore-based computerized support organization, which makes damage stability and residual strength assessments	-	-	Verification of availability of the valid agreement with organization	MARPOL 73/78 as amended, Annex I, reg. 37.4 (for oil tankers of 5000 and above of deadweight)
57	Ship to Ship (STS) Operations Plans	+	+	Approved	MARPOL 73/78, Annex I, reg. 41
58	Cargo record book	-	-	nil	MARPOL 73/78, Annex II, reg.15
59	Shipboard Garbage Management Plan	+	+	Approved (if MA authorization is available)	MARPOL 73/78 as amended, Annex V, reg. 10, IMO resolution MEPC.220(63); Sect. 8 of Appendix 1 to the Guidelines on the Application of Provisions of the International Convention MARPOL 73/78

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Nos.	Document name	RS approval	Flag MA approval	Stamp	Application
60	Garbage record book	-	-	nil	MARPOL 73/78, Annex V, reg. 9
61	Calculation of untreated sewage water discharge rate	+	+	Agreed/ Approved (stamp "Approved" for ship to which MARPOL 73/78 Convention applies)	Ships having untreated sewage water discharge pipeline. Calculations shall be carried out in accordance with Recommendation on standards of untreated sewage water discharge rate from ships in accordance with IMO resolution MEPC.157(55); MARPOL 73/78, Annex IV
62	Sewage Management Plan and procedure for sewage record keeping	+	-	Agreed	Sect. 3, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships (for ECO/ECO-S only)
63	Procedure for keeping records on detection and elimination of impermissible operating leakages of petroleum products i.e. fuel oil, hydraulic oil, etc.	+	-	For information	Sect. 3, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships (for ECO/ECO-S only)
64	Guidelines on methods and arrangements	+	+	Approved	MARPOL 73/78, Annex II, reg. 14.1, IMO resolution MEPC.18(22) as amended by IMO resolution MEPC.62(35) (chemical tankers, ships carrying noxious substances in bulk)
65	Oil record book, Parts I & II	-	-	nil	MARPOL 73/78 as amended, Annex I, regs. 17 and 36
66	Oil Discharge Monitoring and Control (ODMC) Operational Manual	+	+	Approved	MARPOL 73/78, Annex I, reg. 31.4; IMO resolution A.496(XII); IMO resolution A.586(14), as amended by IMO resolution MEPC.24(22) and IMO resolution MEPC.108(49) as amended by IMO resolution MEPC.240(65)
67	Operations and Equipment Manual for Crude Oil Washing Systems (COW Manual)	+	+	Approved	MARPOL 73/78, Annex I, reg. 35
68	Volatile Organic Compound (VOC) Management Plan	+	+	Approved	MARPOL 73/78, Annex VI, regs. 15.6 and 15.7 (for oil tankers, carrying crude oil, and gas carriers, if applicable)
69	Technical documentation for the cargo vapour discharge system including principal diagram of the pipeline for vapour collection on oil tanker with indication of location and purpose of all control and safety arrangements	+	+	Approved	For oil tankers carrying crude oil, petroleum products, as well as for chemical tankers carrying chemical cargoes with flashpoint < 60 °C for which MARPOL 73/78, Annex VI, reg. 15.1 applies (MSC/Circ.585)
70	Cargo transfer procedure	+	-	For information	For oil tankers carrying crude oil, petroleum products, as well as for chemical tankers carrying chemical cargoes with flashpoint < 60 °C for which MARPOL 73/78, Annex VI, reg. 15.1 applies (MSC/Circ.585)
71	Manufacturer's Operating Manual for Incinerators	-	-	nil	MARPOL 73/78, Annex VI, reg. 16.7

Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships (part II)

