RULES
FOR THE CLASSIFICATION AND CONSTRUCTION OF INLAND WATERWAYS VESSELS

PART I

CLASSIFICATION REGULATIONS

July
2020

GDAŃSK

RULES FOR CLASSIFICATION AND CONSTRUCTION OF INLAND WATERWAYS VESSELS developed and edited by Polski Rejestr Statków S.A., hereinafter referred to as PRS, consist of the following Parts:

Part I – Classification Regulations
Part II – Hull
Part III – Hull Equipment
Part IV – Stability and Freeboard
Part V – Fire Protection
Part VI – Machinery and Piping Systems
Part VII – Electrical Equipment and Automation

whereas the materials and welding are to comply with the requirements specified in *Part IX – Materials and Welding* of the *Rules for Classification and Construction of Sea-going Ships*.

Part I – Classification Regulations – October 2020, of the *Rules for Classification and Construction of Inland Waterways Vessels* was approved by PRS Executive Board on 28 September 2020 and comes into force on 1 October 2020.

This *Part I* replaced the previous edition:
Part I – Classification and Construction Regulations for Inland Waterways Vessels, July 2020.

Upon the entry into force of this *Part I*, its requirements apply to:
– new vessels, contracted for construction on 1 July 2018 or later – to the full extent,
– existing vessels – from the nearest classification survey

The requirements of *Part I* are extended and supplemented by the following publications:
Publication 2/P – Alternative Survey Arrangements for Machinery
Publication 27/P – Navigability and maneuverability tests of inland waterway vessels and convoys
Publication 40/P – Non-metallic Materials and Products
Publication 54/P – Alternative Hull Survey Arrangements
Publication 91/P – Inland Waterways Passenger Sailing Vessels
Publication 92/P – Specific Requirements for Inland Waterways High-Speed Vessels
Publication 123/P – Safe Entry to Confined Spaces

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1 GENERAL

1.1 Scope of Application

1.1.1 *Rules for the Classification and Construction of Inland Waterways Vessels*, hereinafter referred to as *Rules*, apply to vessels intended for service on inland waterways

1.1.2 This Part of the *Rules* applies to vessels under construction as well as to the existing vessels.

1.1.3 With respect to high-speed craft, the requirements concerning the construction of hull, equipment, arrangements and installations are specified by PRS separately for each vessel, having regard to the provisions of the HSC Code and the requirements specified in *Publication 92/P – Specific Requirements for Inland Waterways High-Speed Vessels*.

1.1.4 Vessels required to be issued a *Union Inland Navigation Certificate* shall additionally fulfil the technical requirements of the most recent version of ES-TRIN standard referred to in Annex II to *DIRECTIVE (EU) 2016/1629 of the EUROPEAN PARLIAMENT and of the COUNCIL of 14 September 2016 laying down technical requirements for inland waterway vessels, amending Directive 2009/100/EC and repealing Directive 2006/87/EC*.

1.1.5 The requirements concerning the scope of PRS survey, as well as the procedure of survey, types of documents issued and the procedure for technical documentation approval are contained in *General Survey Regulations*.

1.2 Definitions

In this Part of the *Rules* the following definitions have been adopted, they also apply to other Parts of the *Rules*:

ADN – European agreement concerning the international carriage of dangerous goods by inland waterways signed at Geneva on 26 May 2000.

Barge – a vessel intended for the carriage of goods in the holds and / or on the deck.

Towed Barge – not self-propelled barge, moved by towing.

Motor Barge – barge with a mechanical drive.

Pushed Barge – not self-propelled barge, adapted to be pushed.

Front Pusher Barge – barge, at the beginning of a pushed convoy, equipped with a suitable bow anchor devices, providing the opportunity to correct anchor of the whole set of push.

Barge for pushed train – pushed barge located inside a pushed train provided with proper arrangements to be fore-and-aft coupled with other craft. The barge need not be equipped with anchor devices required to be fulfilled by a front pushed barge.

Classification cycle – a cyclical period starting from the date of completion of the Initial Survey for Assignment of Class, performed after the vessel's construction completion or from the date of Class Renewal Survey completion, equal to class validity period (in general 5 years) and covering all due Periodical Surveys.

Length overall – maximum length of the unit, as measured by taking into account all fixed equipment such as parts of the steering and propulsion systems, mechanical devices, fenders, anchor brackets, etc.

Tug – a self-propelled vessel intended and equipped to perform towing.

High-speed vessel – a motorised craft capable of reaching speeds over 40 km/h in relation to water.

Class of a vessel – compliance of the vessel's structure, workmanship and condition (hull, machinery, installations, equipment) with the relevant requirements of the *Rules*, confirmed by the *Certificate of Class* and entered to *Register of Inland Waterways Vessels.*

Ice-breaker – a self-propelled vessel intended to perform ice breaking.

Subdivision – capability of a vessel to maintain buoyancy and stability in accordance with the requirements specified in *Part IV – Stability and Freeboard*, after damage and flooding of a single compartment or a group of adjacent compartments, located below the bulkhead deck.

E *xamination*:
- *General/external examination* – a visual inspection of structure or machinery, without dismantling, to provide a general assessment of their condition and to determine, where necessary, the scope of an additional close-up examination.
- *Internal examination* – a visual examination of structure or machinery in dismantled condition (partially or wholly) or a visual examination of an arrangement (boilers, pressure vessels) from the inside, aimed at the assessment of their condition and determination, where necessary, the scope of an additional close-up examination.
- *Close-up examination* – a thorough visual examination of structure or machinery components being within Surveyor's reach and a possible hammer, magnifying glass, etc. testing.

Passenger – every person on board the vessel other than the master and the members of the crew or other persons employed or engaged on board in any character and capacity (special personnel) and a child less than one year of age.

Pusher – a self-propelled vessel intended and equipped to propel a pushed train of craft.

Dredger – a vessel intended for dredging water areas or aggregate excavation from under water.

Pontoon – a vessel without its own propulsion and crew intended for the carriage of deck cargo which has no deck hatches except for covered manholes.

Ferry – a self-propelled vessel or without its own propulsion intended for the carriage of people or goods from one waterway bank to the other.

Operation, strength, tightness tests:
- *Operation tests* – external examinations of machinery or appliance under working conditions, combined with the measurements of essential operation parameters.
- *Strength tests*:
  - *Non-destructive strength tests* – a test load, specified by PRS, is applied to the tested object or product. The tested object shall not be damaged during testing.
  - *Destructive strength tests* – a load is applied to representative test specimens and increased until the sample is damaged. Parameters of the destructive load are recorded in the test report.
- *Tightness test* – activities intended to determine whether no gas or liquid leakage takes place during the examination of particular elements, assemblies or complete objects.

Survey – a set of activities relating to a vessel, its machinery, appliances, equipment, etc. performed through the review of technical documentation, as well as adequate examinations, measurements and tests.

Rules – Rules for Classification and Construction of Inland Waterways Vessels, Parts I to VII and Part IX of the *Rules for the Classification and Construction of Sea-Going Ships*

Passenger vessel – a self-propelled vessel intended and equipped for the carriage of more than 12 passengers.

Symbol of class – a group of conventional marks and notations, specifying the class of a vessel, kind of survey during the vessel's construction and in service, as well as the vessel's structural features and operational limitations, if any. Symbol of class consists of the main symbol of class and additional marks.

Symbol of machinery – a group of conventional notes specifying kind of survey during construction of machinery.

Overall breadth – the maximum breadth of the vessel including all fixed equipment such as fenders and paddle wheel shields, mechanical equipment, etc.

Dangerous goods – substances, materials and objects whose carriage through international waterways is forbidden or permitted under the specific conditions after the requirements specified in ADN rules have been fulfilled.

Floating unit – vessel equipped with a permanent work devices, such as lifting appliances, dredgers, pile drivers or elevators for performing technical work in the maintenance of shipping routes or exploitation of aggregates.

Crew of a vessel – a group of people controlling the vessel and ensuring her manoeuvrability and safe operation, together with a personnel attending those on board, including passengers.

