



CHINA CLASSIFICATION SOCIETY INTERNATIONAL SHIP
CLASSIFICATION

**GUIDELINES FOR STATUTORY
SURVEYS OF INLAND WATERWAY
SHIPS**

2015

PART TWO SURVEYS AND CERTIFICATION

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CHAPTER 1 GENERAL PRINCIPLES

Section 1 GENERAL PROVISIONS

1.1.1 General requirements

1.1.1.1 This Part applies to the survey and certification of inland waterway ships required by the Guidelines.

1.1.1.2 For ships being surveyed by [CCSISC](#) according to the provisions of the Guidelines authorized by the Administration, [CCSISC](#) is to carry out surveys according to the provisions of this Part under the license agreement, and issue or endorse corresponding statutory certificates at request of the clients.

1.1.1.3 For ships being inspected for compliance by [CCSISC](#) according to the Guidelines requested by the client, [CCSISC](#) is to carry out surveys according to the provisions of this Part under the contents agreed in writing by clients and [CCSISC](#), and issue or endorse corresponding statutory certificates, the acceptability of which to the Administration is, however, not warranted by [CCSISC](#).

1.1.1.4 When the requirements of surveys involved in the Guidelines are stipulated clearly by the Administration, the requirements of the Administration are to be complied with.

Section 2 CERTIFICATES

1.2.1 Certificates

1.2.1.1 Following certificates are to be issued or endorsed to ships according to provisions of this Part after satisfactory survey:

- (1) Certificate of Fitness of Navigation for Inland Waterway ships;
- (2) Tonnage Certificate for Inland Waterway ships;
- (3) Loadline Certificate for Inland Waterway ships;
- (4) Oil Pollution Prevention Certificate for Inland Waterway ships;
- (5) Sewage Pollution Prevention Certificate for Inland Waterway ships;
- (6) Garbage Pollution Prevention Certificate for Inland Waterway ships;
- (7) Air Pollution Prevention Certificate for Inland Waterway ships;
- (8) Certificate of Passenger Quota for Inland Waterway ships;
- (9) Crew Accommodation Certificate for Inland Waterway ships;
- (10) Certificate of Fitness of Carrying/Pushing/Towing Dangerous Cargoes for Inland Waterway ships;
- (11) Certificate of Fitness of Carrying Dangerous Chemicals in Bulk for Inland Waterway ships;
- (12) Certificate of Fitness of Carrying Liquid Gas in Bulk for Inland Waterway ships;
- (13) Exemption Certificate for Inland Waterway ships;
- (14) Provisional Certificate.

1.2.1.2 The corresponding certificate booklet and certificate are to be formulated by [CCSISC](#) otherwise.

1.2.2 Issuance and endorsement of certificates

1.2.2.1 The corresponding certificates are to be issued to the ships after the satisfactory initial surveys. Corresponding certificates are to be issued after a satisfactory renewal survey.

1.2.2.2 Corresponding certificates are to be endorsed after satisfactory annual survey, intermediate survey, inspection to the outside of ship's bottom and additional survey.

1.2.3 Validity of certificates

1.2.3.1 Tonnage Certificate for Inland Waterway ships and Certificate of Passenger Quotas for Inland Waterway ships are to be valid permanently in normal conditions. Corresponding certificates are to be endorsed after satisfactory annual survey, intermediate survey, inspection to the outside of ship's bottom and additional survey.

1.2.3.2 Certificate of Fitness of Navigation for Inland Waterway ships, Loadline Certificate for Inland Waterway ships, Oil Pollution Prevention Certificate for Inland Waterway ships, Sewage Pollution Prevention Certificate for Inland Waterway ships, Garbage Pollution Prevention Certificate for Inland Waterway ships, Air Pollution Prevention Certificate for Inland Waterway ships and Crew Accommodation Certificate for Inland Waterway ships are to be valid in a term not longer than the interval of renewal survey as specified in Table 1.2.4.1. Certificate of Fitness of Navigation for Inland Waterway ships is to be valid in a term of navigable period annually for the ships (including self-propulsion ships and non-self-propulsion ships) serving the waterways with ice-bound period.

1.2.3.3 Exemption certificate is to be valid in a term not exceeding that of the corresponding certificate.

1.2.3.4 Where the renewal survey is completed earlier than 3 months before the due date of the certificate, the date of next renewal survey is to be accounted from the date when this renewal survey is completed. Otherwise the date of the next renewal survey is to be accounted from the date when this renewal survey is previously due.

1.2.3.5 Where the renewal survey is not completed when the certificate is due, an extension not more than 3 months may be granted to ensure the completion of the renewal survey after the surveyor carrying out a survey on board the ship and with the consent of CCSISC at request of the shipowners. In such circumstance, the date of next renewal survey is still to be accounted from the date when this renewal survey is previously due.

1.2.3.6 The term of validity of Certificate of Fitness of Carrying/Pushing/Towing Dangerous Goods for Inland Waterway ships is to comply with the following provisions:

(1) for ships not specially designed for carrying dangerous goods:

① CCSISC may only issue Certificate of Fitness of Carrying/Pushing/Towing Dangerous Goods for Inland Waterway Ships for single trip for the vessels have not registered.

② the certificate of the ships carrying/pushing/towing fixed dangerous goods continuously in short time may not exceed three months.

③ the certificate of the ships carrying fixed dangerous cargoes in fixed cargo areas and with constant navigation courses may not exceed one year.

(2) for ships specially designed for carrying dangerous goods, the Certificate of Fitness of Carrying/Pushing/Towing Dangerous Goods for Inland Waterway ships may not exceed the period of validity of the of Fitness Navigation Certificate.

1.2.4 Interval of surveys

1.2.4.1 Unless expressly provided otherwise, intervals of annual surveys, intermediate surveys and renewal surveys for inland waterway ships in service are listed in Table 1.2.4.1.

Table 1.2.4.1

Types of ships	Numbers of renewal surveys	No.1	No.2	No.3	No.4 and Subsequent
	Intervals of surveys, in year				
	Types of surveys				
Passenger ships, restaurant pontoons, ro-ro ships, oil tankers (including asphalt carriers), oil pushers (tugs), chemical tankers, liquefied gas carriers	Renewal survey	6	6	6	4
	Intermediate Survey	3	2	2	2
	Annual Survey	1	1	1	1
Self-propulsion ships other than those mentioned above	Renewal survey	6	6	6	4
	Intermediate Survey	3	3	3	2
	Annual Survey	1	1	1	1
Oil barges, oil pontoons, vehicle-passenger ferry barges, restaurant pontoons	Renewal survey	8	8	4	4
	Intermediate Survey	4	4	2	2
	Annual Survey	2	2	1	1

Non-self-propulsion working ships	Renewal survey	8	8	8	4
	Intermediate Survey	4	4	2	2
	Annual Survey	—	2	—	—
Non-self-propulsion ships other than those mentioned above	Renewal survey	8	8	8	6
	Intermediate Survey	4	4	2	2
	Annual Survey	—	2	—	—

1.2.4.2 Annual/intermediate surveys are to be carried out within 1 month before or after the date when the survey is due according to the relevant interval.

1.2.4.3 Renewal surveys are to be carried out on schedule. Should the owner have any difficulty in applying for the survey indeed, the certificate may be extended for a period less than three months, subjected to the consent of **CCSISC** after a satisfactory survey, so as to enable the ship to finish its voyage.

1.2.4.4 Two inspections of the outside of ship's bottom during interval of renewal surveys are to be carried out. One inspection is to be carried out in combination with renewal survey, and the other is to be carried out in combination with intermediate survey in general or carried out between the two intermediate surveys. And the interval of these two inspections of the outside of ship's bottom is to be less than 3/4 that of renewal surveys.

The inspections of the outside of ship's bottom for non-self-propelled ships during the first renewal survey (including at the first renewal survey) and those for pontoons at intermediate survey or between the two intermediate surveys may be exempted subjected to the agreement of **CCSISC**.

