

On approval of the Rules for technical supervision of small decked boats

Unofficial translation

Order of the Minister for Investment and Development of the Republic of Kazakhstan dated September 24, 2018 № 669. Registered with the Ministry of Justice of the Republic of Kazakhstan on October 26, 2018 № 17615.

Unofficial translation

In accordance with subparagraph 55-26) of paragraph 3 of Article 4 of the Law of the Republic of Kazakhstan dated January 17, 2002 "On merchant shipping" and subparagraph 26-28) of paragraph 1 of Article 9 of the Law of the Republic of Kazakhstan dated July 6, 2004 "On inland water transport", **I ORDER**:

- 1. To approve the attached Rules for the technical supervision of decked small boats.
- 2. To declare invalid the order of the acting Minister for Investment and Development of the Republic of Kazakhstan dated April 17, 2015 No. 458 "On approval of the Rules for technical supervision of small decked boats" (registered in the Register of the state registration of regulatory legal acts No. 11351, published July 10, 2015 in the legal information system "Adilet").
- 3. The Transport Committee of the Ministry of Investments and Development of the Republic of Kazakhstan, in accordance with the procedure established by the legislation, to ensure:
- 1) the state registration of this order at the Ministry of Justice of the Republic of Kazakhstan;
- 2) within ten calendar days from the date of the state registration of this order, its sending in the Kazakh and Russian languages to the Republican state enterprise on the basis of the right of economic management "Republican Center for Legal Information" for official publication and inclusion in the Reference Control Bank of regulatory legal acts of the Republic of Kazakhstan;
- 3) the placement of this order on the Internet resource of the Ministry for Investment and Development of the Republic of Kazakhstan;
- 4) within ten working days after the state registration of this order in the Ministry of Justice of the Republic of Kazakhstan, the submission of the information to the Legal Department of the Ministry of Investment and Development of the Republic of Kazakhstan on the implementation of measures, in accordance with subparagraphs 1), 2) and 3) of this paragraph.
- 4. Supervising vice minister for investment and development of the Republic of Kazakhstan shall be authorized to oversee the implementation of this order.

5. This order shall come into force ten calendar days after its first official publication.

Minister for investment and development of the Republic of Kazakhstan

Zh. Kasymbek

" A G R E E D
Ministry of national economy of the
Republic of Kazakhstan
" " 2018

Approved by the order of the Minister for investment and development of the Republic of Kazakhstan dated September 24, 2018, № 669

The Rules for the technical supervision of small decked boats

Chapter 1. General provisions

- 1. These Rules for the technical supervision of small size decked boats (hereinafter referred to as the Rules) shall be developed in accordance with subparagraph 55-26) of paragraph 3 of Article 4 of the Law of the Republic of Kazakhstan dated January 17, 2002 "On merchant shipping" and subparagraph 26-28) of paragraph 1 of Article 9 of the Law of the Republic of Kazakhstan dated July 6, 2004 "On inland water transport" and shall determine the procedure for the technical supervision of small size decked boats.
- 2. These rules shall apply to small size decked boats that are subject to the state registration in the ship's book.
 - 3. The following terms shall be used in these Rules:
- 1) small size decked boat a small size boat with a horizontal waterproof deck grillage from the bow to the stern of the decking and a set in the hull of the boat, supported by the boards, bulkheads and pillars;
- 2) Ship register the republican state-owned enterprise for classification and provision of the technical safety of vessels, small size decked boats, established by the decision of the Government of the Republic of Kazakhstan;
- 3) technical supervision the activities of the Ship register to certify the small size decked boats;
- 4) certification an inspection of the boat in order to determine its technical condition in accordance with the requirements, established by the technical regulations and rules of the Ship register, aimed at ensuring the safety of navigation of the boat, taking into account its purpose and class confirmation;
- 5) Inspection certificate of the small size decked boat a document, issued by the Ship register and containing the results of the certification;

- 6) a distance to the harbor the maximum allowable distance in kilometers (hereinafter km), which is measured along the shortest navigationally safe route from a point on a route chosen for navigation by a ship, to the nearest available port or harbor;
- 7) a harbor naturally or artificially protected water area, which is used by the boat as a shelter in the event of circumstances that threaten its safety;
- 8) wave height of 1% security (h1%) the wave height characterizing the irregular wave mode, in which, during the continuous long-term observation, 1% of the actual waves have a height greater than the specified one;
- 9) wave height of 3% security (h3%) the wave height characterizing the irregular waves mode, in which, during the continuous long-term observation, 3% of the actual waves have a height greater than the specified one.

Chapter 2. Procedure for technical supervision

- 4. Technical supervision shall be carried out on the basis of the application of the ship-owner in the form, according to Annex 1 to these Rules.
- 5. According to the results of technical supervision, the Ship register shall issue an act of certification of a small size decked boat to the ship-owner.
 - 6. Technical supervision shall consist of the following steps:
 - 1) initial certification;
 - 2) re-certification;
 - 3) extra-ordinary certification.
 - 7. The initial certification shall be conducted on shore or afloat.

When registering the boat in the Ship register before its state registration, the boat shall undergo an initial certification to confirm the actual compliance of the boat with the information about it, indicated in the title documents.

During the initial certification, the functionality and operability of the ship's technical equipment, technical documentation on the boat shall be checked, conditions and technical requirements for its carrying capacity and passenger capacity, permissible power and number of engines (outboard motors), permissible sail area, navigation area (distance from the coast), the minimum height of the freeboard, the allowed height of the wave, the rescue and fire-fighting equipment, signal lights, navigation and other equipment shall be established.

- 8. The small size decked boat, submitted to the initial certification for the purpose of registration, shall be staffed with rescue and other supplies, in accordance with Annex 2 to these Rules (hereinafter referred to as Annex 2).
- 9. Re-certification shall be held no later than 5 (five) working days before the due date of the initial certification, specified in the Act.

Re- certification shall be carried out afloat

If as a result of the certification of the small size decked boat it is established that its characteristics do not correspond to the title documents or the technical condition of the boat does not meet the navigation safety requirements, the revealed non-conformities shall be indicated in the certification Act. After elimination of the revealed discrepancies, the applicant shall notify in writing the Ship register, which conducts an extraordinary certification of the boat.