Tanker – a vessel specially intended for the carriage of liquid cargoes in bulk.

Tanker of Type C – tanker complying with the relevant requirements of the *Rules* for vessels with mark **zb ADN -C**, having a double- side and a double bottom, in cargo area usually with flush deck.

Tanker of Type G – tanker complying with the relevant requirements of the *Rules* for vessels with mark **zb ADN -G** , intended for the carriage of compressed gases or refrigerated gases in built in cargo tanks. The hull in the cargo area can have a single-side (for compressed gases only) or a double- side construction.

Tanker of Type N – tanker complying with the relevant requirements of the *Rules* for vessels with mark **zb ADN-N**.

Pushed convoy – assembly of units connected rigidly or flexibly, consisting of a pusher and at least one pushed unit .

Rigid convoy – assembly of crafts coupled rigidly on sides, none of which is in front of the unit with a mechanical drive, which convoys the assembly.

Floating crane – a vessel having a lifting device installed on deck.

2 SURVEY

2.1 Scope of Survey

2.1.1 Classification survey covers the vessel's hull and its equipment, the machinery and electrical equipment, including their systems and other equipment, referred to in the *Rules*.

2.1.2 Stability, subdivision and fire protection are also subject to survey, according to the principles specified in the *Rules*.

2.1.3 If the symbol of class contains additional marks, the corresponding items of hull, machinery and electrical equipment and other equipment are subject to classification survey.

2.1.4 During Periodical Classification Surveys, the vessel's equipment not covered by classification survey is subject to PRS' technical survey with respect to the Flag State requirements and/or the possible hazard to the vessel's safety.

2.2 Basis of Survey

The basis of PRS classification survey are:
- *Rules* and referred to relevant *Publications* issued by PRS;
- required technical documentation, specified in the particular parts of the *Rules*.

Note: Before commencement of the construction, conversion or reconstruction of a vessel (or its equipment), the relevant technical documentation shall be provided to PRS Head Office for approval. The documentation shall be supplied in triplicate. Upon agreement with PRS, the required documentation may be transferred in other form, e.g. electronic format.

2.3 Performance of Survey

Performance of classification survey by PRS covers:
- classification documentation approval;
- survey of construction, conversion or reconstruction of a vessel;
- survey of the existing vessel which consists in surveys specified in sub-chapter 2.4.

2.4 Types of Survey

There are the following types of survey:
– Initial Survey (for Class Assignment),
– Periodical Surveys (for Class Renewal and Annual Surveys),
– Occasional Surveys (other surveys, see 5.5) .

2.5 Departures from *Rules*

2.5.1 PRS Head Office may permit application of other requirements equivalent to those specified in the *Rules*, or of exemptions from the *Rules* if it considers that the vessel complies to a satisfactory degree with safety standards, rendering class assignment possible. Application of equivalent requirements or exemptions may not relate to requirements specified by the flag state Administrations or other international regulations.

2.5.2 In the process of class assignment, PRS may take into account the requirements specified by the flag state Administration which are different from those specified in the *Rules*.

3 CLASS OF VESSEL

3.1 General Requirements

3.1.1 On the Owner's request, PRS may assign class to a new or existing vessel, as well as confirm, renew or reinstate class of an existing vessel classed with PRS.

3.1.2 PRS may suspend or withdraw class of a vessel for reasons specified in sub-chapters 6.2 and 7.1 respectively.

3.1.3 Assignment, renewal or reinstatement of class takes place after the vessel has been found to fulfil fully, or to a degree considered by PRS satisfactory, the applicable *Rules* requirements.

3.1.4 Class of a vessel is confirmed by the *Certificate of Class*.

3.1.5 In the *Certificate of Class*, a symbol class consisting the main symbol of class (see 3.3) and additional marks (see 3.4) and the symbol of the machinery (see 3.5) , is given.

3.2 Period of Vessel's Class Validity

3.2.1 Class of a vessel is assigned or renewed for a period of 5 years , if there were no circumstances referred to in 3.2.2.

3.2.2 Having regard to the technical condition of the hull, machinery or electrical equipment, or in other reasonable cases, PRS may assign a class to a vessel for a shorter period or may shorten the class validity, as a result of the Class Renewal Survey, inserting an appropriate additional mark in the symbol of class – see 3.4.4.

3.2.3 PRS may, upon the Owner's request, extend the period of validity of the *Certificate of Class* (by three months at the maximum) if necessary, e.g. where the Class Renewal Survey is impossible to be conducted before the expiry of the *Certificate of Class* validity.

3.3 Main Symbol of Class

3.3.1 Main Symbol of Class of Vessel Built under PRS' Survey

The main symbol of class of a vessel built under PRS' survey consists of mark ✳, followed by affixed marks **sKM** or **sK**:

✳ **sKM** – for vessel with mechanical propulsion,
✳ **sK** – for vessel without mechanical propulsion.

3.3.2 Main Symbol of Class of Vessel Built under Survey of Another Classification Society

An existing vessel, built under the survey of another Classification Society, which has been assigned PRS class, is given a symbol of class without an asterisk, e.g.:

sKM – for vessel with mechanical propulsion,
sK – for vessel without mechanical propulsion,.

3.3.3 Main Symbol of Class of Vessel Built without Survey of any Classification Society

An existing vessel, built without the survey of any Classification Society which has been assigned PRS class, is given a symbol of class in brackets, e.g.:

(sKM) – for vessel with mechanical propulsion,
(sK) – for vessel without mechanical propulsion.

3.4 Additional Marks in Symbol of Class

3.4.1 General

3.4.1.1 Where a vessel fulfils additional requirements provided by the *Rules* or obtained exemptions provided by the *Rules*, relevant additional marks are affixed to the symbol of class.

3.4.1.2 Depending on the additional mark type, assignment of such an additional mark may be either obligatory for the vessel in consideration of the type of service and/or operating area, or subject to the Owner's decision.

3.4.1.3 PRS may alter or delete the additional mark in the symbol of class in the case of modification or breach of the conditions, upon which the mark has been affixed.

3.4.1.4 Additional marks in the symbol of class are put after the main symbol of class in order in the order listed – see 3.4.2, 3.4.3, 3.4.4, 3.4.5, 3.4.6 and 3.4.7, e.g.

✳ sKM 3(W) <2 L1 pas [1]

3.4.1.5 PRS, at Owner's request, may place in the symbol of class an additional mark existing in other PRS Rules, defining additional features of ship structure or adaptation, after fulfilling requirements specified for such mark in the other Rules. PRS may respectively limit the requirements for this mark if this is justified by technical or operational reasons. In such case, information on the scope in which the ship does not fulfil the requirements for the additional mark is placed in the Class Certificate in paragraph "Additional Information".

3.4.2 Marks of operating area – 1, 2, 3 and 4

3.4.2.1 A vessel fulfilling the requirements of PRS *Rules* relevant to the particular operating area, is given marks **1, 2, 3** or **4** in the main symbol of class, which have the following meaning:
1 – navigation in waters with the wave height ($h_{1/10}$) up to 2 m;
2 – navigation in waters with the wave height ($h_{1/10}$) up to 1.2 m;
3 – navigation in waters with the wave height ($h_{1/10}$) up to 0.6 m;
4 – navigation in waters with insignificant wave height.

3.4.2.2 The wave height ($h_{1/10}$), measured from its trough to crest, represents the average value of 10% of the highest waves during the particular, not too long, measuring period. This corresponds to 5% probability of exceeding that height.

3.4.2.3 The marks of operating area are also designated based on the below assumptions:

.1 Vessels assigned operating area mark **1** in the symbol of class are able to navigate throughout their areas at the wind force not exceeding 5 Beaufort (5°B) or in the case of stronger off-shore wind, however, not exceeding 6°B – within 6 nautical miles from the shore;

.2 Vessels assigned operating area mark **2** or **3** in the symbol of class are able to navigate throughout their areas at a wind force not exceeding 6 Beaufort;

.3 Vessels (with the exception of passenger vessels) assigned operating area mark **1** in the symbol of class are able to navigate on the marine coastal waters of the Polish central coast, within 3 nautical miles from the port of refuge where the wind force does not exceed 4 Beaufort, and in the case of stronger off-shore wind, however not exceeding 5 Beaufort – within 1.5 nautical miles from the port.