1.2.4.5 For the ships (including self-propulsion ships and non-self-propulsion ships) serving the waterways with ice-bound period, the annual surveys are to be carried out annually with Two Inspections System which contains the first inspection of hull structure (including side shell plating underwater) and equipment as well as concern to the overhaul and repair information before the thaw of river, and the second inspection of the installation of equipment and the function test; the interval of intermediate surveys is to comply with Table 1.2.4.1, the items of intermediate surveys are to be surveyed with Two Inspections System above; the interval of renewal surveys is to comply with Table 1.2.4.1, should the owner have any difficulty in applying for the survey indeed, the certificate may be extended for a period less than 12 months subjected to the consent of **CCSISC**.

Section 3 SURVEYS

1.3.1 General requirements

1.3.1.1 The Guidelines are the basis of performing ship surveys.

1.3.1.2 For the survey requirements of Chapter 2 to 12 of this Part, corresponding provisions of the Guidelines for Classification of Inland Waterway ships are to be complied with in addition to those of the Guidelines.

1.3.1.3 Essential equipment, component parts and material concerning safety of ship or prevention of environmental pollution used for inland waterway ships are to be subjected to the survey according to the related regulations of the Guidelines for Classification of Inland Waterway ships.

1.3.2 Initial surveys

1.3.2.1 A complete inspection to all items related to the particular certificate before the ship is put into service and the certificate is issued for the first time, so as to ensure that such items comply with related requirements and fit for intended service of the ship.

1.3.2.2 Plans and technical documents, related to the certificate are to be approved and reviewed by **CCSISC** to comply with applicable requirements of the Guidelines. The plans and technical documents for approval are listed in Appendix I of this Part.

1.3.2.3 For ships which meet the requirements of plans and technical documents approved upon survey and testing, and are satisfactory in material, workmanship and installation, certificate are to be issued by **CCSISC**.

1.3.3 Surveys during service

1.3.3.1 Surveys during service include:

(1) Annual survey—An inspection to items related to the particular certificate to ensure that the items are in a satisfactory condition and fit for intended service of the ship;

(2) Intermediate survey—An inspection to specific items related to the particular certificate to ensure that the items are in a satisfactory condition and fit for intended service of the ship;

(3) Renewal survey—An inspection to the items related to the particular certificate before the certificate expires, so as to ensure that the items are in a satisfactory condition and fit for intended service of the ship. A new certificate is to be issued after the satisfactory survey;

(4) Inspection of the outside of the ship's bottom—A survey to the underwater part of ships and related items to ensure that the items are in a satisfactory condition and fit for intended service of the ship;

(5) Additional survey—A general or partial inspection accordingly when any accident occur or any deficiency be found, and any of which will affect the safety of the ship or effectiveness or integrity of the ship's equipment.

1.3.3.2 Ships are to be properly maintained during service so that they are in a satisfactory condition and fit for intended service. Without permission of ~~CCS~~ CCS, no alteration is to be made to the structures, arrangements, machines, equipment and other items which have been subjected to the surveys.

1.3.3.3 The certificates are to be endorsed by the Surveyor if the ship is found to be in good condition after survey.

1.3.3.4 After renewal surveys, new certificates are to be issued by survey organization when the ship is suitable for its intended services and satisfies the seagoing conditions.

CHAPTER 2 ISSUANCE OF TONNAGE CERTIFICATE

Section 1 GENERAL PROVISIONS

2.1.1 General requirements

2.1.1.1 The Tonnage Certificate for Inland Waterway ships is to be issued to the ship where the tonnage is measured according to requirements of the International Convention on Tonnage Measurement of Ships, 1969.

2.1.1.2 The Tonnage Certificate for Inland Waterway ships is to be ineffective when the gross tonnage or net tonnage of the ship is affected as a result of the alteration of the arrangement, structure, volume and use of spaces.

CHAPTER 3 SURVEYS RELATED TO ISSUANCE OF CERTIFICATE OF FITNESS OF NAVIGATION

Section 1 GENERAL PROVISIONS

3.1.1 General requirements

3.1.1.1 Following surveys are to be carried out for the issuance or endorsement of Certificate of Fitness of Navigation for Inland Waterway ships:

- (1) initial surveys;
- (2) annual surveys;
- (3) intermediate surveys;
- (4) renewal surveys.

3.1.1.2 The fitted varieties of cargo and unit weight of bulk carriers are to be stated in the records of Certificate of Fitness of Navigation; that natural gas fuelled ships use natural gas as fuel are to be stated in the records of Certificate of Fitness of Navigation.

3.1.2 Requirements of surveys

3.1.2.1 The requirements of surveys are to comply with the Section 2, 3, 4, 5 of this Chapter and Chapter 1 of this Part.

Section 2 INITIAL SURVEYS

3.2.1 Plan approval

3.2.1.1 The plans submitted for approval (or for reference) are to comply with related provisions of 2.1 and 2.4 to 2.9 of Appendix I of this Part.

3.2.2 Survey items

3.2.2.1 For hull, machinery, electrical installation and engine room automation during the construction and after installation, the surveys to the following items are to be carried out and the approved plans are to be complied with:

- (1) examining the hull structure (including main hull, superstructure and deck house) and sea valve chest, filters etc;
- (2) verifying the watertight of collision below the freeboard deck, the bulkheads separating the machinery space and cargo hold or other spaces, and double bottom tank, collision etc;
- (3) operational test and tightness test of watertight doors;
- (4) verifying the tightness of watertight decks, trunks, tunnels and ventilating pipes;
- (5) examining and testing the steering, anchoring and mooring equipment;
- (6) conducting inclining test, performing test, measurement of structural vibration and shaft torsion vibration when it is required;
- (7) verifying the machinery, equipment, devices and the arrangement, installation and workmanship of system comply with the requirements;
- (8) examining and testing the machinery, equipment, devices and control system after installation, including main engine, propulsion shafting system, propeller, gearbox, generator set, boiler, pressure vessel, steering engine, anchor gear, air compressor, heat exchanger, sea valve, ship side valve etc;
- (9) testing the piping system of fuel oil, lubrication oil, cooling, heating, bilge, ballast, measuring, ventilation, cargo etc. after installation;
- (10) verifying that main and auxiliary engines, boiler, pressure vessel, piping system and hot surface of fuel oil, vapor and compressed air are fitted with appropriate safety devices or safeguards;
- (11) examining and carrying out functional test to the alarm system after installation;

(12) verifying installation and test of the electrical equipment, including the main power source, emergency power source, temporary emergency power source and lighting systems etc;

(13) verifying that precautions have been taken against any electric shock, fire and other hazards of electrical origin;

(14) verifying that the arrangements for automatic controlled engine rooms are satisfactory;

(15) For oil tankers, the surveys during the construction and after installation are to also include:

① verifying that a hull return system of distribution and earthed distribution system are not used;

② verifying that the location of all spaces and the arrangement of all aspects are in compliance with the approved plans;

③ verifying that the electrical equipment located in dangerous areas or spaces complies with the approved plans;

④ verifying that the arrangements of cargo tank ventilating system and cargo pump room ventilating system comply with the approved plans;

⑤ verifying that the cargo pipe system complies with the approved plans.

(16) For ro-ro cargo ships, ro-ro passenger ship type 1, ro-ro passenger ship type 2 and vehicle-passenger ferries, the surveys during the construction and after installation are to also include:

① verifying that the ventilation, drainage and electric apparatus comply with the approved plans;

② verifying that the vehicle securing device complies with the approved plans;

③ verifying that the vehicle ramps and their lifting devices and controlling system are installed and tested in accordance with the approved plans.

