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INLAND TRANSPORT COMMITTEE**

Principal Working Party on Inland
Water Transport

Working Party on the Standardization
of Technical and Safety Requirements
in Inland Navigation
(Eleventh session, 13-15 February 1996,
agenda item 11)

**UNIFICATION OF PROCEDURES AND RULES FOR THE
SURVEY OF INLAND NAVIGATION VESSELS**

Addendum 3

Transmitted by the Government of Poland

1. According to Polish law a ship flying a Polish flag may be engaged in inland waterways navigation provided that it has a Ship's Certificate which confirms that the ship complies with the relevant design, operational and safety requirements. The Ship's Certificate is issued upon application of the shipowner, by local administration for inland navigation (Inland Navigation Inspectorates). The above-mentioned certificates are issued on the basis of:

(a) The Polish Register of Shipping (PRS) Classification Certificate, which confirms that the ship meets technical requirements for safety. For self-propelled ships with power up to 37 kW, and for non-self-propelled ships whose $L \times B$ is less than 50 m², a certificate of ship's fitness for navigation issued by an expert recognized by PRS may be accepted as a substitute for the Classification Certificate;

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(b) The statement by the State Board for Labour Inspection which assesses the condition of ship machinery and equipment as regards work safety, and of the statement by the State Board for Sanitary Inspection assessing the ship's sanitary state.

2. The requirements for the ship's technical state of safety are given in PRS Rules issued upon the authorization given by the Minister of Transport and Maritime Economy. PRS Rules correspond to the regulations of resolution No. 17 dealing with the technical requirements for inland navigation vessels. The Rules contain also principles of classification and the survey procedure.

3. The requirements for ship's life-saving, signalling, embarkation, fire-fighting equipment, etc. are governed by the rules issued by the Minister of Transport and Maritime Economy.

4. Classification survey and their objectives

4.1 The purpose of classification surveys is to ascertain whether the ship, fully or to a certain degree considered satisfactory, complies with appropriate technical requirements of PRS Rules.

Three types of surveys have been distinguished:

- (a) Initial Survey for assignment of class;
- (b) Periodical Survey;
- (c) Occasional Survey.

4.2 The initial Survey for assignment of class is carried out to ascertain that the class can be assigned to the ship submitted to PRS for classification.

The above-mentioned survey differs in scope for the following cases:

- (a) Ship under construction;
- (b) Ship in service.

The scope of the initial survey for assignment of class for the ship under construction is determined in each case according to PRS Rules and according to the approved documentation so as to satisfy the purpose of the survey.

The scope of the initial survey for assignment of class for the ship in service is determined in each case according to requirements for the respective type of the survey for class renewal depending on the age of the vessel and technical state of its hull, machinery and equipment. The class is assigned or renewed, in principle, for a period of 5 years.

4.3 Inland navigation vessels to which a class has been assigned, undergo the following periodical surveys:

- (a) Survey for confirming a class;
- (b) Survey for class renewal.

The purpose of the survey for confirming a class is to assess whether the technical state of the ship meets the requirements under which the class has been assigned to the vessel.

The purpose of the survey for class renewal is to ascertain that the technical state of the vessel complies with PRS rules and additional requirements, if applicable.

4.4 Occasional surveys are all surveys other than those mentioned above. In particular, they are surveys after damage in order to check whether the class of the ship is affected by the damage. The scope of occasional surveys is determined in each particular case.

5. Intervals between surveys

5.1 Survey for confirming a class

(a) Passenger ships operating in navigational zones 1 and 2 undergo annual dock surveys;

(b) Passenger ships operating in navigational zone 3 and crude oil carriers, undergo dock surveys every two and a half years;

(c) Ships of other types are to be subjected to in-water surveys at intervals of two and a half years;

(d) Ships, for which the period of class validity has been shortened, shall not be subjected to the survey for confirming a class.