3.4.3 Mark of standard of equipment not covered by the symbol of machinery - (W)

If the equipment which is not covered by the symbol of machinery has been made without the survey of PRS or other recognized classification society, but it meets the requirements of the flag State Administration and, additionally, has been surveyed and tested by PRS to show evidence that it sufficiently meets safety standards, the mark **(W)** is affixed to the symbol of class.

3.4.4 Mark of Limited Period of Class Validity – <3, <2, <1

If, as a result of survey, the necessity to shorten the classification cycle has been stated by PRS (see paragraph 3.2.2), the appropriate mark of class validity period is placed in the symbol of class:

< **3** – where the classification cycle is shortened to 3 years,
< **2** – where the classification cycle is shortened to 2 years,
< **1** – where the classification cycle is shortened to 1 year.

3.4.5 Ice Strengthening Marks – L1, L2

3.4.5.1 If ice strengthening of a vessel fulfils the relevant requirements contained in *Part II – Hull* and *Part VI – Machinery and Piping Systems*, mark **L1** is affixed to the symbol of class, which means that the vessel is allowed to sail in fine ice pieces either following the ice-breaker or unaided.

3.4.5.2 If ice strengthening of a vessel fulfils the relevant requirements contained in *Part II – Hull*, mark **L2** is affixed to the symbol of class, which means that the vessel is allowed to sail unaided occasionally in fine ice pieces.

3.4.5.3 The necessity of assignment of an ice strengthening mark is subject to the Owner's decision.

3.4.6 Marks Indicating Vessel Type

3.4.6.1 A vessel which complies with the basic requirements of the *Rules* and appropriate for the type specific requirements set out in various Parts of the *Rules*, one of following additional marks is affixed to the symbol of class:

3.4.6.1.1 Pushed barge
bp

3.4.6.1.2 Tug:
hol

3.4.6.1.3 High-speed craft:
hsc

3.4.6.1.4 Ice-breaker*:*
Ld

3.4.6.1.5 Anti-flood ice-breaker
ldp

3.4.6.1.6 Pusher:
pch

3.4.6.1.7 Dredger:
pg

3.4.6.1.8 Pontoon

pn

3.4.6.1.9 Ferry:

pr

3.4.6.1.10 Vessel adapted for carriage of containers:

con

3.4.6.1.11 Vessel adapted for carriage of ore:

rud

3.4.6.1.12 Vessel adapted for carriage of dangerous goods in packages or in the form of dry bulk cargoes:

ADN

In the *Certificate of class*, the class and type of transported dangerous goods, are given.

3.4.6.1.13 Passenger vessel:

pas

3.4.6.1.14 Passenger sailing vessel::

pas sail

3.4.6.1.15 Tanker:

zb

In the *Certificate of class*, the type of transported liquid cargoes , are given .

3.4.6.1.16 Tanker for carriage of dangerous goods:

zb ADN-C
zb ADN-G
zb ADN-N

In the *Certificate of class*, the class and type of transported dangerous goods, are given.

3.4.6.1.17 Floating crane:

dp

Cargo handling and hoisting devices installed aboard the floating cranes shall fulfil the relevant requirements contained in the *Rules for Statutory Survey of Sea-going Ships, Part VI – Lifting Appliances* published by PRS.

3.4.6.2 Vessel fulfilling the requirements relevant to two or more types of vessel, is assigned a combined additional mark (e.g. **pch/hol**, **ld/hol**, **pr/pas**) in the symbol of class.

3.4.6.3 Another mark indicating the vessel type may be assigned to a vessel if PRS considers it technically justified. In that case, additional requirements are specified by PRS in each particular case.

3.4.7 Subdivision Mark – [1], [2]

If a passenger vessel fulfils the relevant requirements contained in *Part III – Hull Equipment*, *Part IV – Stability and Freeboard and Part VI– Machinery and Piping Systems*, mark: **[1]** or **[2]** is affixed in the symbol of class. The figure in brackets indicate the number of compartments after the flooding of which a vessel should remain afloat in a satisfactory state of equilibrium.

3.4.8 Additional marks of vessel whose compliance with certain requirements has been verified directly by the Flag State Administration

3.4.8.1 A vessel whose compliance with the fire protection requirements has been verified directly by the Flag State Administration is assigned the following additional mark in the symbol of class:

(FP)

3.4.8.2 A vessel whose compliance with the intact and damage stability criteria has been verified directly by the Flag State Administration is assigned the following additional mark in the symbol of class:

(STA)

3.4.9 Additional Descriptive Information

3.4.9.1 Specific conditions, such as: design features, permanent service restrictions or other special features not defined by other additional marks in the symbol of class on the basis of which a vessel has been assigned class as well as additional restriction or extension of the vessel operating area due to its features or technical condition are entered in the „Permanent Conditions" of the *Certificate of Class/Temporary Certificate of Class*.

3.4.9.2 Observance of the detailed conditions referred to in 3.4.9.1, rests with the Owner and determines the maintenance of the validity of the class.

3.5 Symbol of Machinery

3.5.1 If main propulsion machinery were built and installed under PRS survey, the following symbol of machinery:

✳ sPRM

is entered in the Certificate of Class.

3.5.2 If main propulsion machinery were built and installed under the survey of another Classification Society and the vessel was subsequently assigned PRS' class, the following symbol of machinery:

sPRM

is entered in the Certificate of Class.

3.5.3 If main propulsion machinery were built and installed without the survey of any Classification Society and do not entirely fulfil PRS Rules, but after the survey and trials are considered to meet the operating safety standards to the satisfactory scope and are acceptable to PRS, and the vessel was subsequently assigned PRS' class, the following symbol of machinery:

(sPRM)

is entered in the Certificate of Class.

4 ASSIGNMENT OF CLASS

4.1 General

4.1.1 Assignment of class is confirmed by the issue of the *Certificate of Class* and an appropriate entry made in the *Register of Inland Waterways Vessels.*. Assignment of class means that the vessel, in full measure or to a degree considered by PRS acceptable, complies with the relevant requirements of the *Rules*.

4.1.2 PRS may assign a class to a new vessel or to an existing vessel. The condition for assigning class to a vessel is the Owner's written request for PRS class assignment and satisfactory result of the Initial Survey for Assignment of Class.

4.1.3 After completion of the Initial Survey for Assignment of Class, PRS Branch Office issues the *Temporary Certificate of Class* to enable the vessel to sail. *Temporary Certificate of Class* is valid until the issue of *Certificate of Class*, but no longer than 12 months.

Class certificate shall be issued by the PRS Head Office based on positive verification of the initial survey results .

This mode of issuing *Certificate of Class* applies also after the Class Renewal Survey.

4.1.4 During Initial Survey, mechanically propelled vessels covered by the requirement to possess a Community Inland Navigation Certificate are subject to maneuverability trials in accordance with *Publication 27/P – Maneuverability Trials of Inland Waterways Vessels and Push Trains*. The scope and procedure of the trials are specified by a competent PRS field organizational unit, in accordance with this *Publication.* Reduction of the scope of trials or use of other method of confirming maneuverability properties shall be agreed with relevant Administration.

In the case of a pusher or a vessel designed to move units in rigid convoy , tests will be performed for train of configurations requested by the Owner.

4.2 Vessel Built under PRS Survey

A new vessel, built under PRS survey, may be assigned PRS class after satisfactory completion of the following activities:

- the approval of technical documentation within the scope required in particular Parts of the *Rules*,
- survey of the manufacture of materials, components, machinery and equipment,
- survey of hull during construction,
- survey of installation of machinery, systems and equipment,
- survey of trials.

The detailed scope of the surveys associated with the above-mentioned activities is specified each time by the attending PRS field organizational unit on the basis of the *Rules*, approved technical documentation and the local building conditions. All these surveys constitute the Initial Survey of a vessel.