3.2.2.2 For the fire-fighting, life-saving appliances, navigation equipment and signal, the surveys during construction and after installation to the following items are to comply with the approved plans:

(1) verifying the structural fire protection arrangement;

(2) verifying that fire main system complies with the stipulated requirements;

(3) checking the allocation and arrangement of the fire-fighting appliances such as extinguishers and fireman's outfits, etc;

(4) verifying that fixed fire-fighting system for machinery and cargo spaces complies with the stipulated requirements;

(5) verifying that the fire-fighting appliance and special arrangement for machinery spaces, comply with the stipulated requirements;

(6) verifying the function of fire detection and alarm system;

(7) verifying the arrangement of fuel oil, lubricating oil and other flammable oils, and the operation of the remote closing device of the valves on the tanks containing the oil mentioned above;

(8) verifying the operation of closing devices for various openings;

(9) checking the allocation and arrangement of life-saving appliances;

(10) examining the embarkation arrangements for each life boat (raft) or life sampans, and the function of launching and recovery of launching appliances;

(11) checking the allocation and conditions of both fixed and portable (if any) on-board communication equipment;

(12) examining the lighting including those supplied from the emergency power source for the muster and embarking station, passageways, stairways and access to the muster and embarkation stations;

(13) examining that the arrangement, installation of the signal lights and testing comply with the stipulated requirements; examining the provision of signal shapes, signal flags and sound signaling appliances;

(14) verifying that the installation and test of magnetic compass, echo sounder, radar, electronic chart system onboard, automatic identification system onboard, rudder angle indicator, revolution indicator of propeller and searchlight comply with the stipulated requirements.

(15) For the oil tankers the surveys during construction and after installation are to also include:

① verifying that the deck foam system complies with the stipulated requirements;

② verifying that the fixed fire-fighting system for cargo pumping room complies with the stipulated requirement;

③ checking the operation of closing devices for various openings of cargo pumping room.

3.2.2.3 For the radio communication equipment, the surveys during construction and after installation are to comply with the approved plans:

(1) checking the allocation and arrangement of radio communication equipment;

(2) checking the installation condition of radio communication equipment;

(3) checking all antennas, feeders and protection against whipping (including insulation resistance and

safety of antennas);

(4) testing the VHF telephone equipment, portable VHF telephone device, outward broadcast apparatus, maritime safety information receiver to confirm the integrity of their function.

3.2.2.4 Verifying the following documents are available on board the ship:

- (1) the safety loading manual (if any);
- (2) the vehicle securing manual (applicable for ro-ro cargo ships, ro-ro passenger ship type 1, ro-ro passenger ship type 2 and vehicle-passenger ferries);
- (3) the container securing manual (applicable for container ships);
- (4) the stability information;
- (5) the manoeuvring booklet (if any);
- (6) the operation manual (applicable for fire fighting ships and oil recovery ships);
- (7) the allocation and posting of fire control plans;
- (8) the table or curve of residual deviations for the magnetic compass (applicable for ships with the magnetic compass).

3.2.3 Issuance of certificate

3.2.3.1 The Certificate of Fitness for Navigation or a Exemption Certificate is to be issued if the result is satisfactory.

Section 3 ANNUAL SURVEYS

3.3.1 Hull, machinery, electrical equipment and engine room automation

3.3.1.1 For hull, machinery, electrical equipment and engine room automation, the annual survey are to consist of:

- (1) examining the hull and closing devices thereof;
- (2) examining the steering, anchoring and mooring equipment;
- (3) examining the watertight doors and carrying out the functional test;
- (4) checking the working condition of bilge, ballast, deck drainage, air and measuring piping systems, and carrying out functional test for bilge and ballast piping systems;
- (5) examining the outside of the boiler, pressure vessel and its attachments including safety devices to confirm that the safety valves of boiler and pressure vessel are in a good working condition;
- (6) confirming that the main propulsion system including main propulsion machinery, wheel gearing and shafting, as well as the pump and piping system are maintained and in a good working condition;
- (7) confirming that the verprime mover of generator, other auxiliary machinery and the pump and piping system serving for them are in a good working condition;
- (8) carrying out the functional test for steering gear and control system, carrying out the emergency steering test for emergency steering system;
- (9) verifying the operation of ventilation system in way of the machinery spaces and other spaces;
- (10) confirming the means of escape from accommodation, machinery and other spaces;
- (11) verifying the operation of the communication system between the navigation bridge and the machinery spaces;
- (12) examining, as far as practicable, visually and in operation, the electrical equipment, including the main power source and the lighting system;
- (13) verifying the automatic operation of the emergency power source, temporary emergency power source after the invalidation of main power source;
- (14) examining the precautions provided against shock, fire and other hazards of electrical origin;
- (15) examining the arrangements of automatic controlled engine room and testing the alarm and automatic shutdown functions;
- (16) For oil tankers, the annual survey is to also consist of:
 - ① examining the cargo tank openings, including gaskets, covers, coamings and fire screens;
 - ② examining the cargo tank pressure/vacuum valves and fire screens;
 - ③ examining the flame screens on the vents to all bunker, oily-ballast, oily-slop tanks and void spaces;
 - ④ examining the cargo tank venting systems;

- ⑤ examining the cargo system both on the deck and in the cargo pump rooms, ballast system and bunker system on the deck;
 - ⑥ verifying that all electrical equipment in dangerous zones meet the requirements of such locations;
 - ⑦ verifying that potential sources of ignition in and near the cargo pump room are eliminated and that access ladders are in a good condition;
 - ⑧ examining whether there is any sign of oil leakage or crack on all pump room bulkheads;
 - ⑨ examining the gland seals of cargo, bilge and ballast pumps, verifying the electrical and mechanical control remote operation, shutdown devices and cargo pump room bilge system, and checking the integrity of the pump foundations;
 - ⑩ confirming that the pump room ventilation system is operational;
 - ⑪ confirming that pressure gauges on cargo discharge lines and level indicating systems are operational.
- (17) For ro-ro cargo ships, ro-ro passenger ship type 1, ro-ro passenger ship type 2 and vehicle-passenger ferries, the annual survey is to consist of:
- ① examining the outside of the vehicle ramp and its connecting part to the hull;
 - ② examining the outside of the lifting device of the vehicle ramp, and verifying it is in a good working condition;
 - ③ putting emphasis on checking the longitudinal members (including transition members) contained in longitudinal strength and their welds, and verifying it is in a good condition.

3.3.2 Fire fighting equipment, life-saving appliance, navigation equipment and signal equipment

3.3.2.1 For fire-fighting, life-saving appliance, navigation equipment and signal equipment, the annual survey is to consist of:

- (1) verifying that no change has been made to the structural fire protection, examining and testing all the manual and automatic fire doors, and testing the means of closing the main inlets and outlets of all ventilation systems;
- (2) examining and carrying out functional test to the fire-main system;
- (3) examining the allocation and storage of fire-extinguishers;
- (4) examining the fireman's outfit;
- (5) examining the fixed fire fighting system in way of machinery and cargo spaces, and testing the alarm function;
- (6) examining and operationally testing the skylights, doors, windows, smoke outlet, ventilating opening and closing appliance in way of the machinery space, as well as the testing stopping working to the ventilating system and fan of boiler;
- (7) examining the remote closing devices for the valves on the tanks that contain fuel oil, lubricating oil and other flammable oils and carrying out the functional test;
- (8) operational test to the closing appliances of various openings;
- (9) examining and, where practicable, testing the fire detection and alarm system;
- (10) checking that each person on board is provided with emergency instruction, that muster lists are exhibited in a conspicuous position, and verifying that notice or marks is given near the position where the life boat and life sampans are stored;
- (11) examining each life boat (raft) and sampan together with their appliance;
- (12) examining the embarkation and launching appliances for each life boat (raft) or life sampan;
- (13) checking the operational function of on-board communication equipment and general alarm system;
- (14) examining the life jackets, and checking their technical condition in random;
- (15) examining the life buoys and buoyant apparatus, and checking their positions and technical conditions;
- (16) examining the lighting, including those supplied from emergency power source, of muster and embarking stations, passageways, stairways and access to the muster and embarking stations;
- (17) examining and testing the signal lights and sound signaling appliances, and examining the shapes and flags of signal;
- (18) examining the equipment such as magnetic compass, radar, echo sounder, electronic chart system onboard, automatic identification system onboard, rudder angle indicator, revolution indicator of propeller.
- (19) For the oil tankers, annual surveys are to also include:
 - ① examining the deck foam system;
 - ② examining the fixed fire fighting system for cargo pump room, and verifying the operational conditions of remote closing devices of various openings.