- 10. Extraordinary certification shall be carried out:
- 1) after damage, without the elimination of which, the boat navigation safety is not ensured;
- 2) in case of detection of defects that threaten the navigation safety, and when clarifying the technical condition or area of the boat navigation, as well as to verify the elimination of the reasons that caused the suspension of the Classification certificate;
- 3) after repair or modernization of small-size boats without changing the type, purpose and class (category) of the boat, but with a significant change in its design and (or) equipment :
- 4) for boats that have violated the navigation area or seasonal restrictions, established by the certification acts;
 - 5) by the order of the state supervision (control) bodies and its officials;
 - 6) when registering and removing the boat from the classification register;
- 7) in the preparation and after the conduct of a one-time transfer (trip) of the boat outside the areas and seasons of navigation, established for the boat;
 - 8) at the initiative of the ship-owner.
- 11. A small size decked boat shall be subject to wind speed limits, determined by the designer in the design and operational documentation (specifications, user manual and other documentation).

Certification of boats, except for the calls in case of emergency, shall be carried out based on preliminary applications, sent to the Ship register at least 10 (ten) working days before the certification.

- 12. Before each certification, an employee of the Ship register shall study the results of previous certifications and receive information from the ship-owner on elimination of defects, identified after a previous certification (test) of the boat and its elements.
- 13. Certifications of the boat and its elements shall be carried out in the presence of the ship-owner or the person, responsible for these elements of the boat.
- 14. According to the results of the certification, the suitability of the boat for transportation of a number of passengers, declared by the ship-owner shall be determined by the general location of the seats for accommodation of people on board, the availability of rescue equipment and other requirements of these Rules.

Paragraph 1. General requirements for certification of the hull

- 15. The hulls of small size decked boats, made of steel, light alloys, plastics (fiberglass, multilayer compositions) and wood shall be subject to certification.
- 16. When certifying the hull, the technical condition of deck-houses, cockpits, hatches and openings, guard rail and nets shall be checked.
- 17. The open decks of the boats the length over 12 (twelve) meters, to which people have access, shall be provided with durable bulwarks or guard rails.

On the boats with a length of less than 12 (twelve) meters, in this case, the installation of a handrail around the perimeter of the superstructure or deck-house shall be allowed.

On self-propelled boats, operated without crews, a guard rail in the area of the cargo hold and cargo bunker may be replaced with a lock bar and a handrail at the cargo hatch coaming or the wall of the cargo bunker.

- 18. Separate zones of open decks of superstructures and deck-houses, designed to accommodate and host people (solar zones), shall be provided with additional fences, or a reliable fixation of a person in a static position during the trip.
 - 19. Constructive fire protection shall be:
 - 1) equipped with fire extinguishers in accordance with table 1 of Annex 2 to these Rules;
- 2) provided with free access to fire extinguishers, with at least one fire extinguisher within the reach of the person running the small size boat;
- 3) provided with the reliable means of evacuation in case of fire of inhabited small size boats;
- 4) provided with the natural or forced ventilation of engine compartments, enclosures with fuel tanks (tanks) and rooms with gas-powered equipment;
- 5) provided with an anti-fire plan, indicating the location of the main and additional extinguishing means and evacuation routes, for the boats longer than 6 (six) meters;
 - 6) placed by the nodes of the fuel system on the side opposite to the exhaust manifold;
- 7) ensured by the presence of a tightly closing impenetrable metal box for the storage of shipboard pyrotechnic equipment.
- 20. On the small size decked boats with a length of more than 12 (twelve) meters, the rooms for internal combustion engines shall be enclosed by impenetrable bulkheads.
- 21. On the small size decked boats suitable for transportation of passengers, displacement vessels and on the vessels with dynamic principles of supporting of all classes and categories, the furniture and equipment shall be securely fixed.
 - 22. Certifications shall include the inspection of:
 - 1) hull waterproof integrity;
 - 2) presence and location of bulkheads (for multihull vessels);
 - 3) the volume and location of cockpits and recesses; the location of hatches and closures;
 - 4) metacentric stability;

- 5) the absence of defects in the hull and superstructures, referred to in paragraph 27 of these Rules.
- 23. For the certification, the boat shall be set in a state providing access to the inspection sites. The ship-owner shall present the boat with a clean, dried hull and hold space.
- 24. The technical condition of the hulls shall be determined by the degree of wear of their main connections, the presence of deformations and other damages that reduce the overall and local strength of the hull.
- 25. Regardless of the material the hull is made of, the technical condition of the boat's hull shall be considered unsuitable in the following cases:
- 1) there is a general residual deflection (bend) of the hull, with gaps, cracks, loss of stability of the beams of the longitudinal set and their brackets, cargo hatch coamings, folds of the decking, bottom plating, boards or other signs of the emerging breakage;
 - 2) the boat is in a submerged state;
- 3) there are cracks, holes in the hull plating, in a waterproof deck, in bulkheads, chipped hull plating;
- 4) presence of delamination of the plating, the detachment of the molding-on from the plating, violating the impermeability, cracks in the plating of plastic hulls is revealed;
 - 5) the integrity of hermetic bulkheads is broken;
- 6) the pressurized compartments, air boxes and buoyancy blocks provided for by the construction are missing or depressurized;
 - 7) air boxes and pressurized compartments are not tightly closed;
- 8) the presence of defects in the transom board or non-compliance of its dimensions with the manufacturer's data is revealed;
- 9) when damage is found in the connections of the structural elements of the hull in welding, riveting, gluing, nailing and other connections (there are ungluing and cracks in the seams, lack of penetration, falling out of the seams, loss or weakening of rivets, nails and bolted connections);
- 10) there is a destruction or absence of the mounting to the hull (bolts, studs, nuts, rivets and welds), proposed by the design, including the absence of locking devices on the threaded connections of false keels, fins, stern and helmport pipes;
 - 11) upon detection of water leakage;
- 12) in case of malfunction of protection equipment of the crew and passengers, closure of openings;
- 13) the presence of visible damage to the hulls of small-size boats, made of plastic and bakelized plywood (knuckling, cuts, abrasions, repair marks below the waterline), which can lead to water leakage;
- 14) the presence of wormholes, rottenness of elements of the hull of a wooden small size boat.

