Commission Directive 2012/48/EU of 10 December 2012 amending the Annexes to Directive 2006/87/EC of the European Parliament and of the Council laying down technical requirements for inland waterway vessels

COMMISSION DIRECTIVE 2012/48/EU

of 10 December 2012

amending the Annexes to Directive 2006/87/EC of the European Parliament and of the Council laying down technical requirements for inland waterway vessels

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Directive 2006/87/EC of the European Parliament and of the Council of 12 December 2006 laying down technical requirements for inland waterway vessels and repealing Council Directive 82/714/EEC[(1)], and in particular the first sentence of Article 20(1) first subparagraph thereof,

Whereas:

(1) Since the adoption of the Directive 2006/87/EC in December 2006, amendments to the Rhine Vessel Inspection Regulation have been agreed pursuant to Article 22 of the Revised Convention for Rhine Navigation. It is therefore necessary to amend Directive 2006/87/EC accordingly.

(2) It should be ensured that the Community inland navigation certificate and the vessel certificate delivered in accordance with the Rhine Vessel Inspection Regulation are issued on the basis of technical requirements which guarantee an equivalent level of safety.

(3) In order to avoid distortions of competition as well as different levels of safety, the amendments to Directive 2006/87/EC should enter into force as quickly as possible.

(4) Following the adoption of Commission Implementing Decisions 2012/64/EU[(2)], 2012/65/EU[(3)] and 2012/66/EU[(4)] of 2 February 2012 on the approval of three classification societies in accordance with Article 10 of Directive 2006/87/EC the necessary amendments to Annex VII to Directive 2006/87/EC should be made.

(5) The measures provided for in this Directive are in accordance with the opinion of the Committee referred to in Article 7 of Council Directive 91/672/EEC of 16 December 1991 on the reciprocal recognition of national boatmasters' certificates for the carriage of goods and passengers by inland waterway[(5)],

HAS ADOPTED THIS DIRECTIVE:

Article 1

Directive 2006/87/EC is amended as follows:

(1) Annex II to Directive 2006/87/EC is amended in accordance with Annex I to this Directive.

(2) Annex VII to Directive 2006/87/EC is amended in accordance with Annex II to this Directive.

(3) Annex IX to Directive 2006/87/EC is amended in accordance with Annex III to this Directive.

Article 2

Member States which have inland waterways as referred to in Article 1(1) of Directive 2006/87/EC shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive at the latest on 1 December 2013. They shall forthwith inform the Commission thereof.

When Member States adopt those provisions, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. Member States shall determine how such reference is to be made.

Article 3

This Directive shall enter into force on the day of its publication in the *Official Journal of the European Union*.

Article 4

This Directive is addressed to the Member States which have inland waterways as referred to in Article 1(1) of Directive 2006/87/EC.

Done at Brussels, 10 December 2012.

For the Commission

The President

José Manuel BARROSO

ANNEX I

Annex II to Directive 2006/87/EC is amended as follows:

(1) Article 1.01 is amended as follows:

(a) points 97, 97a and 97b are replaced by the following:

(97) "Classification society"	:	a classification society that has been approved in accordance with the criteria and procedures of Annex VII
(97a) "Navigation lights"	:	light from signal lamps to indicate vessels
(97b) "Light signals"	:	light used to supplement visual or sound signals.;

(b) the following points are added:

(106) "expert"	:	a person recognised by the competent authority or by an authorised institution, having specialist knowledge in the relevant area on the basis of his or her professional training and experience, fully conversant with the relevant rules and regulations and the generally accepted technical rules (e.g. EN standards, relevant legislation, technical rules of other Member States of the European Union), and able to examine and give an expert assessment of the relevant systems and equipment;
(107) "competent person"	:	a person who has acquired sufficient knowledge in the relevant area on the basis of his or her professional training and experience and is sufficiently conversant with the relevant rules and regulations and the generally accepted technical rules (e.g. EN standards, relevant legislation, technical rules of other Member States of the European Union) to be able to assess the operational safety of the relevant systems and equipment..

(2) In Article 2.01 paragraph 2, point (c) is replaced by the following:

(c) a nautical expert in possession of an inland waterways boatmaster's licence, which authorises the holder to sail the vessel to be inspected.

(3) In Article 3.02 paragraph 1, the first paragraph of point (b), is replaced by the following:

(b) Where there is an inspection as referred to in Article 2.09, the minimum thickness of the bottom, bilge and side plates of vessels made from steel shall be no less than the higher of the values resulting from the following formulae:

(4) The heading of Article 6.09 is replaced by the following:

'*Article 6.09* **Acceptance test**'

(5) In Article 7.05 paragraph 1 is replaced by the following:

1. Navigation lights, their casings and accessories shall bear the approval mark prescribed by Council Directive 96/98/EC of 20 December 1996 on marine equipment[6].

(6) In Article 7.06 paragraph 1 is replaced by the following:

1. Radar navigation equipment and rate-of-turn indicators shall fulfil the requirements laid down in Annex IX Part I and Part II. Compliance with these requirements shall be determined by a type-approval issued by the competent authority. Inland *Electronic Chart Display Information System* (hereinafter referred to as "ECDIS") equipment which can be operated in navigation mode shall be regarded as radar navigation equipment.

The requirements concerning installation and operational testing of radar navigation systems and rate-of-turn indicators used in inland waterway vessels, laid down in Annex IX, Part III shall be met.

The register of radar navigation equipment and rate-of-turn indicators approved as laid down in Annex IX, or on the basis of type-approvals recognised to be equivalent, shall be published by the European Commission.

(7) In Article 8.01, paragraph 2 is replaced by the following:

2. Pressure vessels dedicated for the operation of the vessel shall be checked by an expert to verify that they are safe for operation:

(a) before being put into service for the first time,

(b) before being put back into service after any modification or repair, and

(c) regularly, at least every five years.

The inspection shall involve an internal and an external inspection. Compressed-air vessels the interior of which cannot be properly inspected, or the condition of which cannot be clearly established during the internal inspection, are required to undergo additional non-destructive testing or a hydraulic pressure test.

An inspection certificate shall be issued, signed by the expert and showing the date of the inspection.

Other installations requiring regular inspection, particularly steam boilers, other pressure vessels and their accessories, and lifts, shall meet the regulations applying in one of the Member States of the Union.

(8) In Article 10.02, paragraph 1 is replaced by the following:

1. At least the following equipment in accordance with the applicable navigational authority regulations in force in the Member States shall be onboard:

(a) radio-telephone equipment;

(b) appliances and devices necessary for emitting visual and acoustic signals and for marking the vessel;

(c) stand-alone back-up lights for the prescribed mooring lights.

The following receptacles must also be present:

(a) a marked receptacle for domestic waste;

(b) separate, marked receptacles, with sealing covers, made of steel or another sturdy, non-flammable material, of adequate size but holding at least 10 l, for the collection of

(aa) oily cleaning cloths;

(bb) hazardous or pollutant solid wastes;

(cc) hazardous or pollutant liquid wastes;

and, inasmuch as they may arise, for the collection of

(dd) slops;

(ee) other oily or greasy waste.

(9) Article 10.03 is amended as follows:

(a) the first sentence of paragraph 1 is replaced by the following:

1. There shall be at least one portable fire extinguisher in accordance with the European standards EN 3-7: 2007 and EN 3-8: 2007 at each of the following places:;

(b) paragraph 2 is replaced by the following:

2. For the portable fire extinguishers required by paragraph 1, only powder type extinguishers with a content of at least 6 kg or other portable extinguishers with the same extinguishing capacity may be used. They shall be suitable for Class A, B, C fires.

By way of derogation on vessels with no liquefied gas installations, spray foam fire extinguishers using aqueous film-forming foam (AFFF-AR)frost proof to minus (–) 20 °C are permissible even if they are unsuitable for Class C fires. These fire extinguishers shall have a minimum capacity of 9 litres.

All extinguishers shall be suitable to extinguish fires in electrical systems of up to 1 000 V.;

(c) paragraph 5 is replaced by the following:

5. Portable fire extinguishers shall be checked at least every two years by a competent person. An inspection label shall be affixed to the

fire extinguisher, signed by the competent person and showing the date of the inspection..

(10) In Article 10.03a, paragraphs 6, 7 and 8 are replaced by the following:

6. The systems shall be checked by an expert:

(a) before being put into service for the first time,

(b) before being put back into service after they have been triggered,

(c) before being put back into service after any major modification or repair,

(d) regularly, at least every two years.

Inspections as referred to in point (d) may also be carried out by a competent person from a competent firm specialising in fire extinguishing systems.

7. When carrying out the check in accordance with paragraph 6, the expert or competent person shall verify whether the systems meet the requirements of this paragraph.

The check shall at least include:

(a) external inspection of the entire system;

(b) functional testing of the safety systems and nozzles;

(c) functional testing of the pressure tanks and pumping system.

8. An inspection certificate, signed by the expert or competent person, shall be issued, showing the date of inspection.

(11) In Article 10.03b paragraph 9 points (b), (c) and (e) are replaced by the following:

(b) The system shall be checked by an expert

(aa) before being put into service for the first time;

(bb) before being put back into service after it has been triggered;

(cc) before being put back into service after any major modification or repair;

(dd) regularly, at least every two years.

Inspections as referred to in point (dd) may also be carried out by a competent person from a competent firm specialising in fire extinguishing systems.

(c) In the inspection the expert or competent person shall check whether the system meets the requirements of this Article.

(e) An inspection certificate, signed by the expert or competent person, shall be issued, showing the date of inspection.