3.3.3 Radio communication equipment

3.3.3.1 Radio communication equipment are to be checked and examined according to 3.2.2.3 of this Chapter during annual survey.

3.3.4 Examination of certificates and required documents supplied

3.3.4.1 The examination of current certificates and required documents on board is to consist of:

- (1) checking and confirming the validity of related certificates;
- (2) checking and confirming that all required documents are placed on board.

3.3.5 Endorsement of certificates

3.3.5.1 Endorsing the Certificate of Fitness for Navigation, if the annual survey is satisfactory;

Section 4 INTERMEDIATE SURVEYS

3.4.1 Hull, machinery, electrical equipment and engine room automation

3.4.1.1 For hull, machinery, electrical equipment and engine room automation, the intermediate survey is to consist of:

- (1) those as required in 3.3.1 of this Chapter;
- (2) selective internal inspection on the water ballast tanks and cargo holds (especially those have been engaged in carrying corrosive materials frequently or those of likely being struck by the lifting appliances) during the intermediate survey after the second renewal surveys;
- (3) internal and external survey to the boilers in combination with the intermediate survey or between two intermediate surveys;
- (4) For oil tankers, the intermediate survey is to include:
 - ① should there be any doubt as to its condition when examining various pipe system, the pipe system may be required to be subjected to a pressure test, or pressure gauged or both;
 - ② selective internal inspection on the cargo tanks, cargo pump rooms, cofferdams, pipe tunnels and side tanks during the intermediate survey after the second renewal surveys;
 - ③ testing the insulation resistance of electrical equipment in dangerous zones or spaces, electrical equipment and circuits passing dangerous spaces.

3.4.2 Fire fighting equipment, life-saving appliance, navigation equipment and signal equipment

3.4.2.1 For fire-fighting, life-saving appliances, navigation equipment and signal equipment, the intermediate surveys is to consist of:

- (1) those as required in 3.3.2 of this Chapter;
- (2) verifying that the weight of CO₂ has been checked and that the distribution piping has been proved to be unblocked;
- (3) testing the all fire-detection and alarm system;
- (4) For the oil tankers, verifying that the foam agent has been checked and that the distribution piping has proved to be unblocked during the intermediate survey.

3.4.3 Radio communication equipment

3.4.3.1 The intermediate survey of radio communication equipment is the same as 3.3.3 of this Chapter.

3.4.4 Examination of certificates and required documents supplied

3.4.4.1 The examination of current certificates and required documents on board is the same as 3.3.4 of this Chapter.

3.4.5 Endorsement of certificates

3.4.5.1 Endorsing the Certificate of Fitness for Navigation, if the intermediate survey is satisfactory;

Section 5 RENEWAL SURVEYS

3.5.1 Hull, machinery, electrical equipment and engine room automation

3.5.1.1 For hull, machinery, electrical equipment and engine room automation, the renewal survey are to consist of:

- (1) those as required in 3.4.1 of this Chapter;
- (2) thickness measurements to the ship's hull in the second and onward renewal surveys;
- (3) hydraulic tests to the double bottom tanks, wing tanks (if any), fore and after peak tanks and fuel oil tanks in the second and onward renewal surveys;
- (4) functional tests to anchoring, steering equipment and bilge systems;
- (5) water jet tests to watertight doors and watertight hatches;
- (6) internal and external survey and hydraulic test to the boilers;
- (7) examining the technical condition of intermediate shafts, thrust shafts, propeller shafts and their bearings and flanges, as well as the propellers;
- (8) hydraulic tests to the ballast tanks, void spaces, and pipe tunnels, hydraulic or pneumatic tests to cargo tanks in necessity for oil tankers in the second and onward renewal surveys;
- (9) examining the lifting device and controlling system of the vehicle ramp and carrying out the functional test for ro-ro cargo ships, ro-ro passenger ship type 1, ro-ro passenger ship type 2 and vehicle-passenger ferries in renewal survey.

3.5.2 Fire fighting equipment, life-saving appliance, navigation equipment and signal equipment

3.5.2.1 For fire-fighting, life-saving appliances, navigation equipment and signal equipment, the renewal surveys are to consist of:

- (1) those as required in 3.4.2 of this Chapter;
- (2) functional tests to the fire-main system;
- (3) functional tests to the fire manual alarm system, simulated tests to automatic fire detection and fire alarm systems;
- (4) running tests to piping system and nozzles of pressure water mist system (if any);
- (5) examination and tightness tests to air chests (if any) of life boat (sampan);
- (6) launching tests to launching appliances of life boat (sampan);
- (7) starting and operational tests to lifeboat capstans of motor lifeboats.

3.5.3 Radio communication equipment

3.5.3.1 Radio communication equipment are to be checked and examined according to 3.2.2.3 of this Chapter during renewal survey.

3.5.4 Examination of certificates and required documents supplied

3.5.4.1 The examination of current certificates and required documents on board is the same as 3.3.4 of this Chapter.

3.5.5 Issuance of certificates

3.5.5.1 After a satisfactory renewal survey, the Certificate of Fitness for Navigation is to be issued.

CHAPTER 4 INSPECTION OF THE OUTSIDE OF THE SHIP'S BOTTOM

Section 1 GENERAL PROVISIONS

4.1.1 General requirements

4.1.1.1 The inspection of the outside of ship's bottom is to be based on the related requirements in chapter 1 of this Part and Section 2 of this Chapter.

4.1.1.2 The inspection of the outside of ship's bottom is normally carried out in a dock or on the slipway. When the bottom is surveyed in water, the inspection is to comply with the relevant provisions of Regulations for Classification of Inland Waterway ships.

Section 2 INSPECTION OF THE OUTSIDE OF THE SHIP'S BOTTOM

4.2.1 Inspection items

4.2.1.1 The inspection of the outside of the ship's bottom include:

- (1) side plates, bilge keels, stem post and stern post;
- (2) propellers, nozzle tubes and rudders;
- (3) measuring of the rudder bearing clearance;
- (4) measuring of the propeller shaft clearance and inspecting the shaft seals;
- (5) sea valve chests, entrance grillings and filters, as well as overboard discharge valves and attachments;
- (6) anchors and anchor chains;
- (7) hull paint.

4.2.2 Endorsement of certificates

4.2.2.1 Endorsing the Certificate of Fitness for Navigation, if the inspection of the outside of the ship's bottom is satisfactory;

CHAPTER 5 SURVEYS RELATED TO ISSUANCE OF THE LOADLINE CERTIFICATE FOR INLAND WATERWAY SHIPS

Section 1 GENERAL PROVISIONS

5.1.1 General requirements

5.1.1.1 Following surveys are to be carried out for the issuance or endorsement of Loadline Certificate for Inland Waterway ships:

- (1) Initial surveys;
- (2) Annual surveys;
- (3) Renewal surveys.

5.1.1.2 The annual survey of Loadline Certificate is to be carried out during the intermediate survey when the annual survey of non-self-propulsion ship is not applicable in Table 1.2.4.1; surveys related to issuance of Loadline Certificate are to be carried out according to the requirements of annual survey in Section 3 of this Chapter during the intermediate survey for all ships.

5.1.2 Requirements of surveys

5.1.2.1 The requirements of surveys are to comply with the Section 2, 3, 4 of this Chapter and Chapter 1 of this Part.

Section 2 INITIAL SURVEYS

5.2.1 Plan approval

5.2.1.1 The plans submitted for approval (or for reference) are to comply with related provisions of 2.3 of Appendix I of this Part.