Paragraph 2. Requirements for certification of steel hulls

- 26. The average residual thicknesses of the main groups of connections for the boats longer than 6 (six) meters shall be given in table 2 of annex 2 to these Rules.
- 27. Local residual deformations of structures of steel hulls shall be given in table 3 of annex 2 to these Rules.
 - 28. The technical condition of the hull shall be deemed unsuitable in the following cases:
- 1) in case of wear and tear of connections, exceeding the average residual thicknesses indicated in table 2 of annex 2 to these Rules;
- 2) in the ratio f/l, exceeding 0.1, where f is the maximum sag of the dent, and l is the minimum chord of the dent;
- 3) the values of the sags of embossing and cambers exceed the local residual deformations , indicated in table 3 of Annex 2 to these Rules.
 - 4) wear of the welds to a depth below the surface of the joined sheets was detected.

Paragraph 3. Requirements for certification of light alloy hulls

- 29. The average residual thicknesses of the main groups of connections shall be given in tables 2 and 4 of Annex 2 to these Rules.
- 30. Local residual deformations of the structures of light-alloy hulls shall be given in table 3 of Annex 2 to these Rules.
 - 31. Technical condition of the hull shall be deemed unsuitable in the following cases:
- 1) the ratio of the sag of a dent to its smallest amount in terms of f / l exceeds 0.05 and 0.07 for the hulls, made of duralumin and aluminum-magnesium alloys, respectively;
- 2) the maximum sags of embossing exceed 0.03 and 0.05 of the distances between the beams of the ship's set for duralumin and aluminum-magnesium alloys, respectively;
- 3) the maximum sags of cambers exceed 0.05 and 0.07 of the distance between the beams of the ship's set for duralumin and aluminum-magnesium alloys, respectively;
 - 4) weakening of riveted connections resulted in the breakdown of impermeability;
- 5) the total width of the sheets of outer plating and floorings of decks subject to intergranular and film corrosion (typical gray coating, honeycomb corrosion, bulging and spilly metal) exceeds 0.2 of the width of the main groups of connections in this section.

Paragraph 4. Requirements for certification of plastic hulls of boats

- 32. Certification of the hull made of plastics, in addition to paragraph 22 of these Rules shall include the check of:
 - 1) water leakage;
 - 2) absence of cracks, osmotic bubbles, exfoliation of cover;
 - 3) absence of chips, cracks of the decorative layer, covering cracks;

4) absence of cracks, separation of the moulding-on.

Paragraph 5. Requirements for certification of wooden hulls of boats

- 33. Certification of the wooden hull, in addition to paragraph 22 of these Rules, shall include the verification of the absence of the following defects:
- 1) rotting, cracks, delamination in the outer plating, set, areas of the sand strake, areas of connection to the stems, shaft bossing, helmport, outboard openings, cisterns, transom, deck flooring, waterway, cabin coamings, cockpit, manholes, cockpit well;
 - 2) wood borers, mechanical wear (abrasion), chips in the outer plating and deck flooring.
- 34. The technical condition of the wooden hull shall be deemed unsuitable in the following cases, in addition to paragraph 27 of these Rules:
- 1) there are exfoliation of plating, cuts, knuckling of plywood sheets, weakening of connections (falling out or weakening in screw nests) that violate impermeability;
 - 2) cracks appeared on the plating and the set;
- 3) the presence of wormholes, areas of rotting was established; rotting of the wood plating down to the depths is recorded, at which, the thickness of the plating belts left after the rot has been removed, is less than the thickness, determined subject to the allowable wear;
- 4) wear of heads of metal fasteners is more than 1/3 of their height and a decrease in the diameter of bolts (nails) is more than 0.1 of the original diameter.

Paragraph 6. Assessment of stability, unsinkability, maneuverability. Testing

- 35. When checking the stability, unsinkability, maneuverability of small size boats, the seaworthiness (buoyancy, stability and unsinkability) shall be tested.
- 36. Unsinkability of small size decked boats shall be provided by one of the following ways:
 - 1) dividing the hull into waterproof compartments;
 - 2) installation of buoyancy elements (air boxes) in the hull.
- 37. When testing the maneuverability of a small size decked boat, one should be guided by the operational technical documentation of the boat.

Paragraph 7. General guidelines for certification of mechanisms

38. Tests of main and auxiliary engines, including gasoline ones, installed on small size decked boats, gearboxes, reversible gears, disconnecting and other couplings, shaft lines and propulsion devices, compressors, pumps, fans, separators and deck mechanisms (hereinafter referred to as the mechanisms) shall be carried out with all standard devices, units, remote

and automatic control devices and alarms. Certification and testing in action of automation equipment shall be carried out in conjunction with the mechanisms, devices, systems to which this equipment belongs.

39. Mechanisms for certification and testing in action shall be presented in good condition , except for the certifications, related to the forthcoming or ongoing repairs and emergency cases.

Prior to the certification, an employee of the Ship register shall study the available documents (drawings, descriptions, diagrams, forms, passports, manuals (instructions) for operation and maintenance, conclusions of specialized organizations for technical (service) maintenance of mechanisms).

40. When certifying the engines (including outboard ones), produced outside the Republic of Kazakhstan, the documents issued by the specialized organizations for their technical (service) maintenance, reflecting the technical condition of the specified engines, shall be recognized. The validity of these documents shall be set by the engine manufacturers or specialized organizations for technical (service) maintenance.

The operational documents supplied with the boat, shall indicate information of the manufacturer on the gasoline engines approved for installation on the boat, as well as their technical characteristics and locations for equipment placement, containing gasoline (engines, gas tanks, pipelines, fittings).

It shall not be allowed to install equipment containing gasoline in the compartments of the boat not intended for this purpose.