(12) Article 11.02 is amended as follows:

(a) paragraph 4 is replaced by the following:

4. The outer edges of decks and side decks shall be fitted with bulwarks that are at least 0,90 m high or with a continuous guard

rail in accordance with European standard EN 711: 1995. Work stations where persons might fall more than 1 m, shall be fitted with bulwarks or coamings that are at least 0,90 m high or with a continuous guard rail in accordance with European standard EN 711: 1995. Where the guard rails of side decks are retractable,

(a) a continuous handrail 0,02 to 0,04 m in diameter shall additionally be secured to the coaming at a height of 0,7 to 1,1 m; and

(b) signs in accordance with Appendix I, Figure 10, at least 15 cm in diameter, shall be affixed in clearly visible positions at the point where the side deck begins.

Where there is no coaming, a fixed guard rail shall be installed instead.;

(b) the following paragraphs are inserted:

4a. By way of derogation from paragraph 4, in the case of lighters and barges without accommodation, bulwarks or guard rails shall not be required where:

(a) foot rails have been fitted to the outer edges of the decks and side decks;

(b) handrails in accordance with paragraph 4(a) have been fitted to the coamings; and

(c) signs in accordance with Appendix I, Figure 10, at least 15 cm in diameter, have been affixed in clearly visible positions on deck.

4b. By way of derogation from paragraph 4, in the case of vessels with flush- or trunk-decks it shall not be required that guard rails be fitted directly on the outer edges of those decks, or on side decks where:

(a) the passageway runs over those flush decks, surrounded by fixed guard rails in accordance with EN 711: 1995; and

(b) signs in accordance with Appendix I, Figure 10, at least 15 cm in diameter, have been affixed in clearly visible positions at the transitions to areas unprotected by guard rails.;

(c) the following paragraph 6 is inserted:

(6) Paragraphs 4, 4a and 4b are temporary requirements according to Article 1.06 and will be valid until 1 December 2016..

(13) Article 11.04 is amended as follows:

(a) paragraph 2 is replaced by the following:

2. Up to a height of 0,90 m above the side deck, the clear width of the side deck may be reduced to 0,50 m provided that the clear width above, between the outer edge of the hull and the inner edge of the hold, is not less than 0,65 m.;

(b) the following paragraph 4 is inserted:

4. Paragraph 2 is a temporary requirement according to Article 1.06 and will be valid until 1 December 2016..

(14) Article 11.12 is amended as follows:

(a) paragraphs 6 and 7 are replaced by the following:

6. Cranes shall be inspected by an expert:

(a) before being put into service for the first time,

(b) before being put back into service after any major modification or repair,

(c) regularly, at least every 10 years.

In this inspection proof of adequate strength and stability shall be provided by calculations and an on-board load test.

Where a crane's safe working load does not exceed 2 000 kg the expert may decide that the proof by calculation may be fully or partly replaced by a test with a load 1,25 times the safe working load carried out over the full working range.

An inspection certificate shall be issued, signed by the expert and showing the date of the inspection.

7. Cranes shall be checked regularly and in any case at least every 12 months, by a competent person. During that inspection the safe working condition of the crane shall be determined by a visual check and an operating check.

An inspection certificate shall be issued, signed by the competent person and showing the date of the inspection.;

(b) paragraph 8 is deleted;

(c) paragraph 10 is replaced by the following:

10. The crane manufacturer's operating instructions shall be kept on board. These shall include at least the following information:

(a) operating range and function of the controls;

(b) maximum permissible safe working load as a function of the reach;

(c) maximum permissible inclination of the crane;

(d) assembly and maintenance instructions;

(e) general technical data..

(15) Article 14.13 is replaced by the following:

Article 14.13. **Acceptance test**

Liquefied gas installations shall be checked by an expert, in order to verify whether the installation conforms to the requirements of this Chapter:

(a) before being put into service for the first time,

(b) before being put back into service after any major modification or repair,

(c) on every renewal of the attestation referred to in Article 14.15.

An inspection certificate shall be issued, signed by the expert and showing the date of the inspection. A copy of the inspection certificate shall be submitted to the inspection body.

(16) The heading of Article 14.14 is replaced by the following:

Article 14.14 **Test conditions**

(17) In Article 14.15, paragraph 3, the second subparagraph is replaced by the following:

Exceptionally, where the owner of a vessel or his representative submits a reasoned request, the inspection body may extend the validity of the attestation for not more than three months without carrying out the acceptance test referred to in Article 14.13. Such extension shall be entered in the Community certificate.

(18) In Article 15.02, paragraph 8 is replaced by the following:

8. Bulkheads separating the engine rooms from passenger areas or crew and shipboard personnel accommodation shall have no doors.

(19) Article 15.03 is amended as follows:

(a) paragraph 5 is replaced by the following:

5. The heeling moment due to wind pressure (M_W) shall be calculated as follows:

$$M_W = p_W \cdot A_W \cdot (l_W + T/2) [kNm]$$

where:

p_W	=	the specific wind pressure of 0,25 kN/m^2;
A_W	=	lateral plane of the vessel above the plane of draught according to theconsidered loading condition in [m^2];
l_W	=	distance of the centre of gravity of the lateral plane AW from the plane of draught according to the considered loading condition in [m].

In calculating the lateral plane, account shall be taken of the intended enclosure of the deck by awnings and similar mobile installations.;

(b) paragraph 9 (a) is replaced by the following:

(a) For one-compartment status the bulkheads can be assumed to be intact if the distance between two adjacent bulkheads is greater than the damage length. Longitudinal bulkheads at a distance of less than B/3 to the hull, measured perpendicular to the centre line

from the shell plating at the maximum draft shall not be taken into account for calculation purposes. A bulkhead recess in a transverse bulkhead that is longer than 2,50 m, is considered a longitudinal bulkhead..

(20) Article 15.06 is amended as follows:

(a) paragraph 1 is replaced by the following:

1. Passenger rooms shall:

(a) on all decks, be located aft of the level of the collision bulkhead and, if they are below the bulkhead deck, forward of the level of the aft-peak bulkhead,

(b) be separated from the engine and boiler rooms in a gas-tight manner,

(c) be so arranged, that sight lines in accordance with Article 7.02 do not pass through them.

Deck areas which are enclosed by awnings or similar mobile installations not only above but also fully or partially to the side must satisfy the same requirements as enclosed passenger rooms.;

(b) paragraph 15 is replaced by the following:

15. Superstructures or their roofs consisting completely of panoramic panes and enclosures created by awnings or similar mobile installations and their substructures shall be so designed as to, and shall only be manufactured from materials which, in the event of an accident, reduce as much as possible the risks of injury to the persons on board..

(21) Article 15.11 is amended as follows:

(a) paragraph 2(a) is replaced by the following:

2. Partitions

(a) between rooms shall be designed in accordance with the following tables:

(aa) Table for partitions between rooms, in which no pressurised sprinkler systems according to Article 10.03a are installed

Rooms	**Control centres**	**Stairwells**	**Muster areas**	**Lounges**	**Engine rooms**	**Galleys**	**Store rooms**
Control centres	—	A0	A0/ B15[a]	A30	A60	A60	A30/ A60[c]
Stairwells	—	A0	A30	A60	A60	A30	
Muster areas		—	A30/ B15[b]	A60	A60	A30/ A60[c]	

Lounges				-/A0/ B15[c]	A60	A60	A30
Engine rooms					A60/ A0[d]	A60	A60
Galleys						A0	A30/ B15[f]
Store rooms							—

a Partitions between control centres and internal muster areas shall correspond to Type A0, but external muster areas only to Type B15.

b Partitions between lounges and internal muster areas shall correspond to Type A30, but external muster areas only to Type B15.

c Partitions between cabins, partitions between cabins and corridors and vertical partitions separating lounges according to paragraph 10 shall comply with Type B15, for rooms fitted with pressurised sprinkler systems B0. Partitions between cabins and saunas shall comply with Type A0, for rooms fitted with pressurised sprinkler systems B15.

d Partitions between engine rooms according to Articles 15.07 and 15.10(6) shall comply with Type A60; in other cases they shall comply with Type A0.

e Partitions between store rooms for the storage of flammable liquids and control centres and muster areas shall comply with Type A60, for rooms fitted with pressurised sprinkler systems A30.

f B15 is sufficient for partitions between galleys, on the one hand, and cold-storage rooms and food store rooms, on the other.

(bb) Table for partitions between rooms, in which pressurised sprinkler systems according to Article 10.03a are installed

Rooms	**Control centres**	**Stairwells**	**Muster areas**	**Lounges**	**Engine rooms**	**Galleys**	**Store rooms**
Control centres	—	A0	A0/ B15[a]	A0	A60	A30	A0/ A30[e]
Stairwells	—		A0	A0	A60	A30	A0
Muster areas			—	A30/ B15[b]	A60	A30	A0/ A30[e]
Lounges				-/ B15/ B 0[c]	A60	A30	A0
Engine rooms					A60/ A0[d]	A60	A60
Galleys						—	A0/ B15[f]
Store rooms							—

a	Partitions between control centres and internal muster areas shall correspond to Type A0, but external muster areas only to Type B15.
b	Partitions between lounges and internal muster areas shall correspond to Type A30, but external muster areas only to Type B15.
c	Partitions between cabins, partitions between cabins and corridors and vertical partitions separating lounges according to paragraph 10 shall comply with Type B15, for rooms fitted with pressurised sprinkler systems B0. Partitions between cabins and saunas shall comply with Type A0, for rooms fitted with pressurised sprinkler systems B15.
d	Partitions between engine rooms according to Articles 15.07 and 15.10(6) shall comply with Type A60; in other cases they shall comply with Type A0.
e	Partitions between store rooms for the storage of flammable liquids and control centres and muster areas shall comply with Type A60, for rooms fitted with pressurised sprinkler systems A30.
f	B15 is sufficient for partitions between galleys, on the one hand, and cold-storage rooms and food store rooms, on the other.