5.2 Survey for class renewal

The surveys for class renewal are carried out at intervals corresponding to the period for which a class has been assigned (5 years). When, owing to the state of the ship's hull, the scope of the next survey for confirming a class ought to be extended to the scope of the survey for class renewal, the 5 year validity period shall be shortened to one or two years.

6. Scope of surveys

Symbols:

- O - examination of the technical state requiring measures to be taken in order to make various items accessible for examination or dismantled, where necessary;
- C - external examination;
- M - measurements;
- H - hydraulic tests;
- P - operational tests of machinery or arrangements including their external examination;

- E - checking the availability of valid documentation or brands confirming the adjustment of instruments and devices (legalization) if they are to be checked.

	Item to be surveyed	To confirm class	I, II, III for class renewal	For class renewal after 15 year period
1	2	3	4	5
1.	HULL			
1.1	Underwater shell plating (external examination)			
1.1.1	Keel, stem, stern-frame, side keels, shaft brackets and parts securing stern tube	C $\frac{1}{2}$	O	O
1.1.2	Shell plating	C $\frac{1}{2}$	OM $\frac{2}{2}$	OM $\frac{2}{2}$
1.1.3	Rudder .1 Rudder blade, helmpoint .2 Rudder stock, pintles, bearings $\frac{3}{2}$	O $\frac{1}{2}$ M $\frac{1}{2}$	O OM	OM OM
1.1.4	Bottom and side water boxes	C $\frac{1}{2}$	O	OM
1.1.5	Drain plugs, zinc protectors, and other anti-corrosive means	C $\frac{1}{2}$	O	O
1.2	Above-water shell plating (external examination)			
1.2.1	Stem, stern-frame	C	C	OM
1.2.2	Shell plating	C	C	OM
1.2.3	Bulwark .1 plating and stiffeners .2 bulwark ports	C C	C P	O P
1.2.4	Deck plating and hatch coamings	C	O	OM
1.2.5	Superstructures (shell plating, bulkheads, decks, etc.)	C	C	O
1.2.6	Deckhouses (shell plating, decks, etc.)	C	C	O

1	2	3	4	5
1.2.7	Winch and capstan foundations attachment of derricks and other structures transmitting great loads	C	C	OM
1.2.8	External deck coverings (if any)	C	C	O
1.3	Inner compartments			
1.3.1	Ends .1 fore and after .2 chain locker	C C	O O	O O
1.3.2	Hull tanks (with air and sounding pipes) .1 dry tanks, ballast tanks, fresh water tanks, drain tanks and other tanks .2 oil fuel tanks, tanks for the alternative carriage of oil and water ballast .3 cargo tanks	 C	 O O O	OM $\frac{4}{\cdot}$ OM $\frac{4}{\cdot}$ $\frac{6}{\cdot}$ OM $\frac{5}{\cdot}$
1.3.3	Holds from bottom to deck and bilges	C	O	O
1.3.4	Machinery spaces .1 machinery and pump rooms .2 seatings of main and auxiliary machinery .3 bilges	C C C	O O O	O O OM $\frac{4}{\cdot}$
1.3.5	Cofferdams		O	O
1.3.6	Other spaces in hull and superstructures (public and service spaces, accommodation spaces and store rooms)		O	O
1.3.7	Bottom and ice boxes (see also 1.1.4)		O	O
2.	EQUIPMENT AND OUTFIT			
2.1	Closings .1 hatch covers on open decks, outer doors, side scuttles, skylights .2 hatch covers of store rooms	C C	C C	C C
2.2	Steering gear (see also 5.3.3) .1 stanchions, steering chains .2 indicators, auxiliary steering gear .3 stoppers	C C C	O C C	OM C C