5.2.2 Survey items

5.2.2.1 The surveys during construction and after installation are to include the following items and the approved plans are to be complied with:

- (1) checking that, the ship has been constructed in accordance with approved plans in respect of structural strength;
- (2) confirming that the deck line and load line marks have been properly marked;
- (3) examining the superstructure end bulkheads and closing devices for the openings thereon;
- (4) examining the weather-tight securing devices for cargo hatchways, other hatchways and other openings on the freeboard;
- (5) examining the ventilators and air pipes, including their coamings and closing devices;
- (6) examining the watertight integrity of the closures to the openings in the ship's side below the freeboard deck;
- (7) examining the scuppers, inlets and discharges;
- (8) examining the side scuttles and deadlights;
- (9) examining the bulwarks including the arrangement of freeing ports;
- (10) examining the guardrails, stairways, gangways and other means provided for the protection of the crew and for gaining access to and from crew's accommodation and working spaces.

5.2.2.2 Verifying the following documents are available on board the ship:

- (1) the safety loading manual (if any);
- (2) the stability information.

5.2.3 Issuance of certificate

5.2.3.1 The Loadline Certificate or a Exemption Certificate is to be issued if the result is satisfactory.

Section 3 ANNUAL SURVEYS

5.3.1 Survey items

5.3.1.1 The annual survey for the loadline is to consist of:

- (1) checking, in general, that there has been no deterioration in the strength of the hull;
- (2) checking the positions of the deck line and load line which, if necessary, are to be re-marked and re-painted;
- (3) checking that no alteration has been made to the hull or superstructures that would affect the calculations determining the positions of the load lines;
- (4) examining the superstructure end bulkheads and the closing devices of the openings thereon;
- (5) examining the weathertight securing devices for cargo hatchways, other hatchways and other openings on the freeboard deck;
- (6) examining the watertight integrity of the closures to the openings in the ship's side below the freeboard deck;
- (7) examining the ventilators and air pipes, including their coamings and closing devices;
- (8) examining the scuppers, inlets and discharges;
- (9) examining the side scuttles and deadlights;
- (10) examining the bulwarks including arrangement of freeing ports;
- (11) examining the guardrails, stairways, gangways and other means provided for protection of crew and for gaining access to from crew's quarters and working spaces.

5.3.1.2 Checking the validity of related certificates and required documents supplied.

5.3.2 Endorsement of certificates

5.3.2.1 Endorsement on the LoadLine Certificate in case the annual survey is satisfactory.

Section 4 RENEWAL SURVEYS

5.4.1 Survey items

5.4.1.1 The renewal survey for the loadline is to consist of:

- (1) those as required in 5.3.1 of this Chapter;
- (2) examining the hull to ensure that the ship has enough strength and stability when its draft reaches the approved loadline.

5.4.1.2 Checking the validity of related certificates and required documents supplied.

5.4.2 Issuance of certificates

5.4.2.1 After a satisfactory renewal survey, the Loadline Certificate for Inland Waterway ships is to be issued.

CHAPTER 6 SURVEYS RELATED TO ISSUANCE OF THE OIL POLLUTION PREVENTION CERTIFICATE FOR INLAND WATERWAY SHIPS

Section 1 GENERAL PROVISIONS

6.1.1 General requirements

6.1.1.1 Following surveys are to be carried out for the issuance or endorsement of Oil Pollution Prevention Certificate for Inland Waterway ships:

- (1) Initial survey;
- (2) Annual survey;
- (3) Intermediate survey;
- (4) Renewal survey.

6.1.1.2 The inland waterway ships whose power equipment is untested or total main engine output is less than 22 kW may be exempted from the issuance of the Oil Pollution Prevention Certificate; this type of ships is to also comply with the corresponding requirements of Chapter 2, PART 7 of the Guidelines, the Certificate of Fitness for Navigation is to be endorsed after the initial survey is satisfactorily completed, the Certificate of Fitness for Navigation is to be endorsed after the renewal survey, intermediate survey and annual survey are satisfactorily completed.

6.1.2 Requirements for surveys

6.1.2.1 The requirements of surveys are to comply with the Section 2, 3, 4 of this Chapter and Chapter 1 of this Part.

Section 2 INITIAL SURVEYS

6.2.1 Plan approval

6.2.1.1 The plans submitted for approval (or for reference) are to comply with related provisions of 2.10 of Appendix I of this Part.

6.2.2 Survey items

6.2.2.1 The surveys during construction and after installation are to include the following items and the approved plans are to be complied with:

- (1) checking that the ship is constructed according to approved plans in the aspect of oil pollution prevention;
- (2) checking the type approval certificate or marine product certificate of oil-water separating equipment, the seals or marks and checking the type approval certificate of oil content alarm device and the seals or marks (if fitted);
- (3) the external inspection to the oil-water separating equipment, and necessary dismantling and inspection when distinct efficiency is found;
- (4) examining the fitting of oil-water separating equipment, and carrying out a functional test and a sampling analysis prior to the service of the ship;
- (5) simulated test of oil content alarm device (if fitted);
- (6) the tightness tests of oily sewage tanks, settling tanks and sludge tanks are to be carried out. The tightness test is to comply with the related requirements of the Guidelines;
- (7) confirming that the standard discharging connections comply with the requirements;
- (8) checking the fix condition of related pipelines;
- (9) for oil tankers with ballast tank, ascertaining that cargo system and ballast system in pump room

have been separated exactly, and checking that if the ballast tanks have been defiled by the oily water.

6.2.2.2 Verifying the following documents are available on board the ship (applicable for oil tankers with gross tonnage no less than 150 and other ships with gross tonnage no less than 400):

- (1) oil record book;
- (2) shipboard oil pollution emergency plan.

6.2.3 Issuance of certificates

6.2.3.1 The Oil Pollution Prevention Certificate or a Exemption Certificate is to be issued if the result is satisfactory.

Section 3 ANNUAL SURVEYS AND INTERMEDIATE SURVEYS

6.3.1 Survey items

6.3.1.1 Annual surveys and intermediate surveys related to Oil Pollution Prevention Certificate are to consist of:

- (1) examining the operation conditions of the oil pollution prevention structure and the equipment, and carrying out an external inspection;
- (2) functional tests and sampling analysis are to be carried out for the oil-water separating equipment;
- (3) examining whether the operation of standard discharging connection is in a normal condition;
- (4) simulated test of oily content alarm device (if fitted);
- (5) confirming that the cargo system and ballast system in pump room have been separated exactly, and verifying that if the ballast tanks have been defiled by the oily water during annual survey and intermediate survey for oil tankers.

6.3.1.2 Checking the validity of related certificates and required documents supplied.

6.3.2 Endorsement of certificates

6.3.2.1 Endorsement on the Oil Pollution Prevention Certificate in case the survey is satisfactory.

Section 4 RENEWAL SURVEYS

6.4.1 Survey items

6.4.1.1 The renewal survey for oil pollution prevention is to consist of:

- (1) those as required in 6.3.1 of this Chapter;
- (2) checking the oil-water separating equipment, including whether the related pumps, pipes and fittings have been worn or corroded and, if any distinct deficiency is found, necessary renewal is needed;
- (3) For oil tankers, the renewal survey is to consist of:
 - ① examining the corrosion and leakage condition of oily sewage tanks, settling tanks and sludge tanks together with associated piping and, if necessary, carrying out tightness test;
 - ② examining the fix condition of related pipelines and whether any crack, corrosion, deformation or other mechanical damage is existing to the wall and the joints;
 - ③ examining whether the operation of standard discharging connection is in a normal condition.

6.4.1.2 Checking the validity of related certificates and required documents supplied.

6.4.2 Issuance of certificates

6.4.2.1 After a satisfactory survey, the Oil Pollution Prevention Certificate for Inland Waterway ships is to be issued.

CHAPTER 7 SURVEYS RELATED TO ISSUANCE OF THE SEWAGE POLLUTION PREVENTION CERTIFICATE FOR INLAND WATERWAY SHIPS

Section 1 GENERAL PROVISIONS

7.1.1 General requirements

7.1.1.1 Following surveys are to be carried out for the issuance or endorsement of Sewage Pollution Prevention Certificate for Inland Waterway ships:

- (1) Initial surveys;
- (2) annual surveys;
- (3) intermediate surveys;
- (4) renewal surveys.