(b) paragraph 4 is replaced by the following:

4. Lounge ceilings and wall claddings, including their substructures, shall, where these lounges do not have a pressurised sprinkler system in accordance with Article 10.03a, be manufactured from non-combustible materials with the exception of their surfaces, which shall be at least flame-retardant. The first sentence shall not apply to saunas.;

(c) the following paragraph 7a is inserted:

7a. Awnings and similar mobile installations with which deck areas are fully or partially enclosed and their substructures shall be at least flame-retardant..

(22) Article 22a.04 is replaced by the following:

Article 22a.04 **Buoyancy and stability**

1. Paragraphs 2 to 10 shall apply to craft that are longer than 110 m, with the exception of passenger vessels.

2. The basic values for the stability calculation, the vessel's lightweight and the location of the centre of gravity shall be determined by means of an inclining experiment carried out in accordance with Annex I to IMO Resolution MSC 267 (85).

3. The applicant shall prove, by means of a calculation based on the method of lost buoyancy, that the buoyancy and stability of the vessel are appropriate in the event of flooding. All calculations shall be carried out with free sinkage and trim.

Sufficient buoyancy and stability of the vessel in the event of flooding shall be proven with a cargo corresponding to its maximum draught and evenly distributed among all the holds and with maximum supplies and fully fuelled.

For diversified cargo, the stability calculation shall be performed for the most unfavourable loading condition. This stability calculation shall be carried on board.

For this purpose, mathematical proof of sufficient stability shall be determined for the intermediate stages of flooding (25 %, 50 % and 75 % of flood build up, and, where appropriate, for the stage immediately prior to transverse equilibrium) and for the final stage of flooding, in the loading conditions specified above.

4. The following assumptions shall be taken into consideration for the damaged condition:

(a) Extent of side damage:

longitudinal extent	:	at least 0,10 l
transverse extent	:	0,59 m
vertical extent	:	from the bottom upwards without limit.

(b) Extent of bottom damage:

longitudinal extent	:	at least 0,10 l
transverse extent	:	3,00 m
vertical extent	:	from the base 0,39 m upwards, the sump excepted.

(c) Any bulkheads within the damaged area shall be assumed damaged, which means that the subdivision shall be chosen so that the vessel remains afloat after the flooding of two or more adjacent compartments in the longitudinal direction. For the main engine room only the one compartment standard need be taken into account, i.e. the end bulkheads of the engine room shall be assumed as not damaged.

For bottom damage, adjacent athwart ship compartments shall also be assumed as flooded.

(d) Permeability

Permeability shall be assumed to be 95 %.

If a calculation proves that the average permeability of a compartment is less than 95 %, the calculated value may be used instead.

The values used shall not be less than:

— engine and operation rooms 85 %
— cargo holds: 70 %
— double bottoms, fuel tanks, ballast tanks, etc. depending on whether, according to their function, they have to be assumed as full or empty for the vessel floating at the maximum permissible draught: 0 or 95 %.

(e) The calculation of free surface effect in intermediate stages of flooding shall be based on the gross surface area of the damaged compartments.

5. For all intermediate stages of flooding referred to in paragraph 3, the following criteria shall be met:

(a) the heeling angle φ at the equilibrium position of the intermediate stage in question shall not exceed 15° (5° where containers are not secured);

(b) beyond the heel in the equilibrium position of the intermediate stage in question, the positive part of the righting lever curve shall display a righting lever value of GZ ≥ 0,02 m (0,03 m where containers are not secured) before the first unprotected opening becomes immersed or a heeling angle φ of 27° is reached (15° where containers are not secured);

(c) non-watertight openings shall not be immersed before the heel in the equilibrium position of the intermediate stage in question has been reached.

6. During the final stage of flooding, the following criteria shall be met:

(a) the lower edge of non-watertight openings (e.g., doors, windows, access hatches) shall be not less than 0,10 m above the damaged waterline;

(b) the heeling angle φ at the equilibrium position shall not exceed 12° (5° where containers are not secured);

(c) beyond the heel in the equilibrium position of the intermediate stage in question, the positive part of the righting lever curve shall display a righting lever value of GZ ≥ 0,05 m and the area under the curve shall reach at least 0,0065 m.rad before the first unprotected opening becomes immersed or a heeling angle φ of 27° (10° where containers are not secured) is reached;

(d) if non-watertight openings are immersed before the equilibrium position is reached, the rooms affording access shall be deemed flooded for the purposes of the damaged stability calculation.

7. If cross-flood openings to reduce asymmetrical flooding are provided, the following conditions shall be met:

(a) for the calculation of cross-flooding, IMO Resolution A.266 (VIII) shall be applied;

(b) they shall be self-acting;

(c) they shall not be equipped with shut-off devices;

(d) the total time allowed for equalisation shall not exceed 15 minutes.

8. If openings through which undamaged compartments may additionally become flooded are capable of being closed watertight, the shut-off devices shall bear the following readily legible instruction on both sides:

Close immediately after passage.

9. The proof by calculation in accordance with paragraphs 3 to 7 shall be considered to have been provided if damaged stability calculations in accordance with Part 9 of the Regulations annexed to the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (hereinafter referred to as "AND") are produced with a positive result.

10. Where necessary in order to meet the requirements in paragraph 3, the plane of maximum draught shall be re-established.

(23) In Article 22a.05 paragraph 2, point (c) is replaced by the following:

(c) are built as double-hull vessels in accordance with the ADN, where for dry cargo vessels sections 9.1.0.91 to 9.1.0.95, and for tank vessels paragraph 9.3.2.11.7 and sections 9.3.2.13 to 9.3.2.15 or paragraph 9.3.3.11.7 and sections 9.3.3.13 to 9.3.3.15 of Part 9 of the ADN shall apply;

(24) In Article 24.02 paragraph 2, the table is replaced by the following:

(a) the following entry for Article 7.05 paragraph 1 is inserted:

Article and paragraph	**Content**	**Deadline and comments**
'7.05(1)	Navigation lights, their casings, accessories and light sources	Navigation lights, their casings, accessories, and light sources that fulfill the requirements for colour and light intensity of navigation lights, and for the admission of signal lights for navigation on the Rhine, as of 30 November 2009 may still be used.'

(b) the following entries for Article 7.06(1) are inserted:

7.06(1)	Radar navigation equipment which has received an approval before 1.1.1990	Radar navigation equipment which has received an approval before 1.1.1990 may be installed and used until issue or renewal of the Community certificate after 31.12.2009, in any case at the latest until 31.12.2011, if there is a valid installation certificate pursuant to this Directive or Resolution CCNR 1989-II-35.
	Rate-of-turn indicators, which have received an approval before 1.1.1990	Rate-of-turn indicators, which have received an approval before 1.1.1990 and have been installed before 1.1.2000, may be installed and used until issue or renewal of the Community certificate

		after 1.1.2015, if there is a valid installation certificate pursuant to this Directive or Resolution CCNR 1989-II-35.
	Radar navigation equipment and rate-of-turn indicators which have received an approval after 1.1.1990	Radar navigation equipment and rate-of-turn indicators which have received an approval on or after 1.1.1990 pursuant to the minimum requirements and test conditions for radar installations used for navigation in inland waterway navigation on the Rhine and the minimum requirements and test conditions for rate-of-turn indicators used in inland waterway navigation on the Rhine may continue to be installed and operated if there is a valid installation certificate pursuant to this Directive or Resolution CCNR 1989-II-35.

(c) the following entry for Article 10.02 paragraph 1 second sentence point b, is inserted:

Article and paragraph	**Content**	**Deadline and comments**
‘10.02(1) second sentence point b	Receptacles made of steel or another sturdy, non-flammable material and holding at least 10 l.	N.R.C., at the latest on renewal of the Community certificate’

(d) the entries for Articles 11.02, paragraph 4 and 11.04, paragraph 2 are replaced by the following:

Article and paragraph	**Content**	**Deadline and comments**
‘11.02(4), first sentence	Equipment of outer edges of decks, side	NRC, at the latest on issue or renewal of the

	decks and work stations	Community certificate after 1.1.2020
	Height of coamings	NRC, at the latest on issue or renewal of the Community certificate after 1.1.2035
11.04(1)	Clear width of side deck	NRC, at the latest on issue or renewal of the Community certificate after 1.1.2035, for craft exceeding 7,30 m in width
Paragraph 2	Shipside guard rails on vessels of L < 55 m with only aft accommodation	NRC, at the latest on issue or renewal of the Community certificate after 1.1.2020’

(e) the entry for Article 11.12 is replaced by the following:

11.12(2), (4), (5) and (9)	Manufacturer’s plate, protection devices, certificates on board	NRC, at the latest on issue or renewal of the Community certificate after 1.1.2015.