- 41. When conducting certifications, attention shall be paid to the inspections of:
- 1) fuel system (pipelines, fittings, fuel tanks);
- 2) the presence and serviceability of the silencer;
- 3) operability of the engine remote control system (if it is provided for by the design);
- 4) easy turning on (off) of the reverse gear on various navigation modes, fixing the reverse handle in the "forward", "reverse" and "neutral" positions, excluding the possibility of spontaneous activation or deactivation of the reverse;
- 5) operability of blocking the start of the engine (motor) when the reverse is on, if it is provided for by the design;
 - 6) the absence of backlash or propeller shaft (screw);
- 7) the absence of significant vibration during operation of the engine (motor), which can lead to the appearance of cracks in the engine parts, the foundation, in the connections and pipelines of the systems and hull elements.
- 42. The scope of the initial certification of mechanisms shall be established depending on their operating time, technical condition, availability of technical documentation.
- 43. When conducting a re-certification of mechanisms, the following checks and tests shall be performed:
 - 1) verification of the operational documentation of mechanisms;

- 2) inspection of mechanisms in accessible places and checking them in action in various modes;
- 3) checking in action on various modes of the main and auxiliary engines, shaft lines, systems and their servicing devices, as well as means of communication of the engine room with the wheelhouse (if any, according to the design of the boat);
- 4) verification of compliance of the operating parameters of engines, the values of which do not exceed the limits established by the manufacturer;
- 5) checking the operability of remote automatic control (remote control), correctness and accuracy of execution of all set commands for starting, changing rotation rate and reversing of engines;
- 6) checking the operation of emergency stop devices of the main and auxiliary engines from the ship control station (wheelhouse);
- 7) checking of automatic alarm systems (emergency warning of main and auxiliary engines, signaling the presence of bilge water, bilge waters and others) and instruments for monitoring and protecting the main and auxiliary engines.
- 44. When carrying out an extraordinary certification of mechanisms in addition to the checks and tests, specified in paragraph 46 of these Rules, the following shall be performed:
- 1) verification of the documents, submitted by the ship-owner, reflecting the results of defecation of mechanisms, or verification of documents on the maintenance in the specialized organizations;
 - 2) checking the technical condition of the thrust, intermediate and propeller shafts (if any)
- 45. The employee of the Ship register shall establish the scope of inspections, measurements and the associated opening, disassembling and dismantling of mechanisms in each case, taking into account the design, operating manual, service life, operating time, results of a previous certification, previous repairs and replacements, and also the values of the operating parameters of the engines.
- 46. Based on the results of inspections, measurements and tests reflected in the documents submitted by the ship-owner and sampling control, the Ship register employee shall determine the technical condition of the mechanisms, guided by the criteria for determining their technical condition, specified in paragraphs 44 and 68 of these Rules.
- 47. The technical condition of the mechanisms shall be established based on the results of the certification, using previous acts of the certification and information on the revealed wear, defects, malfunctions and repairs and replacements made in accordance with the documentation, submitted by the ship-owner.

Permissible parameters of wear, defects and malfunctions of structures, components and parts shall be determined by the design documentation, instructions and forms of the organizations - manufacturers and the instructions of these Rules.

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The technical condition of the mechanisms shall be recognized as suitable if they are in an operational condition and no excess of permissible wear and defects has been identified.

- 48. The technical condition of the mechanisms shall be considered unsuitable under the following criteria:
- 1) exceeding permissible wear and tear, defects in assemblies and parts, non-fulfillment of technical (service) maintenance in the volumes and terms regulated by the operational documentation of the manufacturer;
- 2) deviations of the operating parameters of the engines beyond the limits established by the manufacturer;
- 3) gas passes through the seals of the heads of blocks, nozzles, starting valves and other fittings and gas breakthrough into the engine crankcase and engine room, destruction, cracks, through honeycombs or chipping in the cylinder covers and cylinder bushings;
 - 4) leakage of the gas discharge system;
 - 5) malfunctioning or uncalibrated measurement instrumentation.

Paragraph 8. Additional requirements for boats suitable for passenger transportation

- 49. Inspection of the compliance of mechanisms, fuel tanks and pipelines serving them, used on the boat, with its intended purpose.
- 50. Inspection of the functioning of the starter device. If a battery is used as such a device, it is possible to recharge it.

Paragraph 9. General guidelines for certification of general ship systems

- 51. This paragraph shall apply to the following general ship systems:
- 1) drainage;
- 2) fire fighting water, carbon dioxide, aerosol (if any);
- 3) ventilation;
- 4) air conditioning and heating of premises, drinking water;
- 5) industrial water, sanitary flushing system;
- 6) bilge water collecting.

All systems shall be checked in action. Testing shall be performed using all standard pumps, compressors, remote drives and signaling devices.

- 52. When certifying an anti-fire system, the pressure in any fire cock with maximum water flow shall be checked.
- 53. When certifying the aerosol extinguishing system, its serviceability shall be established on indication on the control display and signaling panel, and the operability shall be checked by a simulation method. Also the reliability of fastening equipment shall be controlled.

54. When certifying the hydrocarbon fire fighting system, its performance shall be checked with compressed air.

The presence of carbon dioxide in the cylinders shall be checked by the act of weighing submitted by the ship-owner. At the same time, the permissible deviation of carbon dioxide mass in cylinders should not exceed 10% of that provided for by the project or installation instruction manual.

- 55. When certifying fire-fighting systems, the fire alarm system shall be checked in action
- 56. The drainage system shall be checked in action by test pumping of water from the hull compartments.
- 57. When certifying the ventilation system, it shall be checked in action by starting and stopping from the control stations. Special attention shall be paid to the verification of the ventilation system in the premises in which there is a domestic unit of liquefied gas (stove), and in the premises (enclosures) in which the cylinders are stored.
- 58. The technical condition of the system shall be recognized as valid if the system functions correctly, no leakages of working media have been detected, and the measurement instrumentation is in good condition.
- 59. The technical condition of the elements of the systems listed in paragraph 54 of these Rules shall be deemed unsuitable if:
 - 1) destruction, cracks, through honeycombs in the hulls are identified;
- 2) fractures, cracks, scuffs in the details of movement, bearings, connecting and friction couplings are identified;
- 3) weakening of fastening elements of the systems to the foundations, increased vibration are identified;
 - 4) extraneous noise during operation of the units is identified;
- 5) destruction of the walls and insulation of pipelines, leakage of working media through the pipeline connections, wear of stuffing box seals, improper functioning of valves are identified.

Paragraph 10. Certification of general ship systems

- 60. During the certification, the availability of maintenance documentation for the equipment included in the systems and test reports shall be checked.
- 61. The scope of the certification of systems shall be set depending on the service life of the boat, the technical condition of its elements, the availability of technical documentation and shall be carried out in the amount not lesser than the volume of the next certification.
 - 62. The scope of the certification shall include:
 - 1) external examination of systems in accessible places;
 - 2) verification of all systems in action;

3) inspection of operability of the drinking water system. The results of tests and laboratory tests shall be stored on the boat.