Nos.	Document name	RS approval	Flag MA approval	Stamp	Application
72	Written procedure showing fuel oil changeover before entering into an SO _x emission control area	-	-	nil	MARPOL 73/78, Annex VI, reg. 14 (if applicable)
73	Ozone Depleting Substances Record Book	-	-	nil	For ships for which MARPOL 73/78, Annex VI, regs. 6.1 and 12.6 apply
74	Record book of engine parameters for each engine subject to survey in accordance with NO _x Technical Code (in case of application of engine parameters verification method)	-	-	nil	NO _x Technical Code, paragraph 2.3.7
75	SO _x Emissions Compliance Plan (SECP)	+	+	Approved	In case of installation of exhaust gas cleaning system (EGCS) for SO _x in accordance with IMO resolution MEPC.259(68)
76	Exhaust gas cleaning system Technical Manual	+	+	Approved	In accordance with IMO resolution MEPC.259(68)
77	Onboard Monitoring Manual (OMM)	+	+	Approved	In case of installation of exhaust gas cleaning system (EGCS) for SO _x in accordance with IMO resolution MEPC.259(68)
78	Record Book of SO _x -Reducing Device Parameters (EGCS)	+	+	Approved	In case of installation of exhaust gas cleaning system (EGCS) for SO _x in accordance with IMO resolution MEPC.259(68)
79	Engine's Technical File for NO _x (for engines of power output more than 130 kW)	+	+	Approved	NO _x Technical Code 2008, paragraph 2.3.4
80	Technical file of approved method (for ship's diesel engine with power output more than 5000 kW and a per cylinder displacement at or above 90 l, installed on board a ship built on or after 1 January 1990 or after but prior to 1 January 2000)	+	+	Approved	Technical file of ship's diesel engine exhaust is applicable to engines for which limits for nitrogen oxides emission listed in regs. 13.3, 13.4 and 13.5.1, Annex VI to MARPOL 73/78 apply, and technical file of approved method is applicable to engines falling under reg. 13.7.1, Annex VI to MARPOL 73/78
Ship's energy efficiency					
81	Ship Energy Efficiency Management Plan (SEEMP) required by regulation 22 of Annex VI to MARPOL 73/78	-	-	For ships of GT of 5000 and above, engaged in international voyages, the "Confirmation of compliance ship energy efficiency management plan (SEEMP) PART II" (form 2.4.43.1) is issued	All ships of GT 400 and above (new and existing), excluding platforms (including floating offshore oil- and-gas production units), drilling units independently of their propulsion units, and any other non-self-propelled ship; for ships of GT 5000 and above, engaged in international voyages, SEEMP plan shall contain part II of the Plan (Ship fuel oil consumption data collection plan); Sect. 3, Part I of the Guidelines on the Application of Provisions of the International Convention MARPOL 73/78 (MARPOL 73/78, Annex VI, regs. 22 и 22A, MEPC.282(70))

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Nos.	Document name	RS approval	Flag MA approval	Stamp	Application
82	Energy Efficiency Design Index (EEDI Technical file)	+	-	Agreed	MARPOL 73/78, Annex VI, reg. 20; Sect. 3, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships (for ECO or ECO-S)
Ballast water management					
83	Ballast Water Management Plan	+	+	Approved	2.5, Part III "Survey of ships in compliance with international conventions, codes, resolutions and rules for the equipment of sea-going ships" of the Guidelines on Technical Supervision of Ships in Service (BWM-2004 Convention, reg. B-1 and IMO resolution MEPC.127(53), as amended)
84	Ship's Guidelines for Safe Water Ballast Exchange at Sea	+	-	Agreed	Sect. 3, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships (only for ECO or ECO-S)
85	Ship's software for planning water ballast exchange at sea (where applicable)	+	-	Approved	Sect. 3, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships (only for ECO or ECO-S)
86	Ballast Water Record Book	-	-	nil	BWM-2004, article 9.1 (b) and reg. B-2; Sect. 3, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships (also for ECO or ECO-S)
Recycling					
87	Inventory of Hazardous Materials	+	+	Compliance of the Inventory to the requirements shall be endorsed by the RS surveyor's signature and stamp	In accordance with the Regulation (EU) No. 1257/2013 of the European Parliament, the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2015 Guidelines for the development of the inventory of hazardous materials (refer to IMO resolution MEPC.269(68)); 3.3, Part III "Survey of ships in compliance with international conventions, codes, resolutions and rules for the equipment of sea-going ships" of the Guidelines on Technical Supervision of Ships in Service
Coatings, materials					
88	List of specifications for paintwork materials used for protection of cargo and ballast spaces, living and service spaces and underwater hull			Refer to 2.12.7 of the Guidelines on Technical Supervision of Ships under Construction	1.2.5 and 3.3.5, Part II "Hull" and 6.5, Part XIII "Materials" of the Rules for the Classification and Construction of Sea-Going Ships, as well as Sect. 3, Part III "Technical Supervision during Manufacture of Materials" of these Rules, 2.12.7 of the Guidelines on Technical Supervision of Ships under Construction; IACS UR Z8 and Z9, SOLAS 74/78 as amended, reg. II-1/3-2 (IMO resolutions MSC.215(82) and MSC.216(82)), SOLAS 74/78 as amended, reg. II-1/3-11 (IMO resolutions MSC.288(87) and MSC.291(87))

Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships (part II)

Nos.	Document name	RS approval	Flag MA approval	Stamp	Application
89	The safety certificate on antifouling coating			Refer to 2.12.7 of the Guidelines on Technical Supervision of Ships under Construction	2.12.7 of the Guidelines on Technical Supervision of Ships under Construction; 2.4, Part III "Survey of ships in compliance with international conventions, codes, resolutions and rules for the equipment of sea-going ships" of the Guidelines on Technical Supervision of Ships in Service; AFS Convention, Annex 4, reg. 2, EC regulation 782/2003
90	Final Inspection Report on application of coatings for protection of cargo and ballast spaces, living and service spaces and underwater hull			Refer to 2.12.7 of the Guidelines on Technical Supervision of Ships under Construction	2.4, Part III "Survey of ships in compliance with international conventions, codes, resolutions and rules for the equipment of sea-going ships" of the Guidelines on Technical Supervision of Ships in Service; Appendix 2 to Sect. 2 "Hull" of the Guidelines on Technical Supervision of Ships under Construction
91	Coating Technical File in accordance with the Performance Standard for Protective Coatings for Dedicated Seawater Ballast Tanks in all types of Ships and Double-side Skin Spaces of Bulk Carriers (PSPC)/ Performance standard for protective coatings for cargo oil tanks of crude oil tankers (PSPC-COT)			Refer to 2.12.7 of the Guidelines on Technical Supervision of Ships under Construction	SOLAS 74/78 as amended, reg. II-1/3-2 (IMO resolutions MSC.215(82) and MSC.216(82)), SOLAS 74/78 as amended, reg. II-1/3-11 (IMO resolutions MSC.288(87) and MSC.291(87))
92	Biofouling Management Plan and Biofouling Record Book			nil	In accordance with IMO resolution MEPC.207(62); Sect. 3, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships (also for ECO or ECO-S)
Operation in polar waters					
93	Polar Water Operational Manual (PWOM)			nil	For ships, operating in polar waters and for which part I-A of the Polar Code applies (refer to the Guidelines on Application of the International Code for Ships Operating in Polar Waters (Polar Code))
Carriage of dangerous goods, INF					
94	Justification of possibility of carrying bulk cargoes possessing chemical hazards and/or materials hazardous only in bulk (MHB)	+	-	Approved	(if applicable) – refer to 2.1.12, Part III "Survey of ships in compliance with international conventions, codes, resolutions and rules for the equipment of sea-going ships" of the Guidelines on Technical Supervision of Ships in Service

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Nos.	Document name	RS approval	Flag MA approval	Stamp	Application
95	Shipboard emergency plan developed in accordance with "Guidelines for developing shipboard emergency plans for ships carrying materials subject to the INF Code" adopted by IMO resolution A.854(20)	+	-	Approved	For ships, carrying materials subject to the INF Code, adopted by IMO resolution A.854(20)
96	Radiation protection programme (for carriage of dangerous goods of class 7 and INF cargoes)	+	-	For information (to be agreed with Flag State MA competent authorities)	Annex 25 to the Guidelines on Technical Supervision of Ships in Service (during carriage of dangerous goods of class 7 and INF cargoes)
If mark ESP is available					
97	Enhanced survey programme (ESP), ESP ship's file	+	+	Approved	(for ships in service having distinguishing mark (ESP) in class notation) 1.3, 1.4, Part III of the Rules for Classification Surveys of Ships in Service; SOLAS 74 reg. XI-1/2 and 2011 ESP Code paragraphs 6.2 and 6.3 of annex A, part A and part B, and annex B, part A and part B
For descriptive notation Escort tug					
98	Plan for full scale trials	+	-	Approved	Sect. 2, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
99	Stability Booklet, as well as preliminary calculations of the ship's escort characteristics and tug's stability during escort service	+	-	Approved	Sect. 2, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
For ECO, ECO-S					
100	Documentation according to MARPOL 73/78, BWM-2004, AFS-2001, the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships Conventions, Regulation (EU) No. 1257/2013 of the European Parliament on ship recycling			Refer to items 53 – 92 of this table (as applicable)	Sect. 3, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
For ANTI-ICE					
101	Icing Protection Manual	+	-	Agreed	Sect. 4, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships

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Nos.	Document name	RS approval	Flag MA approval	Stamp	Application
102	Stability Booklet, including loading conditions considering icing	+	-	Approved	Sect. 4, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
For BLS-SPM, BLS or SPM					
103	Bow loading system (BLS) operating manual	+	-	Approved	Sect. 5, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
104	BLS test program	+		Approved	Sect. 5, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
For HELIDECK, HELIDECK-F or HELIDECK-H					
105	Documentation on helideck and hangar deck covering	+	-	Approved	Sect. 6, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
106	Helicopter facility test program	+	-	Approved	Sect. 6, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
107	Helicopter facility operation manual	+	-	Approved	Sect. 6, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
108	Diagram of obstacle restriction and removal	+	-	For information (approved by the Flag State Civil Aviation Authority)	Sect. 6, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
109	Drawing of helideck and obstacle marking (colour, dimensions and configuration of marks shall be indicated)	+	-	For information (approved by the Flag State Civil Aviation Authority)	Sect. 6, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
For WINTERIZATION (DAT)					
110	Manual on operation of ship at low temperature (Winterization Manual)	-	-	nil	Sect. 7, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
111	Stability Booklet, including loading conditions considering icing	+	-	Approved	Sect. 7, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
112	Damage stability booklet	+	-	Approved	Sect. 7, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships

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Nos.	Document name	RS approval	Flag MA approval	Stamp	Application
For RP-1, RP-1A, RP-1AS, RP-2 or RP-2S (propulsion plant redundancy)					
113	Calculation results demonstrating that a single failure does not lead to the loss of propulsion and ship's steering (as an alternative, the results of the model or full-scale tests may be submitted)	+	-	Agreed	Sect. 8, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
114	Qualitative failure analysis for propulsion and steering (in compliance with Section 11, Part VII "Machinery Installations") or Failure Mode and Effect Analysis (FMEA) of the propulsion plant components based on the failure tree or the equivalent risk analysis agreed with the Register	+	-	Agreed	Sect. 8, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
115	Torsional vibration calculations	+	-	Agreed	3.2.7.5.11, Part I "Classification" of the Rules for the Classification and Construction of Sea-Going Ships; Sect. 8, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
116	Programme for mooring and sea trials	+	-	Approved	Sect. 8, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
For GFS (Gas Fuelled Ship)					
117	Operating Manual	+	+	Approved	Sect. 9, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
118	Analysis of risks related to the use and storage of gas fuel and possible consequences of its leakages (may be included in the Operating Manual)	+	+	Approved	Sect. 9, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
119	Gas fuel bunkering instructions	-	-	nil	Sect. 9, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
120	Inerting and gas freeing instructions	-	-	nil	Sect. 9, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships

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Nos.	Document name	RS approval	Flag MA approval	Stamp	Application
121	Instructions for using gas fuel	-	-	nil	Sect. 9, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
122	Instructions describing the crew actions in emergencies which may arise during operations with gas fuel	-	-	nil	Sect. 9, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
123	Plan of periodic audits and maintenance of equipment related to the use of gas as fuel	-	-	nil	Sect. 9, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
For descriptive notation LNG bunkering ship					
124	Ship's Operating Manual, including risk analysis related to gas fuel bunkering operations and potential consequences of leakage, as well as procedure of tightness test of connections between the LNG bunkering and receiving ships prior to bunkering operations	+	+	Approved	Sect. 11, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
125	Operating instructions containing the procedures of bunkering, inerting and control of cargo vapour return	-	-	nil	Sect. 11, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
126	Bunkering procedure for LNG receiving from a gas fueled ship with the required calculations	+		Approved	11.13.1, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships (for mark RE)
127	Diagram of gas freeing system and procedure for gas freeing	+	-	Approved	11.13.2, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships (for mark IG-supply)
128	Bunkering procedure for boil-off gas management indicating the operations	+	-	Approved	11.13.3, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships (for mark BOG)

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Nos.	Document name	RS approval	Flag MA approval	Stamp	Application
129	Calculation of the maximum LNG vapour flow rate possible to be generated during the bunkering to be less than the capacity of boil-off gas unit specified in the bunkering procedure	+	-	Agreed	11.13.3, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships (for mark BOG)
For IWS (in-water survey)					
130	Drawing of the marking on the side and bottom plating to identify the tanks	+	-	Approved	Sect. 12, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
For descriptive notation Anchor handling vessel					
131	Bollard pull test procedure	+	-	Approved	13.3, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
132	Information on stability	+	-	Approved	13.3.5, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of ships" of the Rules for the Classification and Construction of Sea-Going Ships
133	Bollard pull estimation	+	-	Agreed	13.3, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
For GRS (Gas Ready Ship) – ships prepared for conversion for the use of gas fuel					
134	Ship conversion design	+	-	Depending on the type of documentation within the design	Sect. 14, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of ships" of the Rules for the Classification and Construction of Sea-Going Ships
For NAABSA (ships Not Always Afloat But Safely Aground)					
135	Information on stability	+	-	Approved (may be included in the basic information on stability of a ship)	15.4, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
For BMS (boiler monitoring system)					
136	Instruction on maintaining boiler water and chemistry quality	+	-	For information	Sect. 16, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
137	Ship's boiler monitoring log-book	-	-	nil	Sect. 16, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
For HMS(...) (hull monitoring system)					
138	Maintenance manual	+	-	Agreed	Sect. 17, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships

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Nos.	Document name	RS approval	Flag MA approval	Stamp	Application
139	Procedure of sensor installation, adjustment and calibration	+	-	For information	Sect. 17, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
140	Test programme of the system	+	-	Approved	Sect. 17, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
141	Procedure of sensor verification while in operation	+		Approved	Sect. 17, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
For COMF(C) (ships complying with the indoor climate requirements)					
142	Heat balance calculation	+	-	For information	Sect. 18, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
143	Programme of mooring and sea trials	+	-	Approved	Sect. 18, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
144	Measurement report	+	-	For information	Sect. 18, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
For COMF(N – 1 or 2 or 3) (ships complying with the requirements for noise level in all passenger and crew spaces)					
145	Noise level measurement programme	+	-	Approved	Sect. 18, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
146	Measurement report	+	-	For information	Sect. 18, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
For COMF(V – 1 or 2 or 3) (ships complying with the requirements for sanitary vibration level in all passenger and crew spaces)					
147	Programme of sanitary vibration measurements within the spaces	+	-	Approved	Sect. 18, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of ships" of the Rules for the Classification and Construction of Sea-Going Ships
148	Measurement report	+	-	For information	Sect. 18, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships
For descriptive notation gas carrier according to the Rules for the Classification and Construction of Ships Carrying Liquefied Gases in Bulk (LG Rules)					
149	Inspection/survey plan for the cargo containment system	+	-	Approved	4.3.6 of the IGC Code
150	Cargo system operation manual	+	+	Approved	In accordance with the requirements of Chapter 18 of the IGC Code
151	Cargo handling plan	+	+	Approved	18.19, Part X "Special requirements" of LG Rules; 17.18.24 of the IGC Code