(f) the entries for Article 15.03, paragraphs 7 to 13 are replaced by the following:

Paragraphs 7 and 8	Damaged stability	N.R.C., at the latest on issue or renewal of the Community certificate after 1.1.2045
Paragraph 9	Damaged stability	N.R.C., at the latest on issue or renewal of the Community certificate after 1.1.2045
	Vertical extent of damage to the bottom of the boat	N.R.C., at the latest on issue or renewal of the Community certificate after 1.1.2045 N.R.C. applicable for vessels with watertight decks on a minimum distance of 0,50 m and less then 0,60 m of the bottom of vessels that obtained a Community certificate or other traffic licence before 31.12.2005

	Two–compartments status	N.R.C.
Paragraphs 10 to 13	Damaged stability	N.R.C., at the latest on issue or renewal of the Community certificate after 1.1.2045

(g) the entry for Article 15.06 paragraph 1 (a) is replaced by the following:

Article 15.06(1), first subparagraph	Passenger area's under the bulkhead deck behind the collision bulkhead and in front of the aft peak bulkhead.	NRC, at the latest on renewal of Community certificate after 1.1.2045
Article 15.06(1), second subparagraph	Enclosures	N.R.C, at the latest on renewal of Community certificate

(h) the entry for Article 15.06 paragraph 15 is replaced by the following:

Paragraph 15	Requirements for enclosures within the superstructure that consist totally or partly of panoramic windows	NRC, at the latest on renewal of Community certificate after 1.1.2045
	Requirements for enclosures	N.R.C, at the latest on renewal of Community certificate

(i) the following entry for text relating to Article 15.11 paragraph 7a is inserted:

Paragraph 7a	Enclosures	N.R.C., at the latest on issue or renewal of the Community certificate

(25) The table in Article 24.06 paragraph 5 is amended as follows:

(a) the following entry for Article 7.05 paragraph 1 is inserted:

Article and paragraph	**Content**	**Deadline and comments**	**Valid for craft with vessel certificate or traffic licence before**
'7.05(1)	Navigation lights, their casings, accessories and light sources	Navigation lights, their casings, accessories, and light sources	1.12.2013'

		that fulfil the requirements for colour and light intensity of navigation lights and for the admission of signal lights for navigation on the Rhine as of 30 November 2009 may still be used.	

(b) the following entry for Article 7.06 paragraph 1 is inserted:

7.06(1)	Radar navigation equipment which has received an approval before 1.1.1990	Radar navigation equipment which has received an approval before 1.1.1990 may be installed and used until issue or renewal of the Community certificate after 31.12.2009, in any case at the latest until 31.12.2011, if there is a valid installation certificate pursuant to this Directive or Resolution CCNR 1989-II-35.	1.12.2013
	Rate-of-turn indicators, which have received an approval before 1.1.1990	Rate-of-turn indicators, which have received an approval before 1.1.1990 and have been installed before 1.1.2000, may be installed and used until issue or renewal of the Community certificate after 1.1.2015, if	1.12.2013

		there is a valid installation certificate pursuant to this Directive or Resolution CCNR 1989-II-35.	
	Radar navigation equipment and rate-of-turn indicators which have received an approval after 1.1.1990	Radar navigation equipment and rate-of-turn indicators which have received an approval after 1.1.1990 pursuant the minimum requirements and test conditions for radar installations used for navigation in inland waterway navigation on the Rhine and the minimum requirements and test conditions for rate-of-turn indicators used in inland waterway navigation on the Rhine may continue to be installed and operated if a valid installation certificate pursuant to this Directive or Resolution CCNR 1989-II-35 has been issued.	1.12.2013

(c) the following entry for Article 10.02 paragraph 1 second sentence, point b is inserted:

Article and paragraph	**Content**	**Deadline and comments**	**Valid for craft with vessel certificate or**

			traffic licence before
'Article 10.02(1) second sentence point b	Receptacles made of steel or another sturdy, non-flammable material and holding at least 10 l.	N.R.C., at the latest on renewal of the Community certificate	1.12.2013'

(d) the following entries for Articles 11.02 paragraph 4 and 11.04, paragraph 2 are inserted:

Article and paragraph	**Content**	**Deadline and comments**	**Valid for craft with vessel certificate or traffic licence before**
'11.02(4), first sentence	Height of bulwarks and coamings, and shipside guard rails	NRC, at the latest on issue or renewal of the Community certificate after 1.1.2020	1.12.2013
	Height of coamings	NRC, at the latest on issue or renewal of the Community certificate after 1.1.2035	
11.04(2)	Shipside guard rails on vessels of L < 55 m with only aft accommodation	NRC, at the latest on issue or renewal of the Community certificate after 1.1.2020	1.12.2013'

(e) the following entry for Article 11.12 is inserted:

11.12(2),(4),(5) and (9)	Manufacturer's plate, protection devices, certificates on board	NRC, at the latest on issue or renewal of the Community certificate after 1.1.2015.	1.12.2013

(f) the entries for Article 15.03(7) to (13) are replaced by the following:

15.03(7) and (8)	Damaged stability	N.R.C., at the latest on issue or renewal of	1.12.2013

		the Community certificate after 1.1.2045	
Paragraph 9	Damaged stability	N.R.C., at the latest on issue or renewal of the Community certificate after 1.1.2045	1.12.2013
	Vertical extent of damage to the bottom of the boat	N.R.C., at the latest on issue or renewal of the Community certificate after 1.1.2045 N.R.C. applicable for vessels with watertight decks on a minimum distance of 0,50 m and less then 0,60 m of the bottom of vessels that obtained a Community certificate or other traffic licence before 31.12.2005	1.12.2013
	Two–compartments status	N.R.C.	
paragraphs 10 to 13	Damaged stability	N.R.C., at the latest on issue or renewal of the Community certificate after 1.1.2045	1.12.2013

(g) the entry for Article 15.06 paragraph 1 is replaced by the following:

Article 15.06(1), first subparagraph	Passenger areas under the bulkhead deck and in front of the aft peak bulkhead.	NRC, at the latest on issue or renewal of the Community certificate after 1.1.2045	1.12.2013

Article 15.06(1), second subparagraph	Enclosures	N.R.C, at the latest on issue or renewal of the Community certificate	1.12.2013

(h) the entry for Article 15.06 paragraph 15 is replaced by the following:

Paragraph 15	Requirements for enclosures within the superstructure that consist totally or partly of panoramic windows.	NRC, at the latest on issue or renewal of the Community certificate after 1.1.2045	1.12.2013
	Requirements for enclosures	N.R.C, at the latest on issue or renewal of the Community certificate	1.12.2013

(i) the following entry for Article 15.11 paragraph 7a is inserted:

Paragraph 7a	Enclosures	N.R.C., at the latest on issue or renewal of the Community certificate	1.12.2013

(26) The table in Article 24a.02 paragraph 2 is amended as follows:

(a) the following entry for Article 7.05 paragraph 1 is inserted:

7.05(1)	Navigation lights, their casings, accessories and light sources	Navigation lights, their casings, accessories, and light sources that fulfill — the requirements for colour and light intensity of navigation lights and for the admission of signal lights for navigation on the Rhine as of 30

		November 2009 or — the respective requirements of a Member State as of 30 November 2009 may still be used.

(b) the following entry for Article 7.06 paragraph 1 is inserted:

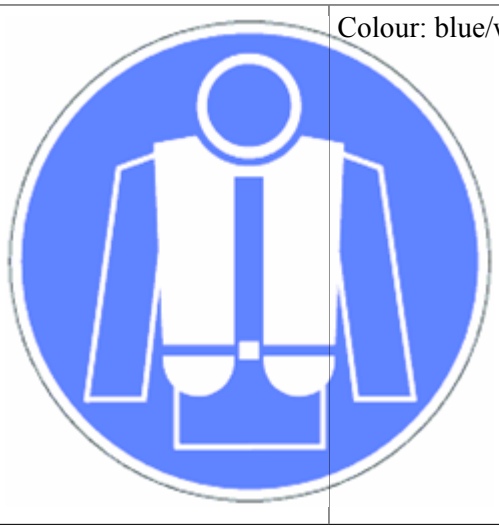
7.06(1)	Radar navigation systems and rate-of-turn indicators	Radar navigation systems and rate-of-turn indicators, which have been approved and installed pursuant to a Member State's regulations before 31 December 2012 may continue to be installed and operated until the issue or replacement of the Community certificate after 31 December 2018. These systems must be entered in the Community certificate under number 52.
		Radar navigation systems and rate-of-turn indicators, which have been approved since 1 January 1990 pursuant to the regulations concerning the minimum requirements and test conditions for navigation radar systems for navigation on the Rhine and of the regulations concerning the minimum requirements and test conditions for rate-of-turn indicators for navigation on the Rhine may continue to be installed and

		operated, provided that an installation certificate that is valid in accordance with this Directive or Resolution CCNR 1989-II-35, is available.

(c) the entries for Articles 11.02 paragraph 4 and 11.04 paragraph 2 are replaced by the following:

Article and paragraph	**Content**	**Deadline and comments**
'11.02(4), first sentence	Equipment of outer edges of decks, side decks and work stations	NRC, at the latest on issue or renewal of the Community certificate after 1.1.2020
	Height of bulwarks or coamings	NRC, NRC, at the latest on issue or renewal of the Community certificate after 1.1.2020
11.04(1)	Clear width of side deck	NRC, at the latest on issue or renewal of the Community certificate after 1.1.2035, for craft exceeding 7,30 m in width
Paragraph 2	Shipside guard rails on vessels of L < 55 m with only aft accommodation	NRC, at the latest on issue or renewal of the Community certificate after 1.1.2020'

(27) In Appendix I to Annex II to Directive 2006/87/EC, the following entry is added:

Figure 10 Wear life jacket		Colour: blue/white

(28) Appendix II to Annex II of Directive 2006/87/EC is amended as follows:

(a) the list of contents is amended as follows:

(i) for No 4, the title is replaced by the following

Application of transitional provisions

(ii) for No 6, the title is replaced by the following 'Application of regulations in Chapter 15'

(iii) the following is added:

No 26: experts/competent persons
No 27: Recreational craft;

(b) the Administrative instruction No 4 is replaced by the following:
ADMINISTRATIVE INSTRUCTION No 4Application of Transitional provisions(Chapters 15 to 22b, Chapter 24 and Chapter 24a of Annex II)

1. APPLICATION OF TRANSITIONAL PROVISIONS IN JOINING TOGETHER PARTS OF CRAFT

1.1. **Principles**

Where parts of different vessels are joined together, status quo protection shall be granted only for the parts which belong to the vessel which retains its Community certificate. Transitional provisions may therefore be invoked only for those parts. Other parts shall be treated as a newly built vessel.

1.2. **Application of the transitional provisions in detail**

1.2.1. Where parts of different vessels are joined together, transitional provisions may be invoked only for those parts which belong to the vessel which retains its Community certificate.