Paragraph 11. Determination of technical condition of general ship systems

- 63. The technical condition of the systems shall be established based on the results of the certification and testing of their elements (pumps, compressors, separators, fans, heat exchangers, filters, pipelines and fittings), using previous certification acts and information on the revealed wear and tear, defects, repairs made and replacements under the boat documentation.
- 64. Wear and defects of system elements shall be established in accordance with the design documentation, instructions and forms of the organizations- manufacturers, and the instructions of these Rules.
- 65. The technical condition of the systems and their elements shall be deemed unsuitable if the wear and defects exceed the standards, established in the documents of the organizations manufacturers.

Paragraph 12. General guidelines for certification of ship devices and supplies

66. The certification of ship devices (steering, steering up, anchor, towing, mooring, boat-handling, turning of false keels and fins), rescue and signal means, fire-fighting, navigation and emergency supplies, lifting devices shall be performed simultaneously with the certification of the hull. Ship devices shall be checked in action in the completed state using standard instruments.

The ship-owner shall provide information on the wear and tear identified in action, damage and defects, repairs and replacements made.

Verification of the actions of ship devices, after repairs with the replacement of elements, shall be carried out at mooring and, if necessary, at sea trials of the boat.

- 67. The composition of the anchor supply of small size boats shall be allowed to be determined using the generally accepted standards given in the technical literature and regulatory documents.
 - 68. Evaluation criteria for the certification of the steering gear shall be:
- 1) the possibility of shifting the steering wheel from side to side within at least 35°, for an outboard motor at least 30°.
 - 2) no sticking during the rotation of the handwheel;
- 3) availability of information about the position of the steering wheel with respect to the diametrical plane using the set pointer at the helmsman's seat, if the small size boat is equipped with a remote steering system;
 - 4) the absence of breaks in cable yarns in steering rope;

- 5) no damage to the steering wheel and steering gear parts; availability of emergency boat control device at low speed, when equipping a small size boat with remote steering system.
- 69. The basis for assessing the technical condition of the anchor and mooring-towing device as "unsuitable" shall be the non-compliance with at least one of the following requirements:
 - 1) a decrease in the mass of the anchor due to corrosive wear by more than 20%;
 - 2) the wear of the links of the anchor chain by more than 10% of the original diameter;
- 3) the number of wire breaks of the steel anchor cable by more than 10% of their total number in any place on the length of 8 (eight) diameters.

Paragraph 13. Certification of ship devices and supplies

- 70. During the certification, the availability of accompanying documentation for ship devices, supplies and test reports shall be checked.
- 71. The scope of the certification of ship devices and supplies shall be set depending on the service life of the boat, the technical condition of its elements, the availability of technical documentation.

Paragraph 14. Re-certification of ship devices and supplies

72. When certifying the steering gear, the steering gear, the steering rope, roller wiring, tiller, sector, buffer springs, steering stops (nozzles), hydraulic cylinders, pumps, pipes and fittings of hydraulic drives, as well as other parts that are available for inspection, shall be inspected.

The steering device shall be checked in action when the main engines are stopped and operating in different modes. The main steering gear should be checked by re-steering the steering wheel from side to side, the spare steering wheel - by transferring the steering wheel from side to side with the main engines operating, corresponding to the ship's forward speed equal to 60% of the maximum. At the same time, the accuracy of the axiometer indications shall be checked.

The main and spare steering gears should be checked in action from both the main and emergency power sources.

A steering propeller should be checked in action.

- 73. When inspecting the anchor device, the mass of the anchor shall be examined, as well as the caliber (diameter) and length of the chains (anchor cables) for compliance with its design.
- 74. The boat device and the boats shall be tested by lowering and lifting the boats, the completeness of the supply of the boats shall be checked.

75. When inspecting a towing device, it is necessary to check the condition of the towing hook, tow rope, towing bollards, the reliability of their attachment to the ship's hull and the condition of the restraining devices.

The mobility of the towing hook with a rope fixed on it, the recoil of the towing rope from the hook, the device of the remote recoil of the hook from the wheelhouse, the work of the towing winch to select and etch the rope from the remote and local control stations, disconnection of the cylinder from the self-braking drive and free wireline slippage, work of mechanisms, brakes and electrical winches shall be checked.

- 76. When inspecting signal devices, the conformity of the alarm-side lanterns, sound and pyrotechnic means shall be checked. Lanterns and sound tools shall be checked in action.
- 77. When inspecting ship supplies, it is necessary to check the compliance of the rescue, navigation, emergency and fire supplies with the standards, established in paragraphs 19-22 of these Rules. The technical condition of the supply should be checked by an external inspection.

Paragraph 15. Certification of ship devices and supplies

- 78. Prior to the certification, an employee of the Ship register shall study the documents, submitted by the ship-owner, reflecting the technical condition of the ship's equipment and supplies.
- 79. On the slip, in the dock or on a ship ashore, the condition of the elements of the devices located in the underwater part of the hull shall be checked.
- 80. Each metal rescue device shall be tested for impermeability, and each plastic rescue device shall be tested for buoyancy.

The boat, which has been repaired with the replacement of critical elements (plating, keel, planshire), shall be subjected to additional strength testing.

After testing, the rescue device shall be stamped with the date of testing.

Paragraph 16. Determination of technical condition of ship devices and supplies

- 81. The technical condition of shipboard equipment and supplies shall be determined based on the results of the certification, using previous certification reports and information on the detected wear, defects, damage, malfunctions, repairs made and replacements under the documentation submitted by the ship-owner.
- 82. Wear and defects of ship devices and supplies shall be established in accordance with the design documentation, instructions and forms of the organizations –manufacturers.
- 83. The technical condition of ship devices and supplies shall be deemed fit, if during their certification no excess of wear and defects are detected, the devices are in working condition, and the supplies comply with the standards established in these Rules.