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Nos.	Document name	RS approval	Flag MA approval	Stamp	Application
152	Document (Record) specifying the maximum allowable loading limits for each cargo tank and product	+	-	Approved	3.20.6, Part VI "Systems and piping" of LG Rules
153	Failure modes and effects analysis	+	+	Agreed	10.2.6 of the IGC Code and 14.3.4 of the IGF Code
154	List of cargoes to be carried onboard a ship specifying their basic chemical and physical properties, as well as dangerous properties related to their carriage and storage	+	-	For information	4.3, Part I "Classification" of the LG Rules (18.3 of the IGC Code)
155	Operating instruction of emergency shutdown valve Manufacturer	-	-	nil	3.15.4, Part VI "Systems and piping" of the LG Rules
156	Testing procedures during sea and gas trials	+	+	Approved	IGC Code (sections regarding testing)
157	Failure mode and effects analysis (FMEA) for reliquefaction unit for cargo vapours (in accordance with IEC 60812 standard) performed against the level confirming the operation of the unit as intended after any single failure	+	-	Agreed	4.4.11, Part I "Classification" of the LG Rules. It is included in the overall document "Failure modes and effects analysis" (for mark RLU)
158	Testing procedures during sea and gas trials of reliquefaction unit for cargo vapours	+	-	Approved	4.4.12, Part I "Classification" of the LG Rules. It is included in the overall document "Testing procedures during sea and gas trials" (for mark RLU)
For descriptive notation Gas carrier CNG according to the Rules for the Classification and Construction of Ships Carrying Compressed Natural Gas (CNG Rules)					
159	Program and procedure for testing full-scale prototype of a cargo tank for fatigue and fracture due to internal pressure	+	-	Approved	Part I "Classification" of the CNG Rules
160	Instruction for cargo handling operations, including emergency procedures	+	-	Agreed	2.9, Part VI "Systems and piping" of the CNG Rules
161	Operating Instruction for the Cargo System	+	-	Agreed	5.1, Part VI "Systems and piping" of the CNG Rules

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Nos.	Document name	RS approval	Flag MA approval	Stamp	Application
For descriptive notation Chemical tanker					
162	List of cargoes intended for carriage on board the ship	+	-	For information	Part I "Classification" of the Rules for the Classification and Construction of Chemical Tankers; Chapter 16 of the IBC Code
163	Documentation on access to spaces	+	-	Approved	3.4 of the IBC Code
164	Stripping system testing programme	+	-	Approved	Part I "Classification" of the Rules for the Classification and Construction of Chemical Tankers
For CSR and ships for which requirements of SOLAS as amended, reg. II-1/3-10 apply					
165	Ship Construction File	+	-	Stamps depending on type of approved documentation within the design	For oil tankers and bulk carriers in accordance with SOLAS as amended, reg. II-1/3-10, MSC.1/Circ.1343; IACS Common Structural Rules (2.2.3, Part 1, Chapter 1)
For high-speed craft, type A WIG craft					
166	Operating Manual	+	+	Approved	Chapter 18 of the HSC Code; Sect. 8 of the Appendix to the Rules for the Classification and Construction of Type A WIG Craft
167	Craft training manual and instructions for on-board maintenance	-	-	nil	12.6, Part XVI "Life-saving appliances" of the Rules for Classification and Construction of High-Speed Craft; Sect. 8 of the Appendix to the Rules for Classification and Construction of Type A WIG Craft
168	Evacuation procedure, including a critical path analysis	+	-	Agreed	13.2, Part XVI "Life-saving appliances" of the Rules for Classification and Construction of High-Speed Craft
For DYNPOS-1, DYNPOS-2 or DYNPOS-3					
169	Failure mode and effects analysis (FMEA) on ships with DYNPOS-2 or DYNPOS-3 distinguishing mark in the class notation	+	-	Agreed	During initial survey of the ship
170	DP system operation instructions according to IMO circular MSC/Circ.645 of 6 June 1994 (it shall contain documents according to 4.4.1 – 4.4.6 of the above mentioned IMO circular)			During the next periodical survey it is necessary to check availability of the document on board. In case of absence of the document it is necessary to introduce the condition into ship's survey status with the term of fulfillment agreed by RS and shipowner	For ships which keels are laid before 09.06.2017 (for ships under RF flag – before 16.06.2017)