1.2.2. Parts which do not belong to the vessel which retains its vessel certificate shall be treated as a newly built craft.

1.2.3. After a vessel has had part of another vessel added to it, the former shall receive the European vessel identification number of the craft, which retains its Community certificate as the converted craft.

1.2.4. Where an existing Community certificate is retained or a new Community certificate is issued for a craft after a conversion, the year of construction of the oldest part of the craft shall additionally be entered in the Community certificate.

1.2.5. If a new fore section is attached to a craft, the engine for the bow thruster system installed in the fore section shall also comply with the current requirements.

1.2.6. If a new stern section is attached to a vessel, the engines installed in the stern section shall also comply with the current requirements.

1.3. **Examples for illustration**

1.3.1. A vessel is put together from two older vessels (vessel 1 year of construction 1968; vessel 2 year of construction 1972). The

whole of vessel 1 apart from the fore section is used; of vessel 2, the fore section is used. The assembled vessel receives vessel 1's Community certificate. The fore section of the assembled vessel must now be fitted, inter alia, with anchor niches.

1.3.2. A vessel is put together from two older vessels (vessel 1 year of construction 1975; vessel 2 year of construction 1958, oldest component 1952). The whole of vessel 1 apart from the fore section is used; of vessel 2, the fore section is used. The assembled vessel receives vessel 1's Community certificate. The fore section of the assembled vessel must now be fitted, inter alia, with anchor niches. The oldest component from the original vessel 2, with year of construction 1952, is additionally entered in the Community certificate.

1.3.3. The stern section of a vessel of year of construction 2001 is attached to a vessel of year of construction 1988. The engine of the vessel of year of construction 1988 is to remain in the vessel. In this case, the engine has to be type approved. The engine would also have to be type approved if it was the engine in the 2001 stern section.

2. APPLICATION OF TRANSITIONAL PROVISIONS IN THE CASE OF A CHANGE IN THE TYPE OF CRAFT (INTENDED USE OF THE CRAFT)

2.1. **Principles**

2.1.1. In any decision on the application of transitional provisions in the case of change of the type of craft (vessel type; intended use of the vessel), as regards to Annex II to this Directive safety considerations shall be key.

2.1.2. It shall constitute a change in the type of craft if the safety requirements applying to the new type of craft are different from those for the old type; this is so if special provisions of Chapters 15 to 22b of Annex II are applicable to the new type which were not applicable to the old type.

2.1.3. In the case of a change in the type of craft, all special provisions and all requirements specific to this type of craft shall be complied with fully; transitional provisions may not be invoked for these requirements. This also applies to parts which are taken over from the existing craft and come under these special requirements.

2.1.4. The conversion of a tanker into a dry cargo vessel shall not constitute a change in the type of craft as defined in 2.1.2.

2.1.5. In the case of conversion of a cabin vessel into a day-trip vessel, all new parts shall comply fully with the current requirements.

2.2. **Application of the transitional provisions in detail**

2.2.1. Article 24.02(2) (NRC), resp. Article 24a.02(2) applies to the parts of the craft that are renewed; hence new parts of the craft cannot be subject to the transitional provisions.

2.2.2. For the parts of the craft that are not converted, the transitional provisions shall continue to be applicable with the exception of parts according to 2.1.3, second sentence.

2.2.3. If the dimensions of the craft are modified, the transitional provisions no longer apply to those parts of the craft that are connected with this modification (e.g. distance of collision bulkhead, freeboard and anchor).

2.2.4. In the case of a change in the type of craft, the special requirements of Annex II that only apply to the new type of craft shall be applicable. All parts and items of equipment that are affected by the conversion of the craft must satisfy the current requirements Part II and III of Annex II.

2.2.5. The craft shall then be granted a new or amended Community certificate and a note shall be made in fields 7 and 8 of the certificate both of the original construction and of the conversion.

2.3. **Examples for illustration**

2.3.1. A cargo vessel (year of construction 1996) is converted into a passenger vessel. Chapter 15 of Annex II then applies to the whole vessel, without invoking transitional provisions. If the fore section is not modified either according to the conversion plans or in accordance with Chapter 15, the vessel does not need to present any anchor niches in accordance with Article 3.03.

2.3.2. A tug (year of construction 1970) is converted into a pusher. The physical conversion consists solely of changing the deck equipment and installing a pushing device. All transitional provisions for a 1970 vessel remain applicable, except for the Chapters 5, 7 (in part), Article 10.01 and Article 16.01.

2.3.3. A motor tanker (year of construction 1970) is converted into a pusher. The physical conversion consists of separating off the fore section and the cargo section, as well as changing the deck equipment and installing a pushing device. All transitional provisions for a 1970 vessel remain applicable, except for the provisions of Chapters 5, 7 (in part), Article 10.01 and Article 16.01.

2.3.4. A motor tanker is converted into a motor cargo vessel. The motor cargo vessel must comply with current workplace safety requirements, particularly those referred to in Article 11.04 of Chapter 11 of Annex II.

3. APPLICATION OF TRANSITIONAL PROVISIONS IN THE CASE OF CONVERSION OF PASSENGER VESSELS

3.1. **Application of the transitional provisions**

3.1.1. Conversion measures that are necessary in order to comply with requirements of Chapter 15, no matter when they are carried out, shall not constitute conversion “C” within the meaning of Article

24.02(2), Article 24.03(1) or Article 24.06(5) of Annex II, resp. Article 24a.02, Article 24a.03.

3.1.2. In the case of conversion of a cabin vessel into a day-trip vessel, all new parts shall comply fully with the current requirements.

3.2. **Examples for illustration**

3.2.1. A passenger vessel (year of construction 1995) must have a second independent propulsion system installed by 1 January 2015 at the latest. If no other voluntary conversions are made on this passenger vessel, it is not necessary to carry out a stability calculation in accordance with the new requirements, but if there is an objective need for one, a stability calculation may be carried out in accordance with the original stability requirements of a Member State.

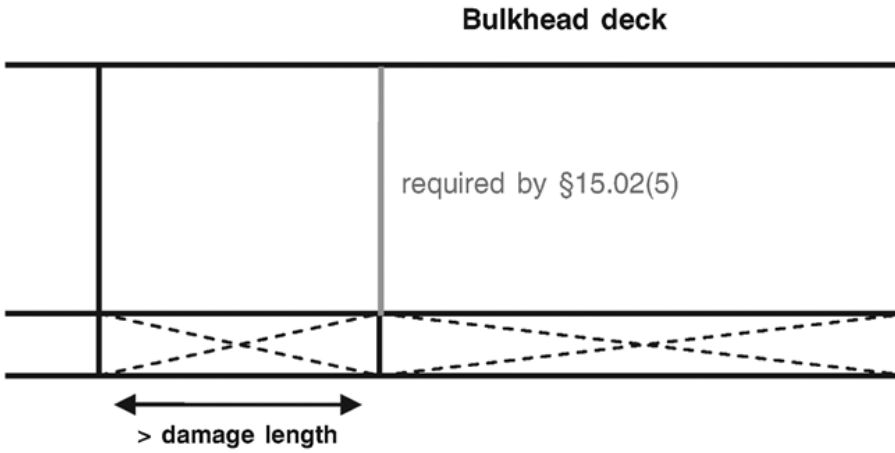
3.2.2. A passenger vessel (year of construction 1994, vessel certificate last renewed 2012) will be extended by 10 m in 2016. In addition, this craft must be given a second independent propulsion system. Also, a new stability calculation will be necessary, which must be carried out in accordance with Chapter 15 for the one-compartment status and the two-compartment status.

3.2.3. A passenger vessel (year of construction 1988) receives a more powerful propulsion system including propellers. This is such a major conversion that a stability calculation is required. This must be carried out in accordance with current requirements.;

(c) the Administrative instruction No 6 is replaced by the following:
ADMINISTRATIVE INSTRUCTION No 6Application of Chapter 15 requirements Local subdivisionsTransitional requirements for enclosures made with awnings or similar mobile installations(Article 15.02(5), 15.03(4), 15.03(9) of Annex II)

1. LOCAL SUBDIVISIONS (ARTICLE 15.02(5))

Under Article 15.02 paragraph 5 it is conceivable that local watertight subdivisions, such as transversally subdivided double bottom tanks of a greater length than the damage length to be considered, will not be included in the evaluation. In this case it might not be possible to take the transversal subdivision into account if it is not extended up to the bulkhead deck. This might lead to inappropriate subdivisions of bulkheads.



Interpretation of the requirement:

If a watertight compartment is longer than required by Article 15.03 paragraph 9 and it contains local subdivisions which form watertight sub compartments, and between which the minimum damage length can be contained, these can be taken into account in the damaged stability calculation.

2. TRANSITIONAL REQUIREMENTS FOR ENCLOSURES MADE WITH AWNINGS OR SIMILAR MOBILEINSTALLATIONS WITH REGARD TO STABILITY (ARTICLE 15.03 PARAGRAPH 5)

Enclosures made with awnings or similar mobile installations can cause problems with the stability of the vessel since, if of sufficient size to do so, they influence the heeling moment due to wind pressure.

Interpretation of the requirement:

In the case of passenger vessels for which a vessel certificate was issued for the first time before 1 January 2006, or for which Article 24.06 paragraph 2, second sentence, is invoked, after the erection of an enclosure made with awnings or similar mobile installations, a new stability calculation must be made according to this Directive, in so far as its lateral plane A_{wz} exceeds 5 % of the total lateral plane A_w to be taken into account in each case.;

(d) in Administrative instruction No 7 Part 1 is replaced by the following:

PART 1

Authorised special anchors

Special anchors with a reduced mass, authorised by competent authorities according to Article 10.01 paragraph 5 are listed in the following table.