- 84. The technical condition of ship devices and supplies shall be considered unsuitable by the following criteria:
- 1) unacceptable wear, defects or malfunction of devices, their mechanisms and structures are detected;
 - 2) incomplete ship supply;
- 3) if the values of the gaps in the gel-port sleeves exceed the norms, specified in the design documentation. In the absence of the corresponding instructions in the design documentation, it is necessary to use the requirements, provided for in Annex 2 to these Rules

Paragraph 17. Certification of the furniture of small size decked boats

- 85. The evaluation criteria for certification of the furniture shall be made in accordance with the requirements of the passport data of the small size decked boat.
- 86. The requirements, specified in the passport data shall be mandatory, and if any of them fail to comply, the condition of the boat by the furniture shall be rated as "unsuitable".

Paragraph 18. Certification of domestic heating systems of small size decked boats

87. Before each certification of domestic heating systems, an employee of the Ship register shall study the results of previous certification and receive information from the ship-owner on elimination of defects identified after a previous certification of domestic liquefied gas installations, galleys, galley stoves, heaters and stoves.

The requirements of this paragraph shall not apply to portable heating appliances.

- 88. During the certification, the presence of maintenance documentation for domestic heating installations and their equipment parts (passports, forms, certificates, test reports) shall be checked.
- 89. Re-certification of domestic heating installations shall be carried out simultaneously with the certification of the systems serving them. During the certification, the operation of the installations as a whole and the results of testing of all gas connections of domestic liquefied gas installations by sealing them with soapy water shall be checked. The availability of information about the timing and volume of the maintenance of domestic heating installations, as well as the acts of inspections and tests with the conclusion of a specialized organization about the operability of domestic liquefied gas installations shall be checked.

Paragraph 19. Determination of technical condition of domestic heating installations of small-size decked boats

90. The technical condition of domestic heating installations shall be deemed unsuitable in the following cases:

- 1) gas consumers are not equipped with automatic gas cut-off devices or the indicated devices are not operational;
 - 2) a leak in the gas pipeline connections has been detected;
 - 3) the rooms in which gas equipment is installed are not equipped with ventilation.

Paragraph 20. Certification of electrical equipment of small size decked boats

- 91. Testing of electrical equipment in action shall be carried out with all standard devices, apparatus, remote and automatic control devices, alarms and protection.
 - 92. During certification, the following shall be checked:
 - 1) reliable fastening of batteries and their protection against water invasion;
 - 2) insulation resistance;
- 3) operability of the ventilation system, eliminating the possibility of accumulation of gases released from batteries;
- 4) waterproof production of alarm and side lanterns, lamps, plug connectors and switches located outside the hull of the small size decked boat;
 - 5) reliable fastening and cable integrity.
 - 6) the presence of protective grounding of metal enclosures of electrical equipment;
- 7) the presence and serviceability of fences that protect against contact with uninsulated current-carrying and open moving parts;
- 8) protection of electrical equipment from mechanical damage and ingress of water, steam, fuel and lubricating oil;
 - 9) compliance with fire prevention measures when installing electrical equipment;
 - 10) the presence and serviceability of a lightning arrester;
 - 11) the measurement results of the insulation resistance of electrical equipment.
 - 93. When inspecting the batteries the following shall be checked:
 - 1) operability of batteries and reliability of their fixing;
 - 2) the work of a battery when recharging;
 - 3) the operation of the charger at all stages of the charging current.
- 94. With regard to electrical equipment for domestic, household and technological purposes the following should be checked:
 - 1) cable routes from the source of electrical energy to equipment;
 - 2) protective devices;
 - 3) insulation resistance;
 - 4) protective grounding.
- 95. When conducting the certification, all consumers should be supplied from ship sources of electrical energy.

In coordination with the Ship register, it shall be allowed to conduct certification when supplying ship consumers from onshore sources of electricity that have proper parameters.

Paragraph 21. Determination of technical condition of electrical equipment

- 96. Determination of the technical condition of electrical equipment shall be carried out according to the results of the certification, using previous acts of the certification and information about detected wear, defects, malfunctions and repairs and replacements under the documentation, submitted by the ship-owner (fault detection reports, test reports, measurement results, forms, logs).
- 97. The technical condition of electrical equipment shall be deemed fit, if it is in working condition, the insulation resistance is normal.
 - 98. The technical condition of electrical equipment shall be deemed unsuitable if:
- 1) insulation resistance is lower than the permissible values specified in table 5 of annex 2 to these Rules;
- 2) there are wear and defects, the parameters of which exceed the ones allowed by the technical conditions or the organization- manufacturer;
- 3) voltage regulators, switching devices, protection, control and alarm systems of power station generators are out of order;
 - 4) cable insulation is damaged (chipping, corroding, buckling);
 - 5) emergency sources and consumers of electrical energy are out of order.

Paragraph 22. Certification of radio communications and navigation equipment

- 99. When certifying radio and navigation equipment the following should be checked:
- 1) availability of operational documents;
- 2) fixing of equipment and antennas;
- 3) compliance with the drawings of brands and cable sections;
- 4) the condition of the outer plating of cables;
- 5) cable reserve before connection to the equipment;
- 6) the continuity of screening of the power cable network and radio frequency cables;
- 7) grounding of cable network enclosures, radio equipment enclosures on the ship hull;
- 8) insulation resistance of antennas, cable network and power sources;
- 9) the presence of fencing of current-carrying and rotating parts of equipment;
- 10) installation of protective devices at the input of transmitters (columns, metal nets, shields, etc.);
 - 11) the presence of protective grounding.
- 100. When certifying the radio and navigation equipment, the testing of its performance should be carried out while taking power from the main and emergency sources of electrical energy.

- 101. When certifying the radio stations and the ship's ground station for satellite communication, the establishment of two-way communication with ship and coast stations shall be checked and they shall be checked in action.
- 102. When testing the means of determining the route of the boat, the stability of the readings on the direct route and during maneuvering shall be checked.
 - 103. When certifying a radar station, the following shall be checked:
 - 1) the minimum acquisition range of a buoy, ground light, shore, etc.;
 - 2) the maximum acquisition range of low and high banks, buoy, ground light, boat.
- 104. When certifying a GLONASS GNSS or GLONASS / GPS receiver and a transponder, an automatic indicator of ship (hereinafter AIS), the following shall be checked .
 - 1) performance in accordance with the instruction (manual) for the operation of products;
- 2) transmission of the established data of the boat AIS in automatic mode and upon the request to the coastal AIS base station.