Validity of the *Certificate of Class* will start from the date of the Initial Survey completion.

4.3 Vessel with Valid Class Assigned by Another Classification Society

4.3.1 Conditions of Assignment of PRS Class

An existing vessel, with valid class of other Classification Society, may be assigned PRS class upon positive completion of the Initial Survey for Assignment of Class .

Initial Survey is carried out in the scope of due Periodical Survey, referred to in Chapter 5. PRS may, however, extend the scope of this survey, depending on age, condition and purpose of the vessel. Depending on the results of the survey, PRS can give the class a vessel for a period of validity of *Certificate of Class* or for other period.

4.3.2 Scope of Required Technical Documentation

4.3.2.1 Following documents must be submitted for classification of the vessel with class of another Classification Society:

1. Classification Documents:
   - last *Certificate of Class*
   - certificates for anchors and anchor chains,
   - all reports of surveys carried out by previous classification society in the period since the last Renewal Survey;
2. Technical Documentation
   - Technical Description of the Vessel
   - General Arrangement Plan;
   - Midship Section;
   - Longitudinal Section;
   - Shell Expansion;
   - Decks and watertight bulkheads;
   - Stem and stern, rudder and rudder stock ,

– Stability Booklet,
– Plan of the machinery spaces,
– Shaftline and stern tube,
– Diagrams of the fuel, bilge, cooling, fresh and sea water cooling, sewage, compressed air and other subject to the supervision of PRS,
– Pressure vessels,
– Principle diagrams of power distribution circuits
– Basic diagram of the main and emergency switchboards

4.3.2.2 Depending on the type of vessel, PRS may increase or decrease the scope of the required documentation.

4.3.3 Intervals between Periodical Surveys

Intervals between Periodical Surveys of a vessel, which having a valid class of another Classification Society was accepted for classification and which has been assigned the Class of PRS for a period of validity of existing *Certificate of Class*, are determined in relation to the date of *Certificate of Class* issue by the classification society which classified the vessel previously.

4.4 Vessel with PRS or Another Classification Society Class Withdrawn

4.4.1 General

PRS may accept for classification a vessel which has withdrawn the class of PRS or another classification society, subject to completion of Initial Survey to the extent determined by the PRS, including the age of the vessel, its technical condition and destination and the reasons for the loss of class.

4.4.2 Required Documents

With the application of the classification of a vessel which has withdrawn the class of another classification society documentation to the extent specified in 4.3.2 to be submitted.

4.4.3 Intervals between Periodical Surveys

Intervals between Periodical Surveys of a vessel the class of which has been withdrawn, shall be determined from the date of completion of the Initial Survey for reinstatement/assignment of class.

4.5 Vessel Not Classed Before

4.5.1 An existing vessel, which has not been classed before, may be assigned PRS class upon completion of the Initial Survey for Assignment of Class covering:
– PRS approval of the submitted, by the Owner, technical documentation within the scope specified by PRS in each case.
– verification of certificates for main engines, as well as for essential machinery and equipment;
– completion of the Initial Survey within the scope of Class Renewal Survey (see 5.4.2);
– survey of dock trials and sea trials, specified by PRS in each particular case.

4.5.2 Where the Owner is not able to submit the required technical documentation (wholly or in part), he shall submit the equivalent information, within the scope enabling PRS to assess the vessel's structure and equipment

4.5.3 If the details of construction of the vessel or its equipment does not correspond to the requirements of the *Rules*, the presented evidence of their satisfactory behavior or operation in a period of at least 12 months before Initial Survey may prove equivalence of structures or equipment to the requirements of the Rules and may be taken into account when assigning the PRS class .

4.5.4 The period of validity of the PRS *Certificate of Class*, and intervals between periodical surveys are determined from the date of completion of the Initial Survey for Assignment of Class.

5 MAINTENANCE OF CLASS – INTERVALS BETWEEN SURVEYS AND SURVEY SCOPES

5.1 General Requirements

5.1.1 The conditions for maintaining the vessel's class are:
– maintaining the vessel – the vessel's hull, machinery, installations and equipment in a satisfactory technical condition,
– vessel's operation in accordance with conditions specified in the *Certificate of Class*, the manufacturer's instructions and the principles of good seamanship
– carrying out due Periodical Surveys at scheduled dates,
– fulfiling conditions of class at scheduled dates,
– carrying out the required Occasional Surveys,
– timely payment of fees for survey services.

5.1.2 Inland waterway vessels classed with PRS are subject to the following periodical surveys:
– Class Renewal Survey
– Annual Survey for class maintenance (vessels referred to in 5.3.2).

5.1.3 The condition for conducting the periodical survey is the Owner's written request/report on the vessel readiness for the periodical survey.

5.1.4 PRS informs the Owner on the dates of due Periodical and Occasional Surveys by a vessel's survey status. Non-receipt of a vessel's survey status does not absolve the Owner from an obligation to submit the vessel for survey at the dates specified in the *Rules*.

5.1.5 The Owner is obliged to properly prepare the hull, machinery and electrical installations, as well as the vessel equipment for each survey. The Surveyor may refrain from performing a survey if he/she considers that the vessel has not been properly prepared for the survey or a threat to life or health exists.

If, during the survey, entering a confined space is necessary, then the requirements contained in *Publication 123/P –Safe Entry to Confined Spaces* shall apply for the preparation of such spaces.

5.1.6 Class Renewal Survey aim is to ascertain that the vessel's hull and its equipment, machinery and installations comply with the requirements of the *Rules*, and to ensure that the vessel is fit for its intended purpose for the subsequent class validity period, subject to proper maintenance and operation.

5.1.7 Annual Survey shall ascertain that the vessel's hull and its equipment, machinery and installations are in a satisfactory technical condition.

5.1.8 The Periodical Surveys may be considered complete if an appropriate survey of the vessel has been held within the scope defined in 5.4. PRS may extend the scope of surveys, depending on the vessel's age, technical condition, as well as the type of equipment and structure.

5.1.9 After positive completion of Periodical Survey, PRS field organizational unit endorses the *Certificate of Class* or issues the *Temporary Certificate of Class* to enable the vessel to sail. The results of Periodical Survey are subject to verification by PRS Head Office.

5.1.10 Intervals between Periodical Surveys of a vessel classed with PRS will date from the classification cycle commencement.

5.1.11 Intervals between Periodical Surveys of vessels which have entered PRS class with a valid class assigned by other Classification Society, vessels that have not been classed before and vessels with class withdrawn are determined by PRS under the provisions given , respectively, in 4.3.3, 4.4.3 and 4.5.4.

5.1.12 PRS may shorten the intervals between examinations of the underwater part of hull or propeller shafts as well as the intervals between examinations, measurements or trials of particular appliances, installations and equipment where this proves necessary due to their technical condition or navigation conditions.

5.1.13 In justified cases, PRS may waive a survey of particular items of machinery in dismantled condition or limit the scope of survey if operation tests prove that the machinery item is in a good and efficient condition.

5.1.14 Where during the survey any damage of hull structure (buckling, grooving, detachment, cracks) are found over the allowable limits or extensive areas of wastage of shell plating and structural elements over the allowable limits, or other defects which, in the opinion of the PRS surveyor, will negative affect the strength and tightness of the hull, are to be promptly and thoroughly repaired before allowing the vessel to sail.

5.1.15 All measurements constituting the basis for the assessment of the technical condition of the structure, machinery or equipment shall be made with measuring devices calibrated according to national or international standards. Each instrument should have a current certificate of calibration. PRS Surveyor may accept, without confirmation of calibration:

– basic measuring instruments, provided that they are made according to current trade standards, properly maintained and inspected periodically by the user;
– vessel equipment used to control the pressure, temperature, rotational speed, etc., provided verification of compliance readings with readings from in other analogous instrument.

5.2 Intervals between Periodical Surveys

5.2.1 Annual Survey

Annual Survey shall be carried out not earlier than three months before and no later than three months after the end of each anniversary date (± 3 months) from the date of commencement of the current classification cycle.