7.1.1.2 The inland waterway ships that produce no sewage within the applicable range of Chapter 5, PART SEVEN of the Guidelines (such as ships with no toilets, passenger ships type 5, etc.) may be exempted from the issuance of the Sewage Pollution Prevention Certificate; this type of ships is to also comply with the corresponding requirements of Chapter 5, PART SEVEN of the Guidelines, the Certificate of Fitness for Navigation is to be endorsed after the initial survey is satisfactorily completed, the Certificate of Fitness for Navigation is to be endorsed after the renewal survey, intermediate survey and annual survey are satisfactorily completed.

7.1.2 Requirements of surveys

7.1.2.1 The requirements of surveys are to comply with the Section 2, 3, 4 of this Chapter and Chapter 1 of this Part.

Section 2 INITIAL SURVEYS

7.2.1 Plan approval

7.2.1.1 The plans submitted for approval (or for reference) are to comply with related provisions of 2.10 of Appendix I of this Part.

7.2.2 Survey items

7.2.2.1 The surveys during construction and after installation are to include:

- (1) checking the marine product certificate of sewage treatment plant and the seals or marks;
- (2) examining the fitting of sewage pollution prevention plant, and carrying out a functional test prior to the service of the ship;
- (3) the tightness tests of holding tanks and sewage treatment tanks are to be carried out. The tightness test is to comply with the related requirements of the Guidelines;
- (4) checking the tightness of sewage pipelines and the fix condition of related pipelines;
- (5) checking the discharge connections;
- (6) checking the emergency by-pass lines;
- (7) checking the liquid level alarm (if fitted);
- (8) checking the ventilating condition of sewage treatment plant to prevent from emerging explosive gas.

7.2.3 Issuance of certificates

7.2.3.1 The Sewage Pollution Prevention Certificate is to be issued if the result is satisfactory.

Section 3 ANNUAL SURVEYS AND INTERMEDIATE SURVEYS

7.3.1 Survey items

7.3.1.1 Annual surveys and intermediate surveys related to sewage pollution prevention are to consist of:

(1) examining the operation conditions of the sewage pollution prevention structure and the equipment, and carrying out an external inspection;

(2) examining whether the operation of standard discharging connection is in a normal condition;

(3) checking the emergency by-pass lines;

(4) checking the liquid level alarm (if fitted);

(5) checking the ventilating condition of sewage treatment plant to prevent from emerging explosive gas.

7.3.1.2 Checking the Sewage Pollution Prevention Certificate, related records and the validity.

7.3.2 Endorsement of certificates

7.3.2.1 Endorsement on the Sewage Pollution Prevention Certificate in case the survey is satisfactory.

Section 4 RENEWAL SURVEYS

7.4.1 Survey items

7.4.1.1 The renewal survey for sewage pollution prevention is to consist of:

(1) those as required in 7.3.1 of this Chapter;

(2) functional test to the sewage treatment plant;

(3) sampling testing is to be carried out for the water purified by the sewage treatment plant.

7.4.2 Issuance of certificates

7.4.2.1 After a satisfactory survey, the Sewage Pollution Prevention Certificate for Inland Waterway ships is to be issued.

CHAPTER 8 SURVEYS RELATED TO ISSUANCE OF THE GARBAGE POLLUTION PREVENTION CERTIFICATE FOR INLAND WATERWAY SHIPS

Section 1 GENERAL PROVISIONS

8.1.1 General requirements

8.1.1.1 Following surveys are to be carried out for the issuance or endorsement of Garbage Pollution Prevention Certificate for Inland Waterway ships:

- (1) Initial survey;
- (2) Annual survey;
- (3) Intermediate survey;
- (4) Renewal survey.

8.1.2 Requirements of surveys

8.1.2.1 The requirements of surveys are to comply with the Section 2, 3, 4 of this Chapter and Chapter 1 of this Part.

Section 2 INITIAL SURVEYS

8.2.1 Plan approval

8.2.1.1 The plans submitted for approval (or for reference) are to comply with related provisions of 2.10 of Appendix I of this Part.

8.2.2 Survey items

8.2.2.1 The surveys during construction and after installation are to include:

- (1) referring to the marine product certificate of garbage compressed plant (if fitted) and the seals or marks;
- (2) checking the garbage holding device;
- (3) checking the signboard.

8.2.3 Issuance of certificates

8.2.3.1 After a satisfactory survey, the Garbage Pollution Prevention Certificate for Inland Waterway ships is to be issued.

Section 3 ANNUAL SURVEYS AND INTERMEDIATE SURVEYS

8.3.1 Survey items

8.3.1.1 Annual surveys and intermediate surveys related to garbage pollution prevention are to consist of:

- (1) examining the operation conditions of the garbage holding device and garbage compressed plant (if fitted), and carrying out an external inspection;
- (2) checking the signboard and garbage record book.

8.3.1.2 Checking the Garbage Pollution Prevention Certificate, related records and the validity.

8.3.2 Endorsement of certificates

8.3.2.1 Endorsement on the Garbage Pollution Prevention Certificate in case the survey is satisfactory.

Section 4 RENEWAL SURVEYS

8.4.1 Survey items

8.4.1.1 The renewal survey for garbage pollution prevention is to consist of:

- (1) those as required in 8.3.1 of this Chapter.

8.4.2 Issuance of certificates

8.4.2.1 After a satisfactory survey, the Garbage Pollution Prevention Certificate for Inland Waterway ships is to be issued.

CHAPTER 9 SURVEYS RELATED TO ISSUANCE OF THE AIR POLLUTION PREVENTION CERTIFICATE FOR INLAND WATERWAY SHIPS

Section 1 GENERAL PROVISIONS

9.1.1 General requirements

9.1.1.1 Following surveys are to be carried out for the issuance or endorsement of Air Pollution Prevention Certificate for Inland Waterway ships:

- (1) initial surveys;
- (2) annual surveys;
- (3) intermediate surveys;
- (4) renewal surveys.

9.1.1.2 The inland waterway ships with diesel engine unsetting or of which the unit power of diesel engine is not more than 130kW may be exempted from the issuance of the Air Pollution Prevention Certificate; this type of ships is to also comply with the corresponding requirements of Chapter 7, PART SEVEN of the Guidelines, the Certificate of Fitness for Navigation is to be endorsed after the initial survey is satisfactorily completed, the Certificate of Fitness for Navigation is to be endorsed after the renewal survey, intermediate survey and annual survey are satisfactorily completed.

9.1.2 Requirements of surveys

9.1.2.1 The requirements of surveys are to comply with the Section 2, 3, 4 of this Chapter and Chapter 1 of this Part.

Section 2 INITIAL SURVEYS

9.2.1 Plan approval

9.2.1.1 The plans submitted for approval (or for reference) are to comply with related provisions of 2.10 of Appendix I of this Part.

9.2.2 Survey items

9.2.2.1 The surveys during construction and after installation are to include:

- (1) checking the relevant product certificates and test reports of controlling harmful gas emission of diesel engine;
- (2) verifying that the equipment, systems, plants and their arrangements and materials comply with the relevant provisions of Chapter 7, PART SEVEN of the Guidelines.

9.2.3 Issuance of certificates

9.2.3.1 After a satisfactory survey, the Air Pollution Prevention Certificate for Inland Waterway ships is to be issued.

Section 3 ANNUAL SURVEYS AND INTERMEDIATE SURVEYS

9.3.1 Survey items

9.3.1.1 Annual surveys and intermediate surveys related to air pollution prevention are to consist of:

(1) examining externally the relevant systems and equipment to verify that they are suitable for their intended services;

(2) putting emphasis on checking the rust and leakage of the mechanical power accessories, piping and valves, checking that the instruments of the equipment and systems have no damage, and carrying out necessary testing and examining for the uncertain.

9.3.1.2 Checking the validity of relevant documents about controlling NO_x emission and Air Pollution Prevention Certificate.

9.3.2 Endorsement of certificates

9.3.2.1 Endorsement on the Air Pollution Prevention Certificate in case the survey is satisfactory.

Section 4 RENEWAL SURVEYS

9.4.1 Survey items

9.4.1.1 The renewal survey for air pollution prevention is to consist of:

(1) those as required in 9.3.1 of this Chapter.