Anchor No		**Acceppted reduction of the anchormass (%)**	**Competent authority**
1.	HA-DU	30	Germany
2.	D'Hone Spezial	30	Germany
3.	Pool 1 (hol)	35	Germany
4.	Pool 2 (massief)	40	Germany
5.	De Biesbosch-Danforth	50	Germany
6.	Vicinay-Danforth	50	France
7.	Vicinay AC 14	25	France
8.	Vicinay type 1	45	France
9.	Vicinay type 2	45	France
10.	Vicinay type 3	40	France
11.	Stockes	35	France
12.	D'Hone-Danforth	50	Germany
13.	Schmitt HHP-anker	40	Netherlands
14.	SHI high holding anchor, type ST (standard)	30	Netherlands
15.	SHI high holding anchor, type	30	Netherlands

	FB (fully balanced)		
16.	Klinsmann anchor	30	Netherlands
17.	HA-DU-POWER Anchor	50	Germany

(e) in Administrative instruction No 11 point 4 after the explanation concerning item 2 of the Community certificate the following explanation of item 10 of the Community certificate is inserted:

10. In respect of vessels allowed to navigate on the Rhine, i.e.

(a) those which comply fully with Annex II including the transitional provisions for Chapter 24; and

(b) those which make no use of the transitional provisions of Chapter 24a or the reductions provided for in Annex IV,

the following is to be added to the indent "— on Community waterways in zone(s)":

(a) Rhine or

(b) zone R.

In point 4 the explanation concerning item 43 of the Community certificate is amended as follows:

43. Portable fire extinguishers required by other safety regulations, e.g. European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN), are not included here.;

(f) in Administrative instruction No 17 section 3 is replaced by the following:

3. ACCEPTANCE TEST

3.1. Fire alarm systems must be checked by an expert:

(a) before being put into service for the first time,

(b) before being put back into service after any major modification or repair,

(c) regularly, at least every two years.

In the case of engine rooms and boiler rooms these checks shall be made under various machine operation conditions and under changing ventilation conditions. Inspections as referred to in subsection (c) above may also be carried out by a competent person from a competent firm specialising in fire extinguishing systems.

3.2. An inspection certificate shall be issued, signed by the expert or competent person and showing the date of the inspection.;

(g) in Administrative instruction No 18 section 4 is replaced by the following:

4. The requirements set out in points 2 and 3 shall also be deemed to have been met if, for each of the two parts, the stability requirements set out in Section 9.1.0.95.2 of the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN) are met.;

(h) in Administrative instruction No 21 section 8 is replaced by the following:

8. Acceptance test

8.1. The luminance of the LLL must be checked by an expert

(a) before being put into service for the first time,

(b) before being put back into service after any major modification or repair,

(c) regularly, at least every five years.

Checks as referred to in subsection (c) above may also be carried out by a competent person trained in safety guidance systems.

8.2. An inspection certificate shall be issued, signed by the expert or competent person and showing the date of the inspection.

8.3. If, after a single measurement, the luminance does not meet the requirements set out in this administrative instruction, measurements are to be taken at least 10 equidistant points. If over 30 % of the measurements do not meet the requirements set out in this administrative instruction, the safety guidance systems must be replaced. If 20 to 30 % of the measurements do not meet the requirements set out in this administrative instruction, the safety guidance systems are to be checked again within one year.;

(i) in Administrative instruction No 24 section 4 is replaced by the following:

4. Calibration and inspection of gas leak detectors, replacement of parts with limited service life

4.1. Gas leak detectors shall be calibrated and inspected by an expert or a competent person as directed by the manufacturer:

(a) before being put into service for the first time,

(b) before being put back into service after any major modification or repair,

(c) regularly.

A calibration and inspection certificate shall be issued, signed by the expert or competent person and showing the date of the inspection.

4.2. Parts of the gas warning equipment which have a limited service life must be duly replaced before expiry of their specified operational life.;

(j) the following administrative instructions No 26 and 27 are added:

ADMINISTRATIVE INSTRUCTION No 26Experts and Competent Persons(Article 1.01 paragraphs 106 and 107 of Annex II)

Experts

Experts are required to carry out acceptance tests which call for specialist knowledge either on account of the complexity of the systems or on account of the safety level required. The following persons or institutions are among those authorised to carry out such acceptance tests:

— classification societies which have the necessary in-house expertise or which bear responsibility, on the basis of their authorisation, for calling in external persons or institutions and have the necessary quality control systems in place in respect of the selection of these persons or institutions;

— members of the inspection bodies or employees of the relevant authorities;

— officially approved persons or institutions with recognised expertise for the scope of inspection in the relevant subject area, whereby the vessel inspection bodies can also issue this approval in their capacity as public agencies, ideally on the basis of a quality assurance system. A person or institution is also deemed to be approved if the latter has passed an official selection procedure which specifically assesses the possession of the required expertise and experience.

Competent persons

Competent persons are required, for example, to conduct regular visual checks and operating checks on safety equipment. The following may be classed as competent persons:

— persons who, on the basis of their professional training and experience, have sufficient expertise to be able to assess specific situations and circumstances, e.g. ship's masters, safety officers in shipping companies, crew members with relevant experience;

— companies which have acquired sufficient specialist knowledge on the basis of their regular work, e.g. shipyards or installation firms;

— manufacturers of special-purpose systems (e.g. fire extinguishing systems, control equipment).

Terminology

German	English	French	Dutch
Sachverständiger	expert	expert	erkend deskundige
Sachkundiger	competent person	spécialiste	deskundige
Fachfirma	competent firm	société spécialisée	deskundig bedrijf

Acceptance tests

The table below summarises the schedule of acceptance tests, including their frequency and the type of inspector required to conduct them. This table is for information purposes only.

Rule	Subject matter	Maximum test interval	Inspector
Article 6.03(5)	Hydraulic cylinders, pumps and motors	8 years	Competent firm
Article 6.09(3)	Motor-driven control equipment	3 years	Competent person
Article 8.01(2)	Pressure vessels	5 years	Expert
Article 10.03(5)	Portable fire extinguishers	2 years	Competent person
Article 10.03a(6)(d)	Built-in fire extinguishing systems	2 years	Competent person or competent firm
Article 10.03b(9)(b)(dd)	Built-in fire extinguishing systems	2 years	Competent person or competent firm
Article 10.04(3)	Inflatable launches	As specified by the manufacturer	
Article 10.05(3)	Life jackets	As specified by the manufacturer	
Article 11.12(6)	Cranes	10 years	Expert
Article 11.12(7)	Cranes	1 year	Competent person
Article 14.13	Liquefied gas installations	3 years	Expert
Article 15.09(9)	Life-saving appliances	As specified by the manufacturer	
Article 15.10(9)	Insulating resistance, earthing	before expiry of validity of the Community certificate	
Administrative instruction No 17	Fire alarm systems	2 years	Expert or competent person
Administrative instruction No 21	Safety guidance systems	5 years	Expert or competent person

Administrative instruction No 24	Gaswarning equipment	As specified by the manufacturer	Expert or competent person

ADMINISTRATIVE INSTRUCTION No 27Recreational craft(Article 21.02(2) in conjunction with Article 7.02, Article 8.05(5), Article 8.08(2) and Article 8.10 of Annex II)

1. **General**

Recreational craft of up to 24 metres length, that are placed on the market, have to comply with the requirements of Directive 94/25/EC of the European Parliament and of the Council[7], as amended by Directive 2003/44/EC[8]. According to Article 3 in conjunction with Article 2 of this Directive, recreational craft having a length of 20 metres or more shall carry a Community inland navigation certificate attesting the craft's compliance with the technical requirements of Annex II. Since double inspection or certification for certain equipment, arrangements and installations of newly built recreational craft which can result from certain provisions in Article 21.02 of Annex II should be avoided, this Administrative Instruction gives information on those requirements listed in Article 21.02 that are already sufficiently covered under Directive 94/25/EC.

2. **Requirements in Article 21.02 which are already covered under Directive 94/25/EC**

For recreational craft subject to Directive 94/25/EC the inspection body shall as regards to the issuance of the Community inland navigation certificate (initial inspection) not require further inspection or certification of the following requirements of Article 21.02 (2), of Annex II provided that the craft presented for inspection has been placed on the market no more than 3 years before the date of presentation to the inspection body and no modifications to the craft have been carried out, and the Declaration of Conformity refers to the following harmonised standards or their equivalence:

— Article 7.02	:	EN ISO 11591:2000, (Unobstructed view)
— Article 8.05(5)	:	EN ISO 10088:2001, (Fuel tanks and pipes)
— Article 8.08(2)	:	EN ISO 15083:2003, (Bilge pumping)
— Article 8.10	:	EN ISO 14509, (Noise emission).

ANNEX II

Annex VII is amended as follows:

— the first two sentences of paragraph 1 of Part I are replaced by the following:

'The classification society shall be able to document extensive experience in assessing the design and construction of inland waterway vessels. The classification society shall have comprehensive rules and regulations for the design, construction and periodic inspection of inland waterway vessels, in particular for calculating stability in accordance with Part 9 of the Regulations annexed to the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN) as referred to in Article 22a.04 and Article 22a.05 of Annex II and which will be published at least in Dutch, English, French or German and shall be continuously updated and improved through research and development programmes.';

— the first sentence of paragraph 11 of Part I is replaced by the following:

'The classification society shall have prepared and implemented and shall maintain an effective internal quality system based on the relevant parts of internationally recognised quality standards and complying with the EN ISO/IEC 17020: 2004, as interpreted by the IACS Quality System Certification Scheme Requirements.';

— paragraph 4 of Part II is replaced by the following:

4. Before approving a classification society which has not been recognised within the framework of the Rhine Vessel Inspection Regulation by all the Member States of the Central Commission for Navigation on the Rhine, the Commission shall consult the Secretariat of the Central Commission.;

— Part III is replaced by the following:

Part III

List of approved classification societies

On the basis of the criteria set out in Parts I and II, the following classification societies are currently approved under Article 10(1) of this Directive:

(1) Bureau Veritas

(2) Germanischer Lloyd

(3) Lloyd's Register of Shipping

(4) Polski Rejestr Statków SA

(5) RINA SpA

(6) Russian Maritime Register of Shipping

Until their approval under Parts I and II, classification societies which are recognised and approved and authorised by a Member State in accordance with Council Directive 94/57/EC of 22 November 1994 on common rules and standards for ship inspection and survey organisations and for the relevant activities of maritime administrations[(9)] are currently approved in accordance with Article 10 of this Directive only in respect of vessels which operate exclusively on waterways of that Member State..