5.2.2 Class Renewal Survey

5.2.2.1 Class Renewal Survey should be completed before the expiry of the class.

5.2.2.2 Irrespective of the provisions of 3.2.3, if the Class Renewal Survey is completed before or after the 3 months window of the due Class Renewal Survey, the validity date of the new *Certificate of Class* is determined for a period in accordance with 3.2.1, starting from the date of the due Class Renewal Survey. In the case of survey completion before the 3 months window of the due Class Renewal Survey, the new period of class validity is counted from the date of survey completion.

5.2.2.3 In justified cases, at the request of the Owner, PRS may postpone the renewal of class but not more than by 12 months, starting from the date of due Class renewal Survey, subject to a positive result of an Occasional Survey .

The scope of the occasional survey is specified by PRS in each particular case taking into account the vessel type, age, technical condition and the period for which the class validity is intended to be prolonged.

Occasional Survey shall be completed before the expiry date of *Certificates of class.*

5.2.2.4 In the case of postponement of Class Renewal Survey on the principles specified in 5.2.2.3, a new classification cycle shall be determined in relation to the date the class renewal has been postponed to.

5.2.2.5 During the Class Renewal Survey of the vessel, PRS may not require carrying out a survey of these machinery and equipment, which have been subjected to examination in the required scope of Class Renewal Survey not earlier than 12 months before the survey. In this case, the object or device whose survey is credited, shall be examined to the extent required in the Annual Survey.

5.3 Scope of Application of Periodical Surveys

5.3.1 Class Renewal Survey

All inland waterway vessels classified by the PRS are subject to class renewal.

5.3.2 Annual survey

Annual survey for class maintenance cover:

– passenger vessels,
– tankers for the carriage of dangerous goods (with a mark **zb**, **zb ADN-C**, **zb ADN-G** or **zb ADN-N**) having marks of operating area **1** and **2** in the symbol of class and engaged on voyages in restricted sea areas.

5.4 Scopes of Periodical Surveys

5.4.1 Annual Survey

5.4.1.1 Hull and Hull Equipment Survey

.1 External examinations of:
- plating of above-water part of the hull from outside,
- plating of decks,
- bulwark and railings,
- superstructures and deckhouses,
- cargo holds including bilges,
- engine room including main engines' frames and auxiliary machinery frames, fixing of sea chest fittings and overboard fittings to the plating, as well as bilges,
- coamings of cargo hold hatches, openings, manholes and ventilators,
- heads of air pipes,
- closing devices for sounding pipes and fuel supply pipes,
- emergency exits,
- mooring equipment and coupling appliances to form a train of craft,
- guides for cable ferries,
- towing arrangements for vessels with additional class notation **hol**.

.2 Internal examination of:
- forepeak and afterpeak,
- chain locker.

.3 Operation tests of:
- closing devices of: hatches and manholes on weather decks, side scuttles and skylights, external doors, bulkhead doors and fire doors,
- main and emergency steering gear,
- anchoring arrangements and mooring equipment,
- installations of retractable wheelhouse, and/or vessel bridges.

.4 Examination with respect to:
- technical conditions of stability maintaining,
- maintaining of the openings' safe height,
- marking of freeboard and/or permissible draught.

.5 Bottom survey of the hull, to be performed during second or third Annual Survey, covering scope specified in 5.6.2.2.

5.4.1.2 Machinery Systems' Survey

.1 External examination of:
- main engine securing to the seating and main engine shafting bolts' securing,
- high pressure fuel pipelines jacketed piping system,
- insulation of exhaust gas manifolds.
- flexible couplings on sea water, oil fuel and oil systems.

.2 Operation tests of:
- starting arrangements, manoeuvring and steering gear, as well as the alarm system and safety systems of the main engine,
- main engine clutch (clutch engaging),
- generator prime movers including their alarm systems and safety systems,

- the following pumps: bilge, cooling water, general use, ballast, fire, fuel oil (feed and transfer), lubricating oil,
- controlled pitch propeller operating arrangements,
- means of communication between the wheelhouse and engine room: engine room telegraph, speaking tubes,
- main and emergency steering gear, including their changeover,
- windlass (the test may be performed at port),
- towing winch,
- bilge system, including high level alarm system (if any),
- compressed air system, including compressors and safety valves – operation tests; compressed air receivers – external examination.

.3 Intermediate shafts and thrust shaft:
- checking each intermediate bearing securing to the foundation.

5.4.1.3 Fire Protection Survey

.1 Fixed fire-extinguishing systems – external examination of system components and:
- water fire main system – operation test of all fire pumps, operation test of all hydrant valves, checking of condition of fire hoses and fire hose nozzles,
- automatic sprinkler system – operation test of feed water pump (pump automatic start test at water pressure drop), operation test of alarm systems after section valve opening, operation test of hydrophore tank and refill water system ,
- CO_2 fire extinguishing system – checking the quantity of CO_2 in cylinders, passage test of CO_2 pipes, operation test of control valves, operation test of the warning system as well as stopping of ventilation and fuel oil pumps,

.2 Water sprinkler system – trial operation of the system.

.3 Service tanks' valves – operation test of remote closing.

.4 On passenger vessels – checking fire-resisting divisions' condition, operation test of the closing arrangements in all doors and other openings in fire-resisting divisions.

.5 Installation of fire detection - checking the operation of alarm.

.6 Installation of liquid gas for domestic purposes – checking the automatic shutdown of gas supply in the event of flame failure, control of gas cylinders room (ventilation, heating, lighting, warning notices), check the attachment of the cylinder, checking the validity of the installation certificate issued by an authorized body following the evaluation of the leak test and pressure test (certificate renewal required every three years and after any modification or repair).

.7 Heating installations working on liquid fuel – visual inspection and operation trial, check the exhaust ducts.

.8 Heating stoves – external examination and fastening check,

.9 Portable fire fighting equipment –checking the distribution of fire extinguishers and fire fighting units, checking the validity of their technical review.

Notes:
- Checking the quantity of CO_2 in cylinders **shall be performed every 2 years** or after a failure of the safety valve on the cylinder has been found. These checks may be performed by the crew provided that the results shall be recorded in a report and entered into the logbook. Where more than 10% of CO_2 has been lost, the cylinder shall be recharged.
- Portable fire extinguishers and fire extinguishing units are subject to annual technical survey by a competent firm. Their maintenance shall be performed in accordance with the manufacturer's specifications.

5.4.1.4 Survey of Electrical Equipment and Automatic Control Systems

.1 Tests of the main sources of electric power:
- load test,
- checking of the set point values of the devices protecting generators against overload and short-circuit,
- parallel test run of generators, including the test of reverse current or reverse power protection.

.2 Tests of the emergency sources of electric power:

- start and operation test of emergency generating set, including the test of a second independent means of starting the emergency generating set,
- test of emergency batteries.

.3 Test of the distributing devices – main and emergency switchboard, battery charging facilities, navigation lights, control and monitoring consoles, shore connection installations and terminal switchboards.

.4 Tests of electric power converting installations supplying essential consumers.

.5 Test of electric drive of essential machinery, together with control and monitoring devices of steering gear, anchoring arrangements, mooring and towing winches, pumps, air compressors, engine room fans.

.6 Test of lighting installation of compartments and places important from the point of view of safety and safe navigation of vessel and the safety of the people on board.

.7 Test of emergency lighting.

.8 Operation tests of:
- electrical engine room telegraph,
- electrical indicator of rudder position,
- service telephone communication (telephone, master communicator),
- general alarm system,
- fire detection and fire alarm system,
- system warning of activation of CO_2 installation,
- watertight doors' and fire doors' closing alarm system,
- bilge high level alarm system in the engine room.

.9 External examination of connections and fixed electrical heating appliances.

.10 External examination of electrical installation and equipment in explosion threatened spaces.

.11 Test of automatic control systems:
- monitoring systems (indicating, alarm and safety),
- systems of operation of the electric power sources and electric power distribution,
- systems of piping installations' operation.