(2) confirming that the sulphur content of fuel oil comply with the relevant provisions of Chapter 7, PART SEVEN of the Guidelines.

9.4.2 Issuance of certificates

9.4.2.1 After a satisfactory survey, the Air Pollution Prevention Certificate for Inland Waterway ships is to be issued.

CHAPTER 10 SURVEYS RELATED TO ISSUANCE OF THE CERTIFICATE OF FITNESS OF CARRYING/PUSHING/TOWING DANGEROUS CARGOES FOR INLAND WATERWAY SHIPS

Section 1 GENERAL PROVISIONS

10.1.1 General requirements

10.1.1.1 Following surveys are to be carried out for the issuance or endorsement of Certificate of Fitness of Carrying/Pushing/Towing Dangerous Cargoes for Inland Waterway ships (applicable for the ships designed for carrying dangerous cargoes):

- (1) initial surveys;
- (2) annual surveys;
- (3) intermediate surveys;
- (4) renewal surveys.

10.1.1.2 The categories, quantities and loading areas of the cargoes approved to be carried are to be noted in the Certificate of Fitness of Carrying/Pushing/Towing Dangerous Cargoes for Inland Waterway ships after a satisfactory survey according to the relevant technical requirements.

10.1.1.3 Within the validity period of the Certificate, a second survey is to be applied for the technical conditions for carrying/pushing/towing dangerous cargoes when the categories, quantities and loading areas of the cargoes change.

10.1.1.4 For the ships not designed for carrying dangerous cargoes, an additional survey is to be carried out before issuing the Certificate of Fitness of Carrying/Pushing/Towing Dangerous Cargoes for Inland Waterway ships, and the requirements of additional survey are to refer to those of initial survey for ships specially designed for carrying dangerous cargoes.

10.1.2 Requirements of surveys

10.1.2.1 The requirements of surveys are to comply with the Section 2, 3, 4, 5 of this Chapter and Chapter 1 of this Part.

Section 2 INITIAL SURVEYS

10.2.1 Plan approval

10.2.1.1 The plans submitted for approval (or for reference) are to comply with related provisions of 2.11 of Appendix I of this Part.

10.2.2 Survey items

10.2.2.1 The survey related to the equipment and devices of ships carrying dangerous cargoes during the construction and after the installation are to consist of:

(1) confirming that the fire protection arrangement and special requirements for the dangerous cargo areas comply with the approved plans.

(2) examining the arrangement of particular requirements for carrying dangerous cargoes, including the tests and examination for water supply, electrical equipment and cable laying, fire detection and fire alarms, ventilation, bilge pumping arrangements of cargo tanks, person protection (including protective clothing and portable devices), portable fire extinguishers and sprinkler system etc.

(3) examining the pushing/towing fleet of barges carrying dangerous cargoes and the additional requirements of pushing/towing ships.

10.2.2.2 Checking and confirming that the cargo stowage and securing manual is supplied on board the ship (applicable for the ships carrying dangerous cargoes).

10.2.3 Issuance of certificates

10.2.3.1 After a satisfactory survey, the Certificate of Fitness of Carrying/Pushing/Towing Dangerous Cargoes for Inland Waterway ships is to be issued.

Section 3 ANNUAL SURVEYS

10.3.1 Survey items

10.3.1.1 Annual surveys for the equipment and plants related to the Fitness of Certificate of Fitness of Carrying/Pushing/Towing Dangerous Cargoes for Inland Waterway ships are to consist of:

- (1) confirming that the fire protection arrangement and special requirements have no any change;
- (2) examining the arrangement of particular requirements for carrying dangerous cargoes, including the tests and examination for water supply, electrical equipment and cable laying, fire detection and fire alarms, ventilation, bilge pumping arrangements of cargo tanks, person protection (including protective clothing and portable devices), portable fire extinguishers and sprinkler system etc;
- (3) examining the pushing/towing fleet of barges carrying dangerous cargoes and the additional requirements of pushing/towing ships;
- (4) checking the validity of the Certificate of Fitness of Navigation and Certificate of Fitness of Carrying/Pushing/Towing Dangerous Cargoes for Inland Waterway ships;
- (5) checking the required documents on board the ships.

10.3.2 Endorsement of certificates

10.3.2.1 Endorsement on the Certificate of Fitness of Carrying/Pushing/Towing Dangerous Cargoes for Inland Waterway ships in case the survey is satisfactory.

Section 4 INTERMEDIATE SURVEYS

10.4.1 Survey items

10.4.1.1 Intermediate surveys for the equipment and plants related to the Certificate of Fitness of Carrying/Pushing/Towing Dangerous Cargoes for Inland Waterway ships are to consist of:

- (1) those as required in 10.3.1 of this Chapter;
- (2) operation functional test to all kinds of closing appliance for the openings within the dangerous cargo areas (including ro-ro spaces).

10.4.2 Endorsement of certificates

10.4.2.1 Endorsement on the Certificate of Fitness of Carrying/Pushing/Towing Dangerous Cargoes for Inland Waterway ships in case the survey is satisfactory.

Section 5 RENEWAL SURVEYS

10.5.1 Survey items

10.5.1.1 Renewal surveys for the equipment and plants related to the Certificate of Fitness of Carrying/Pushing/Towing Dangerous Cargoes for Inland Waterway ships are the same as the intermediate survey.

10.5.2 Issuance of certificates

10.5.2.1 After a satisfactory survey, the Certificate of Fitness of Carrying/Pushing/Towing Dangerous Cargoes for Inland Waterway ships is to be issued.

CHAPTER 11 SURVEYS RELATED TO ISSUANCE OF THE CERTIFICATE OF PASSENGER QUOTAS FOR INLAND WATERWAY SHIPS

Section 1 GENERAL PROVISIONS

11.1.1 General requirements

11.1.1.1 Following surveys are to be carried out for the issuance of Certificate of Passenger Quota for Inland Waterway ships:

- (1) initial surveys;
- (2) annual surveys.

11.1.1.2 When the passenger quotas changing because of conversion or other causes, passenger ships are to be surveyed and certificated in accordance with the requirements of Section 2 of this Chapter.

11.1.2 Requirements of surveys

11.1.2.1 The requirements of surveys are to comply with the Section 2, 3 of this Chapter and Chapter 1 of this Part.

11.1.2.2 During the renewal survey and intermediate survey of passenger ships, the survey of Certificate of Passenger Quota for Inland Waterway ships is to be carried out according to the requirements of annual survey.

Section 2 INITIAL SURVEYS

11.2.1 Plan approval

11.2.1.1 The plans submitted for approval (or for reference) are to comply with related provisions of 2.13 of Appendix I of this Part.

11.2.2 Survey items and assignment of passenger quotas

11.2.2.1 The survey to the accommodation facilities and the assignment of passenger quota during the construction and after installation are to consist of:

- (1) arrangement of the accommodation facilities;
- (2) checking the conditions for carrying passengers;
- (3) examining the means of accesses (including emergency means of acceses), passageways, stairways together with indicating marks;
- (4) examining the public spaces, accommodation spaces, service spaces and embarkation stations, together with the lighting (including emergency lighting) thereof;
- (5) examining the water supply and discharging systems;
- (6) examining the ventilation arrangements for accommodation and public spaces;
- (7) examining the arrangements of water closets, bathrooms and galleys;
- (8) examining the bulwark, guardrails or handrails;
- (9) examining the safety devices in the spaces in which dangerous gas may exist, such as battery rooms and painting lockers;
- (10) assignment of the passenger quota according to the requirements.

11.2.3 Issuance of certificates

11.2.3.1 After a satisfactory survey, the Certificate of Passenger Quota for Inland Waterway ships is to be issued.

Section 3 ANNUAL SURVEYS

11.3.1 Survey items

11.3.1.1 Annual surveys of the Certificate of Passenger Quota for Inland Waterway ships are to consist of:

- (1) examining as required in 11.2.2.1(1) to (9), and testing the operation of accommodation facilities in case of necessary.
- (2) checking the validity of Certificate of Passenger Quota and other related certificates.