1	2	3	4	5
2.3	Anchor equipment (see also 5.3.4) .1 anchors and hawses .2 chain cables and wire ropes .3 chain slips and anchor davits and hand-operated windlasses	CE CE CP	OE OE OP	OE OME OP
2.4	Mooring equipment .1 bollards, mooring pipes .2 mooring lines	C C	C C	C C
2.5	Coupling gears of push trains .1 bollards, fairleaders, cushion springs and winches .2 wire ropes, balls	C C	C C	C C
2.6	Towing equipment (see also 5.3.5) .1 towing hook with fastening and rigging as well as rollers, sheaves and rope stoppers .2 towing hopps .3 bollards, hawses, ropes drums and wire ropes	C C	CPE CP C	CPE CP C
2.7	Checking whether the information on stability for the master is on board	E	E	E
2.8	Elements having effect on the position of the freeboard mark .1 hatch coamings .2 companionway coamings, ventilator coamings, filling, scunding, overflowing and air pipes, as well as freeboard mark .3 openings in vessel's sides	C C C	C C C	CM CM CM
3.	FIRE PROTECTION			
3.1	Fire extinguishing systems			
3.1.1	Water fire extinguishing systems .1 water fire main and pressure water-spraying systems ^{9/} .2 froth smothering systems	P P	OPH ^{8/} OPH ^{8/}	OPH ^{8/} OPH ^{8/}
3.1.2.1	Carbon dioxide gas smothering systems ^{10/}	P	OPH ^{31/}	OPH ^{31/}
3.1.2.2	Fluid smothering system ^{10/}	P	OPH ^{31/}	OPH ^{31/}
3.2	Fire detection and alarm system ^{32/}	P	P	P

1	2	3	4	5
4.	PUMPING AND PIPING			
4.1	Bottom and side fittings, as well as fittings installed on watertight bulkheads			
4.1.1	Fittings installed below waterline ^{12/}	O ^{1/}	O	OH
4.1.2	Fittings installed above waterline	C	O	O
4.2	Pumping and piping			
4.2.1	Water systems .1 bilge water ^{12/} .2 ballast .3 cooling water ^{13/} .4 pipelines passing through oil fuel tanks and liquid cargo tanks without tunnels (except heating coils) ^{14/} .5 scuppers leading through decks, bulkheads, platforms and leading outboard	P - - - -	OP OP O OH O	OPH OPH O OH O
4.2.2	Oil fuel system .1 oil fuel pipelines .2 tanks not forming part of hull	- -	OP O	OP OH
4.2.3	Liquid cargo system, heating coils for that cargo	-	C	C
4.2.4	Compressed air system	P	OP	OPH
4.2.5	Lubricating oil system ^{13/}	-	OP	OP
4.2.6	Steam systems .1 boiler pressure live steam ^{13/} .2 reduced pressure live steam	- -	OP OP	OPH OPH
4.2.7	Pipelines with fittings .1 air pipelines (see also 1.3.2) .2 overflow pipes .3 gas vent pipes in tankers	- - -	C C C	C C C
4.2.8	Vent ducts leading through watertight constructions	-	O	O
4.2.9	Liquid gas heating system	C	OH ^{15/}	OH ^{15/}
5.	MACHINERY INSTALLATIONS			
5.1	Main internal combustion engine	-	P	P

1	2	3	4	5
5.1.1	Frame .1 frame, cylinder covers, reamed bolts and chocks .2 cylinder liners	- -	O OM	O OM
5.1.2	Pistons .1 pistons, gudgeon pins .2 connecting rods, connecting rod bearing bolts	- -	OM O	OM O
5.1.3	Crank shaft .1 journals and crank pins .2 main bearings .3 crank web deflection (if possible)	- - -	OM O M	OM O M
5.1.4	Distributing devices (valve drives, suction, exhaust and starting air valves)	-	O	O
5.1.5	Fittings .1 measuring instruments and gauges .2 safety valves .3 lubricating devices lubricators, etc.	E $\frac{1}{2}$ / - -	E P $\frac{16}{16}$ / P	E P $\frac{16}{16}$ / P
5.1.6	Gears and couplings .1 shafts .2 bearings, friction clutches, reamed bolts and chocks .3 pinions and gear wheels .4 flexible connections engine-gear	- - - -	OM O OM O	OM O OM O
5.1.7	Reversing and starting arrangements	P	P	P
5.1.8	Speed governor	-	P	P
5.1.9	Auxiliary machinery driven by main engine .1 pumps: sea and fresh cooling water, lubricating oil and bilge .2 compressors .2.1 safety valves .3 scavenging pumps, turbo-chargers	P P P P	OP OP P OP	OP OP P OP
5.2	Shafting			
5.2.1	Thrust shaft .1 journals and thrust collars .2 journal and thrust bearings .3 reamed bolts and shims of thrust bearing and coupling $\frac{17}{17}$ / .4 axial clearance .5 shaft alignment $\frac{18}{18}$ /	- - C - -	OM O C M -	OM O C M M