5.4.1.5 Additional survey on tankers carrying dangerous goods with the following class notations: zb ADN-C, **zb ADN-G** or **zb ADN-N**.

.1 Hull and Accommodation and Service Spaces:
- ventilation system of double side, double bottom and cofferdams ,if any – operation test,
- ventilation system accommodation, wheelhouse and service spaces outside the cargo area – examination and operation test.

.2 Pump room :
- Pump room ventilation system - operation test
- Filling the bilge alarm and emergency drainage installation – operation test,
- Optical and acoustic detection system explosive gas and oxygen measurement – examination and operation test
- Switches the cargo pumps and/or compressors – operation test
- Automatic shutdown of cargo pumps and/or compressors in case of signaling activation of explosive gas detection and measurement of oxygen – operation test.

.3 Cargo Installation:
- Pipelines, their marking, fittings, boundary connections and measuring instruments mounted on installation – examination,
- Remote shutdown of cargo pumps and/or compressors of cargo space and from the space beyond – operation test.

.4 Cargo Cooling Installation:
- Ventilation system of refrigerant machinery room – operation test,
- Insulation of pipes and fittings – examination,
- Refrigeration compressors, condensers, heat exchangers and refrigerant tanks – examination for safety.

.5 Cargo tanks:
- Gas-tight covers in the tanks – examination,

– Exhaust ventilation of the cargo hold, if any – operation test,
– Pressure relief valves – examination,
– Installation of removing the vapor from the cargo tanks and residual (piping, fittings, flash suppressors, vacuum valves and pressure relief) – examination,
– Installation of cargo heating – examination.

.6 Fire and explosion protection installations and equipment :
– Spark arrestors on the exhaust pipes – examination,
– Deck sprinkler installation, if any – examination and trial operation,
– Special equipment (protective clothing, escape breathing apparatus, independent breathing apparatus, safety belts, rescue winch, flammable or explosive gases and toxic detector) – check the quantity and condition,
– Information and warning noticeboards prohibiting smoking and use of open fire – examination.

.7 Electrical equipment :
– Documentation specified in 16.2.1.1 of *Part VII – Electrical Equipment and Automation* – examination,
– Spaces with electrical equipment, used for cargo operations and degassing of vessel (if the devices are not at least kind of limited risk of explosion) – operation tests of the ventilation system, gas detection and alarm system and automatic shut-off for fans of the alarm installation of gas detection,
– Indication of a power failure of control and protection equipment – operation test,
– Alarms and indicators of liquid high level, pressure and temperature in the cargo tanks – operation test,
– Grounding of electrical equipment, piping components cargo, cargo tanks, masts and metal cables running over the cargo tanks – status checking,
– Metal insulation of electric cables in the cargo area – examination.

5.4.2 Class Renewal Survey

5.4.2.1 Hull and its Equipment Survey

Class Renewal Survey of hull and its equipment covers close-up examination and tests specified in sub-chapter 5.4.1.1 and, additionally, the following activities:

.1 Thickness measurements of shell plating of the above-water part of hull, deck and hull structural members in the scope determined by PRS Surveyor depending on the hull technical condition.

.2 The survey of tanks, including air pipes and sounding pipes in the following scope:
– forepeak and afterpeak – internal examination, and where they are used as ballast tanks – tightness test;
– cargo tanks, ballast tanks, sewage and wastes tanks, engine room bilge water tanks – external examination at each class renewal, tightness test at second class renewal and then at each class renewal;
– fuel oil tanks, oil tanks, fresh water tanks – external examination, and where signs of possible leak are found – tank tightness test;
– dry tanks – external examination at second class renewal and then at each class renewal. Tightly closed dry tanks without manholes shall be made accessible by gas cutting of openings or by removing the plating which covers the inner structure. At least 1/3 of the volume is subject to inner structure inspection of each tank at each Class Renewal Survey. After the internal examination, tank tightness test may be required which can be performed afloat.

.3 External examination of steering gear and anchoring arrangements.

.4 Thickness measurements of anchor chain at third Class Renewal Survey and then every next.

.5 Bottom survey in the scope specified in 5.6.2.1

.6 Operation test of the towing arrangement with test of hook release arrangement at full load (for vessels assigned mark **hol** in the symbol of class).

5.4.2.2 Machinery Survey

Machinery survey covers the scope of the Class Maintenance Survey specified in 5.4.1.2 and, additionally, the following activities:

.1 Main internal combustion engines and auxiliary internal combustion engines:
- close-up examination and measurements of parts essential of the engine, in the dismantled condition

Note: In the case where it is documented that the engine has not worked the number of hours recommended by the manufacturer for its main inspection PRS at the request of the owner may dispense with a survey in dismantled condition or limit the scope of survey on the basis of a positive result of diagnosis and operation test. In such a situation, the Owner should request the survey of engine , after working hours , as specified the manufacturer's instructions .

.2 Gearing:
- the gearing shall be opened up and examined within the necessary scope to ascertain its technical condition.

.3 Couplings:
- slip clutch – examination,
- spring coupling – examination combined with dismantling of the cover for assessment of coupling elastic parts,
- rubber coupling – examination after 5 years from the date of the coupling installation or rubber part replacement; at the subsequent Class Renewal Surveys – examination in the dismantled condition.

.4 Air compressors – examination.

.5 Examination of the following pumps: bilge, cooling water, general use, ballast, fire, fuel oil (feed and transfer), lubricating oil.

.6 Air receivers:
- internal examination – every 5 years,
- hydraulic test – at the second class renewal and then at each class renewal.

Note: Where the technical condition of the air receiver can be ascertained with the satisfactory accuracy on the grounds of internal examination, PRS may waive the hydraulic test. After each repair, the receiver shall be subjected to the hydraulic test.

.7 Sea water filter – examination.

.8 Heat exchangers:
- examination of heaters and coolers,
- hydraulic test required depending on survey results and after each repair.

.9 Piping systems:
- operation tests of the following systems: cooling water, fuel oil, oil, lubrication of shafting, ballast, hydraulic,
- hydraulic tests of pipes passing through fuel oil tanks, liquid cargo tanks and cargo holds,
- hydraulic tests of steam heating lines,
- examination of drain pipes passing through the side, decks and bulkheads,
- examination of sounding pipes, air pipes and overflow pipes,
- examination of ventilation ducts passing through watertight bulkheads,
- examination and compressed air tightness test of liquefied gas system,
- internal examination of tanks which do not form the structural part of hull.

Note: In case of any doubts regarding the technical condition of piping, PRS may require hydraulic tests or pipe wall thickness measurement.

.10 Main and emergency steering gear – internal examination.

.11 Checking of noise level measurements.

.12 Windlass – internal examination.

.13 Towing winch – internal examination.

.14 Intermediate shafts and thrust shaft:
- examination of thrust shaft and intermediate shafts, including bearings,
- measurement of thrust bearing clearance.

.15 Propeller shaft and propeller – survey in scope as specified in 5.7.1.5 and 5.7.2.

5.4.2.3 Survey of fire protection

The survey covers activities of Survey, specified in 5.4.1.3 and, additionally for fixed gas fire-extinguishing system:

.1 Hydraulic test of manifolds and pipelines for distribution valves - every 10 years,

.2 Checking the due date of hydraulic test of extinguishing medium cylinders, required every 10 years.

5.4.2.4 Survey of electrical equipment and automation.

The survey covers activities of Survey, specified in 5.4.1.4 and in addition:

.1 Examination of cable lines and cable penetrations through partitions,

.2 Examination of earthing and lightning protection,

.3 Operation test of generator protection: overload and undervoltage,

.4 Checking the set point value of sensors of the engine-room automatic control systems,

.5 Insulation resistance measurement of electric network and fixed electrical equipment.

5.4.2.5 Additional survey on tankers carrying dangerous goods with the following class notations: zb ADN-C, zb ADN-G or zb ADN-N

Survey covers activities specified in 5.4.1.5 and, in addition:

.1 Structural elements of supports and fixings of cargo tanks – close-up survey and thickness measurement in the second Class Renewal Survey and each of the following.