CHAPTER 12 SURVEYS RELATED TO ISSUANCE OF THE CREW ACCOMMODATION CERTIFICATE FOR INLAND WATERWAY SHIPS

Section 1 GENERAL PROVISIONS

12.1.1 General requirements

12.1.1.1 Following surveys are to be carried out for the issuance of Crew Accommodation Certificate for Inland Waterway ships:

- (1) initial surveys;
- (2) renewal surveys.

12.1.2 Requirements of surveys

12.1.2.1 The requirements of surveys are to comply with the Section 2, 3 of this Chapter and Chapter 1 of this Part.

Section 2 INITIAL SURVEYS

12.2.1 Plan approval

12.2.1.1 The plans submitted for approval (or for reference) are to comply with related provisions of 2.12 of Appendix I of this Part.

12.2.2 Survey items

12.2.2.1 The surveys during construction and after installation are to include the following items and the approved plans are to be complied with:

- (1) confirming that the arrangement of crew accommodation comply with the approved plans;
- (2) confirming that the facility supply of crew accommodation comply with the approved plans, the supplied facilities apply to the expected purpose and are in a normal condition;
- (3) confirming that the facilities in accommodation spaces (including living, accommodation and entertainment facilities) comply with the approved plans.

12.2.3 Issuance of certificates

12.2.3.1 After a satisfactory survey, the Crew Accommodation Certificate for Inland Waterway ships is to be issued.

Section 3 RENEWAL SURVEYS

12.3.1 Survey items and requirements

12.3.1.1 The items and requirements of renewal survey are the same as the requirements of 12.2.2.1 of this Chapter.

12.3.2 Issuance of certificates

12.3.2.1 After a satisfactory survey, the Crew Accommodation Certificate for Inland Waterway ships is to be issued.

APPENDIX CONTENTS OF PLANS FOR APPROVAL

1 GENERAL PROVISIONS

1.1 Unless expressly provided otherwise, the contents of plans for approval (or for reference) for obtaining of certificates are listed in this Appendix. The contents of plans for each ship are different from each other and are to be determined according to the applicable conditions. CECIS may require other plans for approval in necessity.

1.2 Above plans for approval (or for reference) are in triplicate, plans need not be submitted if the items are repetitive.

1.3 The contents of plans for approval (or for reference) listed in this Appendix are divided according to the content of each part of the Guidelines, an identical plan submitted for approval and reference simultaneously is to be deemed as for approval.

2 CONTENTS OF PLANS FOR APPROVAL (OR FOR REFERENCE)

2.1 Ship structure

2.1.1 Ship structure includes the hull, machinery, electrical installation and engine room automation, the contents of plans for approval comply with the relevant provisions of the Rules for the Construction of Inland Waterway Steel Ships.

2.2 Tonnage measurement

2.2.1 For ships with tonnage measurement, the applicants are to submit plans for reference as follow:

- (1) Hull description;
- (2) General arrangement;
- (3) Lines plan;
- (4) Hydrostatic curves;
- (5) Main transverse section;
- (6) Construction profile;
- (7) Tonnage calculation.

2.3 Loadline

2.3.1 Following plans are submitted for approval:

- (1) Hull description;
- (2) Freeboard calculation;
- (3) Loadline and draft mark plan;
- (4) Whole ship openings (including doors and windows) arrangement and construction;
- (5) Cargo hatch construction;
- (6) Cargo hatch cover construction and strength calculation;
- (7) Deckhouse and superstructure construction.

2.3.2 Following plans and documents are submitted for reference:

- (1) General arrangement;
- (2) Main transverse section;
- (3) Structure strength calculation;
- (4) Stability calculation of various carrying conditions;
- (5) Lines plan.

2.3.3 The plans and documents for approval may be added in necessity for the ships with special purpose, arrangement and structure.

2.4 Stability

2.4.1 Following plans are submitted for approval:

- (1) Stability calculation of various carrying conditions;
- (2) Allowable height of center of gravity curves or data;
- (3) Flooding angle and opening position curves or data;
- (4) Damage stability calculation (if applicable).

2.4.2 Following plans are submitted for reference:

- (1) General arrangement;
- (2) Lines plan and offset table;
- (3) Bilge keel arrangement (if fitted);
- (4) Hydrostatic curves or data;
- (5) Cross curves or data
- (6) Accommodation curves or data.

2.5 Fire fighting

2.5.1 Following plans are submitted for approval:

- (1) Structure fire and material particulars description;
- (2) Fire area and accommodation fire division plan;
- (3) Fire bulkhead, deck and door structure detail;
- (4) Fire door control schematic diagram;
- (5) Ventilation system arrangement and damper control plan;
- (6) Fixed fire-extinguishing system arrangement (including scavenge box fire-extinguishing system of crosshead type diesel engine) and extinguishant calculation;
- (7) Water fire-extinguishing system arrangement;
- (8) fixed fire detection and alarm system arrangement;
- (9) Fire control plan or fire fighting appliance arrangement (with fire control plan not required);
- (10) Fire fighting appliance and fire service inventory list.

2.6 Life-saving appliance

2.6.1 Following plans are submitted for approval:

- (1) Life-saving appliance arrangement and list;
- (2) Lifeboat appliance list;
- (3) Boat davit and winch plan.

2.7 Radio equipment

2.7.1 Following plans are submitted for approval:

- (1) Radio communication equipment system diagram;
- (2) Radio communication equipment arrangement;
- (3) Antenna arrangement;
- (4) Radio communication equipment specification.

2.8 Navigation equipment

2.8.1 Following plans are submitted for approval:

- (1) Navigation equipment arrangement;
- (2) Navigation equipment system diagram;
- (3) Antenna arrangement;
- (4) Navigation equipment specification (relevant approved number and document of product may be provided during installation onboard).

2.9 Signaling appliance

2.9.1 Following plans are submitted for approval:

- (1) Signal light, signal, flag and sound signaling appliance arrangement;
- (2) Specification of signal light, signal, flag and sound signaling appliance.

2.10 Pollution prevention structure and equipment

2.10.1 Following plans are submitted for approval:

- (1) Oil pollution prevention structure and equipment description;
- (2) Bilge measuring and control system diagram;
- (3) Electrical equipment schematic diagram of oily-water separating equipment;
- (4) Arrangement of oil (water) tanks and sludge tanks together with their piping;
- (5) For oil tankers, following plans are to be submitted:
 - ① Oil pollution prevention structure and equipment description for oil tankers;
 - ② Special ballast arrangement for oil tankers (if fitted);
 - ③ Oil (water) tanks arrangement and system diagram for oil tankers.
- (6) Instruction of the sewage pollution prevention system, including the instruction of the holding tank/cabinet and sewage treatment tank (if applicable);
- (7) Arrangement of the sewage pollution prevention system, including piping, discharge connections, emergency by-pass lines and sewage treatment plants or device assembly drawings (if applicable);
- (8) Description of garbage holding device and compressed plant (if fitted);
- (9) Ozone-depleting substances system arrangement.

2.11 Dangerous cargo carrying

2.11.1 Following plans are submitted for approval (or for reference):

- (1) Description of ship type intended to carry dangerous cargoes, cargo area, carrying mode (for reference);
- (2) Fire protecting arrangement plan of the areas loading dangerous cargoes;
- (3) Relevant plans of particular requirements for carrying dangerous cargoes, including water supply, electrical equipment and cable laying, fire detection and fire alarms, ventilation, bilge pumping arrangements of cargo tanks, person protection etc.

2.12 Crew accommodation equipment

2.12.1 Following plans are submitted for approval:

- (1) Crew accommodation arrangement;
- (2) Crew accommodation equipment description.

2.13 Passenger quota and accommodation

2.13.1 Following plans are submitted for approval:

- (1) General arrangement of the ship and passenger arrangements on each deck;
- (2) Stability calculation;
- (3) Life-saving appliance arrangement.