Paragraph 23. Supply of rescue means and rescue equipment

- 105. Boats, intended for passenger transportation, self-propelled and non-propelled ferries , on hydrofoils, air cushions and gliders shall be supplied with collective life-saving equipment, in accordance with Annex 2 to these Rules.
- 106. The supply of self-propelled vessels with collective life-saving equipment, except for the boats, indicated in tables 6-7 of annex 2 to these Rules, shall be provided in accordance with table 8 of annex 2 to these Rules.

The supply of non-propelled vessels with collective rescue equipment, except for the boats, listed in tables 6-7 of annex 2 to these Rules shall be provided in accordance with table 9 of annex 2 to these Rules.

Non-propelled vessels, intended for operation in the "P" and "L" class basins, as well as fishing vessels of categories 4 and 5, operated by groups of at least 2 units in the coastal areas of the Caspian Sea, may not be supplied with collective life-saving equipment.

Non-propelled vessels, operated without crews may not be provided with life-saving equipment.

- 107. Self-propelled and non-propelled ferries intended for operation on river crossings and channels of "P" and "L" class may be supplied with one flotation ring for every 5 (five) meters of the overall length of the ferry, the number of life-saving equipment shall be provided in table 10 of annex 2 to these Rules.
- 108. The boat shall be supplied with life jackets on the basis of 100%-provision of people on board.

When transporting children, the ship-owner shall supply children's life jackets in the amount corresponding to the number of the children being transported, their number is not less than 10% of the permitted number of passengers.

- 109. The number of flotation rings on the boat shall be supplied in accordance with table 10 of annex 2 to these Rules.
- 110. All small size decked boats shall be supplied with one set of equipment for bulge draining.

Paragraph 24. Supplies with signaling and pyrotechnic means, emergency supply

111. The supply of small-size decked inland navigation boats with alarm and side means and lanterns should comply with the requirements of the inland waterways Rules, approved by the order of the Minister for Investment and Development of the Republic of Kazakhstan dated April 30, 2015 No. 537 (registered in the Register of the state registration of regulatory legal acts under No. 11347).

Small size decked boats, operating in the areas with maritime navigation mode, shall be supplied with signaling equipment required for navigation in inland waterways and signaling means, required for navigation in marine areas in accordance with the provisions of the International Rules for preventing collision of ships (IRPCS-72), regardless the nature of the route.

The supply of small size decked boats of inland navigation with alarm and side means and alarm and side lanterns shall be given in table 11 of Annex 2 to these Rules.

- 112. The supply of boats with pyrotechnic means shall be made in accordance with table 12 of annex 2 to these Rules.
- 113. Emergency supply of small size decked boats approved for use in marine coastal areas shall be listed in table 12 of annex 2 to these Rules.

Paragraph 25. Fire-fighting supply

114. The number of fire supplies for small size decked boats shall be defined in table 1 of Annex 2 to these Rules.

Paragraph 26. Navigation supplies, communications and navigation equipment

- 115. Self-propelled small size decked boats the length of up to 12 (twelve) meters shall be supplied with binoculars with prismatic depth-gauge, the boats the length of over 12 (twelve) meters shall be additionally equipped with the means of communication and navigation in accordance with table 13 of Annex 2 to these Rules.
- 116. Radio and navigation equipment, including those not included in the equipment listed in table 13 of annex 2 to these Rules, but installed on a boat, can be operated subject to

the availability of a document confirming compliance with the requirements of the Ship register.

Annex 1
to the Rules for technical
supervision of small
size decked boats
Form
Ship register of Kazakhstan

Request

(full name of the organization or surname, name, patronymic (if any of the owner of the small size decked boat (object)) Name of the small size decked boat (object)
project №
place of dislocation of the small size decked boat (object)
(legal address of the owner of the small size decked boat (object)
(actual address of the owner of the small size decked boat (object)
type of work performed by the boat or object
To conduct certification of the small size decked boat object)
(type of certification)
Date of readiness of the small size decked boat for certification (object)
Contact phone:
Owner of a small size decked boat (object)

(signature) (surna	me, name, patronymic (if available)		
Phone number			
	supervi de Requiremen	aNNEX 2 cules for technical sion of small size ecked boats ts for safe operation of size decked boats Table 1	
Name	Amount of fire supply	Table 1	
Portable fire extinguishers:	The state of the s		
powder or foam	1 – in the machine room, 1 – in the galley, operating on ga	us, liquid or solid fuel	
powder or carbon dioxide	1 – in the room where the boat control equipment is locate	* •	
Covers the size of 1,0x1,5 m			
Buckets 10 l.	2 – on the boat		
with the	r and carbon dioxide fire extinguishers with the capacity of a t least n 12 m may be provided with one fire extinguisher and one	3.5 d m 3. bucket.	
		Table 2	
Main connection groups Average residual thickness			
Decking, bottom plating, bi Boarding in any s A set of sides, transverse water	0 , 6 t 0 , 5 5 t		
 The wear of the hull connect absence of design An assessment of the techn wear of certain The average wear value shameasurements, referred to the 	thickness of the group of elements of the ction groups should be applied to the thicknesses, indicated data - to the thicknesses, regulated ical condition of the hull for wear should be established de groups of connections with the all be defined as the ratio of the sum of residual thicknesses number of control measurements on the selected area. The gand a length of about a meter or a linear meter of the element of darea.	by the Rules. pending on the degree of worst assessment. is in the places of control e surface area of the hull (
		Table 3	
Specified value	Local residual deformations		
The extent to which dents are separate for the deck and the l	V is 0,35		
Maximum sag of dents f, mm			
in the middle part of the hull i	n the ends of the boats	1/12 of spacing 1/ 10 of spacing	

Maximum sag of dents f, mm, for the sides and the second bottom, regardless of the location 1/10 of spacing
of dents along the length of the boat
N o t e s :
1. bj - total length of dents across the width of the boat, B - deck or bottom width.
2. If there are discrepancies between the estimates for various specified values, the technical condition should be
evaluated at the worst assessment.
The middle part of the hull is considered to be a section of the length of the boat, equal to 0.5L (0.25L at the bow
and stern from the midship-frame), and the end of the boat - the section of the length from the bow and stern
perpendiculars equal to 0.25L