ANNEX III

Annex IX is replaced by the following:

ANNEX IX RADAR EQUIPMENT AND RATE-OF-TURN INDICATORS USED ON BOARD INLAND WATERWAY VESSELSCONTENTS

Definitions

PART I	:	Minimum requirements and test conditions for radar installations used for navigation on board inland waterway vessels
PART II	:	Minimum requirements and test conditions for rate-of-turn indicators used on board inland waterway vessels
PART III	:	Requirements for installation and performance tests for radar equipment and rate-of-turn indicators used on board inland waterway vessels
PART IV	:	Installation and performance certificate for radar equipment and rate-of-turn indicators used on board inland waterway vessels
PART V	:	Register of competent authorities, technical services, approved radar navigation equipment and rate-of-turn indicators and approved specialised firms
PART VI	:	Equivalent equipment

Definitions:

1. "Type test" means the test procedure as referred to in Part I Article 4 or Part II Article 1.03 which the technical service uses to test for compliance with the requirements according to this Annex. The type test forms an integral part of the type approval;

2. "Type approval" means the administrative procedure by which a Member State confirms that equipment complies with the requirements of this Annex.

   For radar navigation equipment this procedure includes the provisions according to Articles 5 to 7 and 9. For rate-of-turn indicators the procedure includes the provisions according to Part II, Articles 1.04 to 1.06 and 1.08;

3. "Test certificate" means the document in which the type testing results are laid down;

4. "Applicant" or "manufacturer" means any legal or natural person under whose name, trademark or any other form of identification the equipment submitted for testing is manufactured or marketed and who is responsible for all matters as regards the type testing and type approval procedure in respect of the technical service and the approval authority;

5. "Technical service" means the institution, authority or organisation that does the type testing;

6. "Manufacturer's declaration" means the declaration by which a manufacturer gives the assurance that the equipment meets the prevailing minimum requirements and that is identical in every respect to the type submitted for testing;

7. "Declaration of conformity" according to Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity[(10)] means the declaration according to Directive 1999/5/EC Annex II Paragraph 1, by which the manufacturer confirms that the products in question meet the applicable requirements of the Directive;

8. "Competent authority" means the official authority that issues the type approval.

PART IMinimum requirements and test conditions for radar installations used for navigation on board inland waterway vesselsArticle 1Scope

These provisions set out the minimum requirements for radar equipment used for navigation on board inland waterway vessels as well as the conditions for testing conformity with these minimum requirements.

Article 2Purpose of the radar navigation equipment

The radar navigation equipment shall facilitate the navigation of the vessel by providing an intelligible radar picture of its position in relation to buoys shorelines and navigational structures, as well as permitting the reliable and timely recognition of other vessels and obstructions protruding above the water surface.

Article 3Minimum requirements1.

With the exception of requirements on electromagnetic compatibility (Article 3.1.b of Directive 1999/5/EC) and of requirements on the effective use of the spectrum so as to avoid harmful interference arising from Article 3.2 of Directive 1999/5/EC, radar navigation equipment used in inland waterway vessels shall fulfil the requirements of European standard EN 302194-1: 2006.

2.

Paragraph 1 applies to inland ECDIS equipment which can be operated in navigation mode. This equipment shall additionally fulfil the requirements of the Inland ECDIS standards in the version valid on the date of issue of the type approval.

Article 4Type tests1.

Compliance with the minimum requirements as specified in Article 3(1) shall be established by means of a type test.

2.

If the equipment passes the type test the testing establishment shall issue a test certificate. If the equipment fails to meet the minimum requirements, the applicant shall be notified in writing of the reasons for its rejection.

Article 5Application for a type test1.Applications for a type test of a radar navigation installation shall be submitted to a technical service.

The technical services shall be notified to the European Commission.

2.Each application shall be accompanied by the following documents:

(a) detailed technical descriptions;

(b) complete set of installation and service documents;

(c) detailed operator's manuals;

(d) short operator's manual; and

(e) where applicable, evidence of previously completed tests.

3.

In case it is not intended by the applicant to have the Declaration of Conformity pursuant to Directive 1999/5/EC established concurrently with the type-approval, a Declaration of Conformity shall be submitted together with the application for a type test.

Article 6Type-approval1.

Type-approval shall be granted by the competent authority pursuant to the test certificate. The competent authority shall inform the European Commission of the equipment for which it has issued type approval. The relevant notice shall include the type-approval number assigned, as well as the type designation, the name of the manufacturer, the name of the holder of the type-approval and the date of the type approval.

2.Each competent authority or the technical service designated by the competent authority shall be entitled to select equipment from the production series at any time for inspection.

If this inspection reveals defects in the equipment, type-approval may be withdrawn.

The type-approval shall be withdrawn by the authority that issued it.

Article 7Marking of the equipment and type approval number1.Each component of the equipment shall be marked indelibly with

(a) the name of the manufacturer,

(b) the trade designation of the equipment,

(c) the type of equipment and

(d) the serial number.

2.The type-approval number assigned by the competent authority shall be affixed indelibly to the display unit in such a way that it remains clearly visible after the equipment has been installed.

Composition of a type-approval number: e-NN-NNN

e = European Union

NN = number for the country of type-approval, where

01	=	Germany
02	=	France
03	=	Italy
04	=	Netherlands
05	=	Sweden
06	=	Belgium
07	=	Hungary
08	=	Czech Republic
09	=	Spain

11	=	United Kingdom
12	=	Austria
13	=	Luxembourg
14	=	Switzerland
17	=	Finland
18	=	Denmark
19	=	Romania
20	=	Poland
21	=	Portugal
23	=	Greece
24	=	Ireland
26	=	Slovenia
27	=	Slovakia
29	=	Estonia
32	=	Latvia
34	=	Bulgaria
36	=	Lithuania
49	=	Cyprus
50	=	Malta

NNN = three-digit number, to be determined by the competent authority.

3.The type-approval number shall be used only in conjunction with the associated type-approval.

It shall be the responsibility of the applicant to produce and affix the type-approval number.

Article 8Manufacturer’s declaration

Each unit of equipment shall be accompanied by a manufacturer’s declaration.

Article 9Modifications to type-approved equipment1.

Any modification made to equipment already approved shall cause the type-approval to be withdrawn. Whenever modifications are planned, details shall be sent in writing to the competent technical service.

2.The competent authority shall decide following consultation with the technical service whether the type-approval still applies or whether an inspection or new type test is necessary.

If a new type test is granted, a new type-approval number shall be assigned.

PART IIMinimum requirements and test conditions for rate-of-turn indicators used on board inland waterway vesselsTable of contentsCHAPTER 1GeneralCHAPTER 2General minimum requirements for rate-of-turn indicatorsCHAPTER 3Minimum operational requirements for rate-of-turn indicatorsCHAPTER 4Minimum technical

requirements for rate-of-turn indicatorsCHAPTER 5Test conditions and procedures for rate-of-turn indicatorsCHAPTER 1GeneralArticle 1.01Scope

These provisions set out the minimum requirements for rate-of-turn indicators used on board inland waterway vessels, as well as the conditions for testing conformity with these minimum requirements.
Article 1.02Purpose of the rate-of-turn indicator

The rate-of-turn indicator is intended to facilitate radar navigation, and to measure and indicate the rate of turn of the vessel to port or starboard.
Article 1.03Type test1.

Compliance with the minimum requirements for rate-of-turn indicators pursuant to Chapters 2 to 4 shall be established by means of a type test.
2.

If the equipment passes the type test the technical service shall issue a test certificate. If the equipment fails to meet the minimum requirements, the applicant shall be notified in writing of the reasons for its rejection.
Article 1.04Application for a type test1.Applications for a type test of a rate-of-turn indicator shall be submitted to a technical service.

The technical services shall be notified to the European Commission.
2.Each application shall be accompanied by the following documents:

(a) detailed technical descriptions;

(b) complete set of installation and service documents;

(c) operating instructions.
3.By means of tests, the applicant shall establish or have it established that the equipment meets the minimum requirements of these provisions.

The results of the test and the measurement reports shall be attached to the application.

These documents and the information obtained during testing shall be kept by the competent authority.
Article 1.05Type approval1.Type approval shall be granted by the competent authority pursuant to the test certificate.

The competent authority shall inform the European Commission of the equipment it has approved. The relevant notice shall include the type approval number assigned, as well as the type designation, the name of the manufacturer, the name of the holder of the type approval and the date of the type approval.
2.Each competent authority or the technical service designated by the competent authority shall be entitled to select equipment from the production series at any time for inspection.

If this inspection reveals defects in the equipment, type approval may be withdrawn.

The type-approval shall be withdrawn by the authority that issued it.
Article 1.06Marking of the equipment and type approval number1.Each component of the equipment shall be marked indelibly with

(a) the name of the manufacturer,

(b) the trade designation of the equipment,

(c) the type of equipment and

(d) the serial number.

2.The type-approval number assigned by the competent authority shall be affixed indelibly to the control unit in such a way that it remains clearly visible after the equipment has been installed.