Note: The components hidden under the casing and insulation should be made available for survey at the locations specified by the Surveyor, to the scope dependent on the general technical condition of the vessel.

.2 Bulkheads bordering cargo tanks – close -up survey and thickness measurement in the second each next one Class Renewal Survey.

.3 Cargo tanks – hydraulic tightness test with pressure specified in *Part II – Hull*.

Note: In case where substances which, in combination with water cause corrosion, were transported, the test shall be agreed with PRS.

.4 Cofferdams of cargo tanks should be subjected to tightness test at every second class renewal with pressure specified in *Part II – Hull*.

.5 Cargo tanks in which only non-corrosive cargoes have been carried – if the results of general examination indicate good condition of tanks and tightness test as specified in 5.4.2.5.4 was completed positively, the survey may be limited to examination only.

.6 Cargo tanks used for the carriage of acids and lyes are subject to internal examination at each class renewal, and at every second class renewal – to tightness test. The test procedure and test pressure are subject to PRS approval in each particular case. The test pressure shall be determined taking into account the cargo mass density.

.7 Tanks for the carriage of compressed liquefied gases are subject to the same tests as pressure vessels.

Note: Where only gasses or gas mixtures which do not act corrosively to the tank walls have been carried in those tanks, a survey of the tanks can be limited only to the internal examination at every class renewal if during the random checking it was found that the condition of the tanks is satisfactory.

.8 Cargo pipelines (loading and unloading) – tightness test to a pressure equal to 1,25 times the allowable working pressure.

.9 Pressure relief valves for cargo tanks – close-up survey in an open condition, adjustable pressure of opening and test on control place.

.10 Pressure/vacuum valves and other safety devices on installations discharging fumes from the cargo and residual tanks– close-up survey in the open condition, regulation and test on control stand.

.11 Cargo heating system – tightness test at the second and each next one class renewal.

5.4.2.6 Additional survey for vessels carrying dangerous goods in packages or in the form of dry bulk cargoes, with additional mark ADN in the symbol of class

.1 Cargo holds hatch covers – examinations and splash-proof test;

.2 Bulkheads of holds – close-up survey and measurement at the second and each next class renewal.

.3 Spark arrestors on exhaust pipes – examinations;

.4 Hold's exhaust fans – examinations and operation test;

.5 Gas-tight covers of openings in accommodation area and in the wheelhouse in front of the cargo hold – examinations;
.6 Special equipment (protective clothing, breathing apparatus, flammable, explosive and toxic gas detectors) – checking of quantity and condition;
.7 Information and warning noticeboards prohibiting smoking and use of open fire – checking;
.8 Controls of lights circuits under voltage – operation test;
.9 Sockets in protected area – examinations
.10 Earthing of the mast and metal ropes running above holds – checking of condition.

5.5 Occasional Surveys

5.5.1 General

Occasional Surveys of a vessel or the vessel's machinery, arrangements, installations or equipment are held upon request in all cases not covered by Initial Surveys for Class Assignment and Periodical Surveys. Occasional Survey may be held at the Owner or Underwriter's request or may be consequent upon PRS or Administration verification.

The scope of Occasional Surveys and their procedure will be determined by PRS, depending on the purpose of the survey, age and technical condition of the vessel. Performance of the survey resulting from classification activities verification may be the condition for class maintenance.

5.5.2 Survey After Damage

5.5.2.1 One of Occasional Surveys is a Survey After Damage to which a vessel is to be submitted in the case of the damage sustained by the vessel's hull, machinery, arrangements, installations, equipment or outfit covered by the requirements of the *Rules* and subject to PRS' technical survey, where complete elimination of the damage consequences is impossible by the vessel's means as well as in case of grounding which might have caused any of the above mentioned damage.

It is the Owner's duty to notify PRS immediately of the damage or grounding.

5.5.2.2 The Survey After Damage shall be performed at a port where the damage occurred or at the first port the vessel calls after the damage or grounding.

5.5.2.3 The aim of the survey is to assess the extent of damage, specify the scope of work required to eliminate the damage consequences and to determine the possibility and conditions for maintenance of class.

5.5.3 Postponement of Class Renewal Survey – see 5.2.2.3

5.5.4 Survey for Change in the Name of the Vessel and/or Port of Registry

In order to maintain the validity of the class after the change of name and/or port of registry, PRS must be notified in advance of any change. Upon receipt of such notification, the PRS specify the scope of an occasional survey of the vessel, which is carried out for the issue of a new *Temporary Certificate of Class.*

5.6 Inspection of the Underwater Part of the Hull

5.6.1 Intervals and Scope of the Inspection of the Underwater Part of the Hull

5.6.1.1 All vessels are subject to the Underwater Part of the Hull Survey performed during Class Renewal Survey in dry dock.

Within Class Renewal Survey, PRS may accept an inspection of the underwater part of the hull carried out within the required range for this survey not earlier than 12 months before the date of class renewal. In such a case, the next date of inspection of the underwater part of the hull is determined as consistent with Periodical Surveys.

5.6.1.2 Vessels subject to Annual Surveys (see 5.3.2) shall be subject to an additional inspection of the underwater part of the hull in dry dock, during the second or third Annual Survey**.**

5.6.1.3 Instead of the survey of underwater part of the hull described in 5.6.1.2, at PRS consent, the survey may be performed onboard the vessel afloat by PRS surveyors divers (see 5.6.3).

5.6.1.4 Occasional inspection of the underwater part of the hull shall be subject to the winter season icebreakers that participated in the action of ice breaking. Such an inspection should be carried out in a dock, at any time before the next winter season.

5.6.1.5 For vessels operated in the area **4**, the required inspection of the underwater part of the hull may be in each case with the consent of PRS carried out by PRS divers (see 5.6.3), instead of inspection in dry dock. In such case the intervals between such inspections should not exceed 2.5 years ± 6 months. These inspections should include the thickness measurements of the underwater part of the hull plating performed from the outside or from the inside.

5.6.2 Scope of the underwater inspection of the hull

5.6.2.1 Inspection of the underwater part of the hull for Class Renewal covers:

- **.1** examination of the bottom and side shell plating to the line of maximum draught, keel, stem, stern frame, propeller shaft brackets, Kort nozzle, thruster tunnel, means of corrosion protection;
- **.2** examination of the rudder blade ;
- **.3** measurement of clearance in the steering gear bearing and visual inspection during pivoting rudder blade. Depending on the results of measurements of the clearances in the bearings and examination rudder blade or parts of the rudder hangings may be need to be disassembled;
- **.4** survey of the propeller (see 5.7.2) and measurements of weardown and/or clearances in the aft stern tube bearing and tightness test of sealing glands;
- **.5** examination and measurements of other equipment associated with the movement and steering of the vessel ;
- **.6** thickness measurements of plating in the scope specified by PRS Surveyor depending on the technical condition of the hull ;
- **.7** examination of bottom and side sea chests, including valves and bottom plugs.

5.6.2.2 Inspection of the underwater part of the hull of the vessels listed in 5.6.1.3, 5.6.1.4 and 5.6.1.5, carried out during the review of the annual, intermediate or occasional survey covers:

- **.1** inspection of the hull and sea sides to the line of maximum draft, keel, stem, stern frame, propeller shaft brackets, Kort nozzle, tunnel thruster, means of corrosion protection;
- **.2** examination of the rudder blade;
- **.3** measurement of clearances in the rudder bearings;
- **.4** examination of the propeller and checking of fixing of nut;
- **.5** examination of other equipment associated with the movement and steering of the vessel;
- **.6** measurement of the shaft weardown/clearance in the aft stern tube bearings;
- **.7** tightness test of oil sealing glands.