		Table 4		
Material	Main groups of hull connections	Average residual thickness		
1. Duralumin alloys	Bottom plating, bottom set	0,85t		
	Deck flooring (superstructure awning), deck set	0,80t		
	Board plating, board set	0,75t		
2. Aluminum-magnesium alloys	Bottom plating, bottom set	0,80t		
	Deck flooring (superstructure awning), deck set	0,80t		
	Board plating, board set	0,75t		
Note. t – design thickness of the hull connection elements, mm				

	Table 5		
Name of electrical equipment	Permissible value of insulation resistance, MOM		
1. Electrical machines for which the minimum insulation resistance permitted during operation is established by technical conditions or by the organization -manufacturer	According to the technical conditions or data of the		
2. Generators of the ship power station for which there is no data on the minimum allowable value of the insulation resistance at nominal voltage, V:	organization-manufacturer		
Up to 500	0,2		
over 500	0,001U		
3. Other electrical machines for which there is no data on the minimum allowable value of insulation resistance	0,2		
4. Main switchgears in case of disconnected consumers	1.0		
5. Other switchgears, control panels, at the rated voltage allowed, V:	1,0		
Up to 100	0,06		
from 101 to 500	0,2		
6. Magnetic stations, starters, resistors	0.2		
7. Power cables at rated voltage, V:	0,2		
Up to 500	0,2		
Over 500	0.00211		
8. Power supply of lightening network at the rated voltage, V:	0,002U		
Up to 100;	0,06		
From 101 to 220	0.2		
9. Control, signaling and control circuits at the rated voltage, V:	0,2		
Up to 100	0,06		
From 101 to 500			

10. Rechargeable batteries with consumers dis V:	connec	ted at t	he rated voltage,	0,2	
Up to 24	0,02				
From 25 to 220		0,1			
N o t e s: 1. U - 2. Measurement of insulation resistance sh 3. In the electrical machines, the insulation re between the contacting winding 4. In switchgears, the insulation resistance sh various phases and poles with the external circ	sistance gs o nall be	e carri e shall of d measu	be measured between the red between the	ated state of electrical equipment. ween the windings and the hull and ses, legs and voltages. tires and the hull and between the	
				Table 6	
Class/category			umber of people nent, %	provided with collective rescue	
]	rafts		devices	
M ms, O-PR ms, M-PR ms, M-SP ms, categor	ries 0,	100		_	
O ms, category 2		100		_	
P ms*, category 3		50		50	
P ms, category 3	-	_		20	
Л ms, categories 4 and 5	-	_		20	
* For boats, going to the lakes and reservoirs of	f the P	catego	ry.		
		1		Table 7	
Class/category				eople provided with rescue rafts, %	
M ms, O-PR ms, M-PR ms, M-SP ms, categor	ries 0, 1		100		
O ms, category 2			20		
P ms*, category 3			10		
* For boats, going to the lakes and reservoirs of	f the P	catego	ry.	m.11.0	
		m)	1 0 1	Table 8	
Class/category		The number of people provided with collective equipment, %			
	1	rafts		devices	
M ms, O-PR ms, M-PR ms, M- SP ms, categor	ries 0,	100		_	
O ms, category 2		100		_	
P ms, category 3	-	_		100	
				Table 9	
Class/category		The number of people equipment, %		provided with collective rescue	
		rafts		devices	
M ms, O-PR ms, M-PR ms, M-SP ms, categories 0, 1				_	
O ms, category 2		50		50	
				Table 10	
	Num	nber of	flotation rings, po	cs.	

Types of boats	Length of the	Total	Including		
	b o a t L, m		with self-igniting buoy	with a lifeline	
Passenger, self-propelled ferries		24	11	at least one on each deck from each side	
Hydrofoil, air cushion, gliding		12		11	
Fishing		12	1	11	
Not self-propelled	≤ 20	2	1	1	

Table 11

	Alarm and side lanterns								
Types of boats	Flagship	ship Shipborne 7		G	T	Light pulse visual	Circular		
	White	Red	Green	Sternmost	Towing	signals	White	Red	Yellow rotating
Self-propelled vessels	1	1	1	31	_	45	26	36	12
Nonself-propelled vessel	14	_	_	_	_	_	2	1	_

1 On the boats the width of 5 m and less, one stern lamp is installed. 2 It is mounted on displacement passenger ships, intended for permanent work within the boundaries of the port water area and on ferries and on self-propelled ferries. On ferries of cable crossings one yellow circular lamp is

i n s t a l l e d .

3 It is 4 It is

is required is mounted

for d on fishing pushed vessels. vessels.

5 In the absence of a light pulse visual signal, the use of a light visual signal (flashing white light) is allowed in the dark, and a light flag visual signal - in the daytime. 6 All boats are supplied with one white and three red circular lanterns that are hung overboard in the event of

taking the ground.

7 On the boats the length of up to 7 m, side lights can be combined in one lamp located along the axis of the boat in the bow.

Continuation of the table

Daytime signals					
Black ball	Black cone	Red cone	White flag visual signal		
3	23	14	1		
1	_	1	_		

Table 12

Types of boats	Distress rockets, parachute ship or false lights, red, pcs.

Boats the length of , m:	
Over 12	6
from 6 to 12	3

Note. For the boats of all classes and categories that are constantly operated in the inland water-ways of the "P" and "L" categories, equipment with pyrotechnic means is not required.

Table	13
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Equipment composition	Operating areas		
	M-SP, M-PR, O-PR	M, O	P, L
1. VHF radiotelephone station (300,025 – 300,500 MHz; 336,025 – 336,500 MHz) 1	_	1	1
2. VHF radiotelephone station (with frequencies of the maritime mobile service) 1	1	12	12
3. Radar responder or AIS transmitter 3	1	14	_
4. Emergency or personal radio buoy3	1	1	-
5. Route indicator	1	14	-

1 The use of a portable (portable) VHF-radio telephone station with a protection against water ingress of at least IPX6 or keeping in a shipboard control post in a waterproof case (container) is allowed. In the absence of the possibility of charging the batteries on the ship, there should be a set of rechargeable batteries with a total capacity that ensures the operation of the radio station during the entire voyage for a continuous operation for 24 hours at least hour to transmit and 24 hours to receive. 2 It is installed on ships that make voyages in the areas with maritime navigation. 3 It is mounted on ships voyaging outside the uninterrupted communication zone of coastal VHF radio stations. 4 It is installed on ships making voyages in "M" category basins.

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