1	2	3	4	5
5.2.2	Intermediate shafts .1 journals, journal bearings, flange connections and couplings ^{18/} .2 reamed bolts and bearing shims ^{17/} .3 shaft alignment ^{18/}	- C -	O M C -	O M C M
5.2.3	Propeller shaft .1 journals .2 clearance in bearing in stern bush .3 journal bearings .4 stern tube .5 seal at the part between the after end of the liner and the propeller boss ^{22/} .6 flange connections and couplings	O ^{1/ 19/} M ^{1/ 19/} M ^{1/ 20/} O ^{1/ 19/} O ^{1/ 21/} O ^{1/ 1/} O ^{1/}	O ^{19/} M M O O OH O	O ^{19/} M M O O OH O
5.2.4	Propeller ^{23/} .1 static balancing ^{24/} .2 propeller shaft fitting cone, check of adjustment .3 main parts of controllable pitch propellers ^{25/} .4 fastening of propeller, check of tightness and locking ^{23/} .5 nozzle ^{23/}	- - - -	OM O O O -	OM O O O O
5.3	Auxiliary machinery and arrangements			
5.3.1	Auxiliary internal combustion engines .1 cylinders, pistons with connecting rods and their bearings, crank shafts and main bearings, covers, valves	P -	P O	P O
5.3.2	Compressors	P	PO	PO
5.3.3	Steering gear	P	PO	PO
5.3.4	Windlass ^{26/}	P	PO	PO
5.3.5	Towing winch with arrangements ^{7/}	-	PO	PO
5.3.6	Pumps with independent drive .1 bilge pumps, cooling water pump sea and fresh water, pumps of general service, ballast pumps, fire extinguishing pumps, cargo pumps, fuel oil pumps (booster and transfer), lubricating oil pumps .2 salvage pumps	P	PO P	PO P
5.3.7	Sea water and cooling water strainers, fuel oil and lubricating oil filters	-	-	O

1	2	3	4	5
5.3.8	Means of communication	P	P	P
5.4	Pressure vessels			
5.4.1	Vessels accessible for internal examination	-	OH ^{8/}	O
5.4.2	Vessels inaccessible for internal examination	-	OH	OH
5.4.3	Fittings ^{27/}	P	P	P
5.4.4	Safety valves	P	OP	OP
5.4.5	Pressure gauges	E ^{1/}	E	E
5.5	Heat exchangers		O	OH
5.5.1	Cooling water and lubricating oil coolers	-	O	OH
5.5.2	Pressure gauges	E	E	E
6.	ELECTRICAL EQUIPMENT			
6.1	Power and lighting equipment ^{28/}			
6.1.1	Electric propulsion plants .1 generators, exciters, motors and electromagnetic clutches .2 distributing devices .3 control desks	P P P	OMP OEP OEP	OMP OEP OEP
6.1.2	Sources of electrical power intended to supply the vessel's consumers (main and emergency)	P	OMP	OMP
6.1.3	Converting devices feeding essential consumers	P	OMP	OMP
6.1.4	Distributing devices .1 main and emergency switchboards and navigation light switchboards .2 section and distributing switchboards	P C	OEP OP	OEP OP
6.1.5	Cabling .1 cables and wires .2 cable protection (additional), passage of cables through watertight bulkheads, fireproof bulkheads and decks		O O	O O