5.6.3 Underwater inspection of hull on the water by a diver

5.6.3.1 Underwater inspection of hull afloat by a diver is performed at the Owner's written, reasonable request, with the consent of PRS. The application shall be accompanied by a statement of the Owner that:

– since the last inspection in the dry dock, the vessel has not been aground and had no failures in the underwater part of the hull,
– since the last inspection in the dry dock, there were no damages or blockages in the steering arrangement, shaftline, propeller and bow thruster (if any),
– an inspection will take place in water with good visibility (min. 0.5 m) and a sufficient depth (min. 1 m between the hull and the bottom of the basin), and the hull has been properly prepared and marked for inspection to enable clear identification of diver's position and possible damage.

5.6.3.2 Underwater inspection of the hull afloat is performed by PRS divers. In justified cases, PRS may agree to the inspection carried out by divers engaged by the Owner, provided that :

– the divers have been approved by PRS,

– examinations are monitored by the PRS Surveyor,
– the final assessment of the technical condition of the underwater part of the hull is made by the PRS surveyor.

5.6.3.3 The in-water inspection shall be so performed as to ensure as far as possible, information normally obtained from a dock survey (see 5.6.2.2). If fulfilling of the above requirements are not possible or inspection detects presence of significant corrosion or damage affecting the vessel class, the vessel must be submitted for inspection at the dock.

5.7 Periodical Surveys of Propeller Shafts and Propellers

5.7.1 Intervals and Scope of the Propeller Shafts Surveys

5.7.1.1 Propeller Shafts are subject to Complete Survey at intervals not exceeding 5 years. Such a survey should take place during the Class Renewal Survey

5.7.1.2 Complete Survey performed within 12 months prior to the due date of Class Renewal Survey may be credited to the Class Renewal Survey. In such a case, the next survey is determined from the date of class renewal.

5.7.1.3 Instead of Complete Survey a Modified Survey may be performed in case where:

.1 propeller shaft works in the lubricated with oil or grease aft bearing and meets the following conditions:
- shaft seals are of an approved type and are not older than 12 years,
- the propeller shaft and its fittings are not directly exposed to corrosion,
- details of construction of the shaft meet the requirements of the Rules;

.2 propeller shaft works in the lubricated with water aft bearing and meets the following conditions:
- the propeller shaft is made of stainless steel and works in a bearing of the plastic approved type,
- details of construction of the shaft meet the requirements of the Rules;

5.7.1.4 In case where Modified Survey has been carried out, the next survey of the shaft shall be carried out in scope of Complete Survey, so that the maximum interval between the two Complete surveys does not exceed 10 years.

5.7.1.5 Scope of Propeller Shafts Surveys

5.7.1.5.1 Complete Survey (performed after drawing the propeller shaft from the tube) covers:
– examination of the shaft journals and bearings,
– examination of the shaft after end (cone or flange);
– non-destructive tests for the shaft end,
– examination of the stern tube,
– measurements of weardown and/or clearances in the aft stern tube bearing,
– examination of sealing glands (if any),
– tightness test of sealing glands (if any).

5.7.1.5.2 Modified Survey covers:
– examination of accessible parts of the shaft after removing oil sealing glands (if any),
– examination of back part of the shaft (cone or flange);
– non-destructive tests for the shaft end,
– measurements of weardown and/or clearances in the aft stern tube bearing ,
– examination of sealing glands (if any),
– tightness test of sealing glands (if any).

5.7.2 Propeller Survey

Propeller Survey is performed during the Bottom Survey.

5.7.2.1 The survey covers:

- external examination;
- examination of propeller action (rotation),
- in the case of the propeller dismantling, close-up examination of the internal part of propeller boss;
- external examination of the propeller fastening to the shaft.

5.7.2.2 For controllable pitch (CP) propellers – additionally checking the correctness of propeller blade skew together with tightness test of the propeller blades sealing (if any). The dismantling of CP propeller is not required unless the Surveyor considers propeller inspection in a dismantled condition necessary.

6 SUSPENSION OF CLASS

6.1 General Information

Suspension of class means that there are interim, possible to cease to exist or be rectified shortly, conditions which preclude maintaining of class.

6.2 Reasons for Vessel's Class Suspension

6.2.1 Grounding, damage, failure

In any case of the vessel grounding, damage the hull, failure of machinery, installations or equipment covered by the requirements of the *Rules*, the Owner is obliged to immediately notify the PRS about the event as well as to agree with PRS the term of After Damage Survey and procedure for:

- determine the extent of damage ,
- determine the scope and schedule of repairs.

The vessel's class is automatically suspended from the time of damage occurrence until completion of After Damage Survey confirming elimination of class suspension reasons.

In justified cases, after receiving notification from the Owner and its review, PRS may decide that the vessel's class will not be suspended

6.2.2 Transgression of Service Conditions Specified in *Certificate of Class*

The Owner is obliged to inform PRS on every transgressing the service conditions specified in the *Certificate of Class* and PRS will make a decision on further proceedings. Transgression of service conditions, without PRS agreement, causes the vessel's class automatic suspension until completion of the occasional survey.

6.2.3 Overdue Periodical Surveys

The class is automatically suspended in the case when required Periodical Survey has not been completed by the due date.

The class will be reinstated upon satisfactory completion of the due survey.

The vessel is disclassed from the date of class suspension until the confirmation of validity of *Certificate of Class* /issue of *Temporary Certificate of Class*.

6.2.4 Overdue conditions of class

Each condition of class is assigned a due date for fulfilment.

Owners will be notified by PRS of these dates and that the vessel's class will be subject to suspension if the item is not dealt with, or postponed by agreement by the due date.

Suspension of class followed by a decision of the PRS Head Office.

The *Certificate of Class* validity will be reinstated upon PRS verification that the overdue conditions of class have been fulfiled.

The vessel will be disclassed from the date of class suspension until the conditions of class are fulfiled.

6.2.5 Owner's Financial Overdues

If the Owner has not paid PRS for its services connected with the vessel survey at the agreed date, the vessel's class may be suspended. Notice of PRS intent to suspend the class will be sent to the Owner one

month in advance. Suspension of class follows by a decision of the PRS Head Office. The class will be reinstated automatically after settlement of payments.

6.2.6 Change of Owner/Operator

To maintain class validity, a written notification of the intended change of the Owner/Operator shall be submitted to PRS.

This change requires the issue of a new *Temporary Certificate of Class* on the basis of the registration document submitted by the Owner.

Failure to meet this condition causes that the *Certificate of Class* issued with the name and address of the previous owner/operator of a vessel loses its validity, and the class shall be automatically suspended.

6.3 Notification to Owners and Flag States

PRS will confirm the suspension of class and reinstatement of the vessel's class by separate letters to the Owner and to the Flag State.

7 WITHDRAWAL OF CLASS

7.1 Reasons for Vessel's Class Withdrawal

7.1.1 Introduction of alterations to hull, superstructures and deckhouses, machinery, equipment and installations, covered by the requirements of the *Rules*, without the prior agreement with PRS. After introduction of such changes, vessel's class is withdrawn automatically.

7.1.2 Suspension of class for a period exceeding 6 months.

PRS Head Office makes decisions about the withdrawal of class after confirming that the Owner does not intend, in the near future, to carry out the Survey for the class reinstatement.

7.1.3 The vessel has sunk.

7.1.4 The vessel has been transmitted for scrapping.

7.1.5 The written request of the Owner for the vessel withdrawal from PRS *Register of Inland Waterways Vessels*..

7.2 Withdrawal of Vessel from PRS Register

Withdrawal from PRS *Register of Inland Waterways Vessels* is consequent upon the ship's class withdrawal for reasons specified in 7.1.

7.3 Notification to Owners and Flag States

PRS will confirm the withdrawal of the vessel's class and the vessel's deletion from PRS *Register of Inland Waterways Vessels* by separate letters to the Owner and to the Flag State.

List of amendments effective as of 1 July 2020

Item	*Title/Subject*	*Sourceo*
various items	Substitution of the term "recommendation" by the term "condition"	IACS decision
3.4.8	Additional marks of vessel…	PRS

List of amendments effective as of 1 October 2020

Item	*Title/Subject*	*Sourceo*
3.4.1.5	Assignment additional marks from other PRS rules in the symbol of class of small sea-going ships and inland waterway vessels.	PRS