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Nos.	Document name	RS approval	Flag MA approval	Stamp	Application
171	DP system operation instructions according to IMO circular MSC.1/Circ.1580 (as a rule, it shall contain documents, listed in items 172 – 182 of this table)			During the first annual survey after construction it is necessary to check availability of the document on board (in case of absence of the documentation before completion of the initial survey after construction for issuance of FSVAD or DPVAD it is necessary to enter the following record into ship's survey status: "Before commencement of actual operation of the ship in DP modes, but not later than the first annual survey the set of documents "DP operations manuals" shall be submitted to RS surveyor on board")	For ships which keels are laid on or after 09.06.2017 (for ships under RF flag – on or after 16.06.2017)
172	Checklist for the DP system check before its operation, taking into account the DP system specific use			refer to item 171	
173	Checklist for the DP system checks at regular intervals when dynamically keeping the ship's position and/or heading			refer to item 171	
174	DP operation instructions			refer to item 171	
175	Annual survey programme for the DP system to confirm that the system has been maintained in good working order			refer to item 171	

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Nos.	Document name	RS approval	Flag MA approval	Stamp	Application
176	Initial and special survey programme for the DP system to confirm that the system complies with the approved technical documentation and remains in good working order, including, inter alia, necessary checks and tests according to all FMEA items for the DP systems on ships having DYNPOS-2 or DYNPOS-3 distinguishing mark in the class notation	+		Approved	
177	Typical recommendations on checking the DP system operability after failure elimination or the DP system changes			refer to item 171	
178	Procedure for the DP system restoring after the ship blackout	+		Agreed	
179	List of critical components of the DP system	+		Agreed	
180	Examples of the DP system operating conditions			refer to item 171	
181	Guidelines for decision-making during the DP system control, taking into account the DP system specific use (ship type and operational profile), ship service area (weather conditions, currents, depths, etc.)			refer to item 171	
182	Diagrams showing the ability of the ship having DYNPOS-2 or DYNPOS-3 distinguishing mark in the class notation to keep position both with the DP system in fully serviceable condition and after the single worst DP system failure as defined in FMEA	+		Agreed	

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Nos.	Document name	RS approval	Flag MA approval	Stamp	Application
For MODU and FOP					
183	Information on stability on seabed	+	-	Approved	Part II "Hull" of the Rules for Classification, Construction and Equipment of Mobile Offshore Drilling Units and Fixed Offshore Platforms; Sect. 19, Part III "Additional surveys of ships depending on their purpose and hull material" of the Rules for Classification Surveys of Ships in Service
184	Guidance for the ballast system arrangement plan	+	-	Approved	1.4.9, Part IV "Stability" of the Rules for Classification, Construction and Equipment of Mobile Offshore Drilling Units and Fixed Offshore Platforms
185	Strength calculations	+	-	Agreed	1.3.3, Part II "Hull" of the Rules for Classification, Construction and Equipment of Mobile Offshore Drilling Units and Fixed Offshore Platforms
186	MODU/FOP Operating Manual	+	+	Approved	1.3.3, Part II "Hull" of the Rules for Classification, Construction and Equipment of Mobile Offshore Drilling Units and Fixed Offshore Platforms; Chapter 14 of the MODU Code 2009
187	Helicopter facility operation manual	+	-	Approved	Sect. 6, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships" of the Rules for the Classification and Construction of Sea-Going Ships (if helicopter arrangement is available) (may be included in the MODU/FOP Operating Manual)
188	MODU/FOP special survey programme or continuous survey programme, as applicable	+	-	Approved	Sect. 19, Part III "Additional surveys of ships depending on their purpose and hull material" of the Rules for Classification Surveys of Ships in Service
For manned submersibles and ship's diving systems					
189	Passenger submersible operation manual containing normal and emergency working procedures	+	+	Approved	4.2.5.3, Part I "Classification" of the Rules For the Classification and Construction of Manned Submersibles and Ship's Diving Systems
190	Emergency plan	-	-	nil	4.2.5.3, Part I "Classification" of the Rules For the Classification and Construction of Manned Submersibles and Ship's Diving Systems
191	Passenger submersible maintenance manual	-	-	nil	4.2.5.3, Part I "Classification" of the Rules For the Classification and Construction of Manned Submersibles and Ship's Diving Systems

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