1	2	3	4	5
6.1.6	Electric drives of essential arrangements, as well as their control and monitoring devices of: .1 pumps as mentioned in 5.3.6, compressors, anchor equipment .2 steering gear .3 mooring winches and towing winches	P	OMP OMP OP	OMP OMP OP
6.1.7	Lighting of compartments and places important from the point of view of safety and safe navigation, emergency lighting, navigation lights	P	OP	OP
6.1.8	Electrical heating appliances connected with machinery installations, electrical cooking appliances		P	P
6.1.9	Electric cables and electrical equipment in explosion hazardous spaces	C	C	C
6.2	Electrical engine room telegraph, essential electrical signalling, service telephone communication	P	OP	OP
6.3	Lightning arresters and earthing	C	O	O
7.	AUTOMATIC SYSTEMS			
7.1	Control, alarm, safety and indicating systems	P	OMPE	OMPE
8.	REFRIGERATING INSTALLATIONS ^{29/}			
8.1	Compressor safety valves	P	P	P
8.2	Safety devices	OP	OPH ^{30/}	OPH
8.3	Condensers, intercoolers and refrigerant vessels		OH ^{30/}	OH
8.4	Evaporators		OH ^{15/}	OH ^{15/}
8.5	Refrigerant side fittings	O	O	O
8.6	Water-spraying system of refrigerating machinery space	P	OP	OP
8.7	Emergency ventilation of refrigerating machinery space	P	OP	OP
8.8	Automatic safety devices of compressors	P	P	P

Notes to the table

- 1/ Examinations (measurements, hydraulic tests) are required during all surveys for class confirmation, only with regard to ice-breakers, if they took part in ice-breaking operations, and to all passenger vessels and tankers.
- 2/ Beginning from the second survey for class renewal for oil tankers and from the third survey for class renewal for all other vessels the thickness of shell plating and structural members is to be measured during all surveys for class renewal as considered necessary by the PRS surveyor depending on the technical state of the hull.
- 3/ Clearance and sag measurements in bearings.
- 4/ Thickness measurements of bottom plating and watertight decks only.
- 5/ Thickness measurements of bulkhead and deck plating only.
- 6/ External inspection and fuel oil pressure test may be substituted by internal inspection of tank.
- 7/ Only on tugs.
- 8/ H - at 10-yearly intervals.
- 9/ P - testing of pumps, compressors and main pipelines with fittings.
- 10/ P - checking of discharging and filling intensity, every year.
- 11/ O - for passenger vessels and vessels performing ice-breaking operations annually, for other vessels only during docking.
- 12/ On board of non-self-propelled vessels OP at 5-yearly intervals.
- 13/ P - during operation test of respective engines.
- 14/ H - for pipelines with connections inside tanks - at 2 1/2-yearly intervals.
- 15/ H - compressed air test.
- 16/ Checking of adjustment.
- 17/ O - checking of bolt tightening.
- 18/ M - during each dismantling or after repair.
- 19/ During each withdrawal from the stern tube and removal of propeller.
- 20/ Also during each examination in a submerged position.

- 21/ Without dismantling.
- 22/ C - also during each withdrawal of the shaft.
- 23/ O - during examination of propeller shafts (see items 5.2.3 and 5.2.4 of the table).
- C - during each docking.
- 24/ M - during each repair of propeller.
- 25/ O - during each dismantling.
- 26/ P - may be effected at a port.
- 27/ Additionally O and H, together with O and H of the vessel.
- 28/ During annual surveys for class confirmation, measurement of insulation resistance of electric circuits of electrical machinery and devices affecting the safe navigation of the vessel are to be carried out. During class renewal surveys, measurement of insulation resistance of all electric circuits and all fixed electric machinery and devices are to be carried out.
- 29/ Applicable to refrigerating plants containing 150 kg or more of refrigerant in the system under working conditions (supervision from the point of view of safety).
- 30/ H - after 10 years and then at 5-yearly intervals, depending on the period for which the Classification Certificate has been issued (see 3.2.1).
- 31/ At 5-yearly intervals.
- 32/ During survey.
-