Composition of a type-approval number: e-NN-NNN

e = European Union
NN = code for the country of type-approval,

01	=	Germany
02	=	France
03	=	Italy
04	=	Netherlands
05	=	Sweden
06	=	Belgium
07	=	Hungary
08	=	Czech Republic
09	=	Spain
11	=	United Kingdom
12	=	Austria
13	=	Luxembourg
14	=	Switzerland
17	=	Finland
18	=	Denmark
19	=	Romania
20	=	Poland
21	=	Portugal
23	=	Greece
24	=	Ireland
26	=	Slovenia
27	=	Slovakia
29	=	Estonia
32	=	Latvia
34	=	Bulgaria
36	=	Lithuania

49	=	Cyprus
50	=	Malta

NNN = three-digit number, to be determined by the competent authority.

3.The type-approval number shall be used only in conjunction with the associated type-approval.

It shall be the responsibility of the applicant to produce and affix the type-approval number.

Article 1.07Manufacturer's declaration

Each unit of equipment shall be accompanied by a manufacturer's declaration.

Article 1.08Modifications to type-approved equipment1.Any modification made to equipment already approved shall cause the type-approval to be withdrawn.

Whenever modifications are planned, details shall be sent in writing to the competent technical service.

2.The competent authority shall decide following consultation with the technical service whether the type-approval still applies or whether an inspection or new type test is necessary.

If a new type test is granted, a new type approval number shall be assigned.

CHAPTER 2General minimum requirements for rate-of-turn indicatorsArticle 2.01Construction, design1.

Rate-of-turn indicators shall be suitable for operation on board inland waterway vessels.

2.

The construction and design of the equipment shall be in accordance with current good engineering practice, both mechanically and electrically.

3.In the absence of any specific provision in Annex II or in this Annex, the requirements and test methods contained in European Standard EN 60945:2002 shall apply to power supply, safety, mutual interference of ship borne equipment, compass safe distance, resistance to climatic influences, mechanical strength, environmental influences, audible noise emission and equipment markings.

Additionally, the equipment shall satisfy all requirements of this Annex at ambient temperatures between 0 and 40 °C.

Article 2.02Spurious emissions and electromagnetic compatibility1.General requirements:

Rate-of-turn indicators shall meet the requirements of Directive 2004/108/EC[(11)] of the European Parliament and of the Council of 15 December 2004 on the approximation of the laws of the Member States relating to electromagnetic compatibility and repealing Directive 89/336/EEC.

2.Spurious emissions:

In the frequency ranges of 156 to 165 MHz, 450 to 470 MHz and 1,53 to 1,544 GHz the field strength shall not exceed a value of 15 μV/m. These field strengths shall apply at a test distance of 3 metres from the equipment under test.

Article 2.03Operation1.The equipment shall not have more controls than are necessary for its correct operation.

The design, markings and manipulation of the controls shall be such as to permit their simple, unambiguous and fast operation. Their arrangement shall be such as to prevent operational mistakes as far as possible.

Controls that are not necessary for normal operation shall not be immediately accessible.
2.All controls and indicators shall be provided with symbols or markings in English. Symbols shall meet the requirements of European Standard EN 60417:1998.

All numerals and letters shall be at least 4 mm high. If it can be demonstrated that, for technical reasons, numerals and letters 4 mm high are not possible and if for the purposes of operation smaller numerals and letters are acceptable, a reduction to 3 mm shall be allowed.
3.

The equipment shall be designed in such a way that operating mistakes cannot cause its failure.
4.

Any functions over and above the minimum requirements, such as facilities for connection to other equipment, shall be provided in such a way that the equipment meets the minimum requirements under all conditions.
Article 2.04Operating instructions

A detailed operator's manual shall be supplied with each unit. It shall be available in Dutch, English, French and German and shall contain at least the following information:

(a) activation and operation;

(b) maintenance and servicing;

(c) general safety instructions.
Article 2.05Installation of the sensor

The direction of installation in relation to the keel line shall be indicated on the rate-of-turn indicator's sensor unit. Installation instructions shall be provided to ensure maximum insensitivity to other normal movements of the vessel.
CHAPTER 3Minimum operational requirements for rate-of-turn indicatorsArticle 3.01Operational readiness of the rate-of-turn indicator1.

From a cold start, the rate-of-turn indicator shall be fully operational within 4 minutes and shall operate to within the required accuracy tolerances.
2.

A warning signal shall indicate that the indicator is switched on. It shall be possible to observe and operate the rate-of-turn indicator simultaneously.
3.

Cordless remote controls shall not be permitted.
Article 3.02Indication of the rate of turn1.

The rate of turn shall be indicated on a linear graduated scale having the zero point situated in the middle. It shall be possible to read the direction and extent of the rate of turn with the necessary accuracy. Indicators other than needle indicators and bar-graphs shall not be permitted.

2.The indicator scale shall be at least 20 cm long and may be circular or rectilinear.

Rectilinear scales may be arranged horizontally only.
3.

Solely digital indicators shall not be permitted.
Article 3.03Measuring ranges

Rate-of-turn indicators may be provided with one or more measuring ranges. The following measuring ranges are recommended:

30	°/min
60	°/min
90	°/min
180	°/min
300	°/min.

Article 3.04Accuracy of the indicated rate of turn

The indicated rate of turn shall not differ by more than 2 % from the measurable maximum value or by more than 10 % from the actual value; whichever is the greater (see Appendix).
Article 3.05Sensitivity

The operating threshold shall be less than or equal to a change in angular speed equivalent to 1 % of the indicated value.
Article 3.06Monitoring of operation1.

If the rate-of-turn indicator does not operate within the required accuracy range, this shall be indicated.
2.

If a gyroscope is used, any critical fall in the rate of rotation of the gyroscope shall be signalled by an indicator. A critical fall in the rate of rotation of the gyroscope is one which lowers accuracy by 10 %.
Article 3.07Insensitivity to normal movements of the vessel1.

Rolling of the vessel of up to 10° at a rate of turn of up to 4°/s shall not give rise to measurement errors in excess of the stipulated tolerances.
2.

Impacts such as those that may occur during berthing shall not give rise to measurement errors in excess of the stipulated tolerances.
Article 3.08Insensitivity to magnetic fields

The rate-of-turn indicator shall be insensitive to magnetic fields which typically occur on board the vessel.
Article 3.09Slave indicators

Slave indicators shall comply with all requirements applicable to rate-of-turn indicators.
CHAPTER 4Minimum technical requirements for rate-of-turn indicatorsArticle 4.01Operation1.

All controls shall be so arranged that during their operation no information is concealed from view and radar navigation remains unimpaired.
2.

All controls and indicators shall be provided with a dazzle-free source of lighting appropriate for all ambient lighting conditions and adjustable down to zero by means of an independent control.
3.

Adjustment of controls shall be such that movements to the right or upwards have a positive effect on the variable and movements to the left or downwards a negative effect.
4.

If push-buttons are used, it shall be possible to locate and operate them by touch. They shall also have clearly perceptible contact release. If pushbuttons have multiple functions, it must be apparent which hierarchical level is active.
Article 4.02Damping devices1.

The sensor system shall be damped for critical values. The damping constant (63 % of the limit value) shall not exceed 0,4 s.
2.The indicator shall be damped for critical values.

Controls for increasing damping shall be permitted.

Under no circumstances may the damping constant exceed 5 s.
Article 4.03Connection of additional equipment1.If the rate-of-turn indicator can be connected to slave indicators or similar equipment, the rate-of-turn indication shall remain usable as an analogue electric signal. In addition, the rate-of-turn indicator may possess a digital interface in accordance with (2).

The rate of turn shall continue to be indicated with galvanic earth insulation and the equivalent to an analogue voltage of 20 mV/°/min ± 5 % and a maximum internal resistance of 100 Ω.

Polarity shall be positive when the vessel is turning to starboard and negative when it is turning to port.

The operating threshold shall not exceed 0,3°/min.

Zero error shall not exceed 1°/min at temperatures from 0 to 40 °C.

With the indicator switched on and the sensor not exposed to the effects of movement, the spurious voltage at the output signal measured with a 10 Hz pass-band low-pass filter shall not exceed 10 mV.

The rate-of-turn signal shall be received without additional damping beyond the limits referred to in Article 4.02 (1).
2.

A digital interface shall be designed pursuant to European standards EN 61162-1: 2008, EN 61162-2: 1998 and EN 61162-3: 2008.
3.An external alarm switch shall be provided. The switch shall be installed as a galvanic insulation break-switch for the indicator.

The external alarm shall be triggered by contact closure:

(a) if the rate-of-turn indicator is disconnected; or

(b) if the rate-of-turn indicator is not in operation; or

(c) if the operating control has reacted following an excessive error (Article 3.06).

CHAPTER 5Test conditions and procedures for rate-of-turn indicatorsArticle 5.01Safety, load capacity and electromagnetic compatibility

Power supply, safety, mutual interference of ship borne equipment, compass safe distance, resistance to climatic influences, mechanical strength, environmental impact, audible noise emission and electromagnetic compatibility shall be tested in accordance with European Standard EN 60945:2002.

Article 5.02Spurious emissions

Spurious emissions shall be measured in accordance with European Standard EN 60945:2002 in the frequency range of 30 to 2000 MHz.

The requirements of Article 2.02 (2) shall be met.

Article 5.03Test procedure1.Rate-of-turn indicators shall be tested under nominal and boundary conditions. In this regard, the influence of the operating voltage and of the ambient temperature shall be tested as far as the prescribed limit value.

In addition, radio transmitters shall be used to set up the maximum magnetic fields in the vicinity of the indicators.

2.

Under the conditions described in paragraph 1, indicator errors shall remain within the tolerances indicated in the Annex.

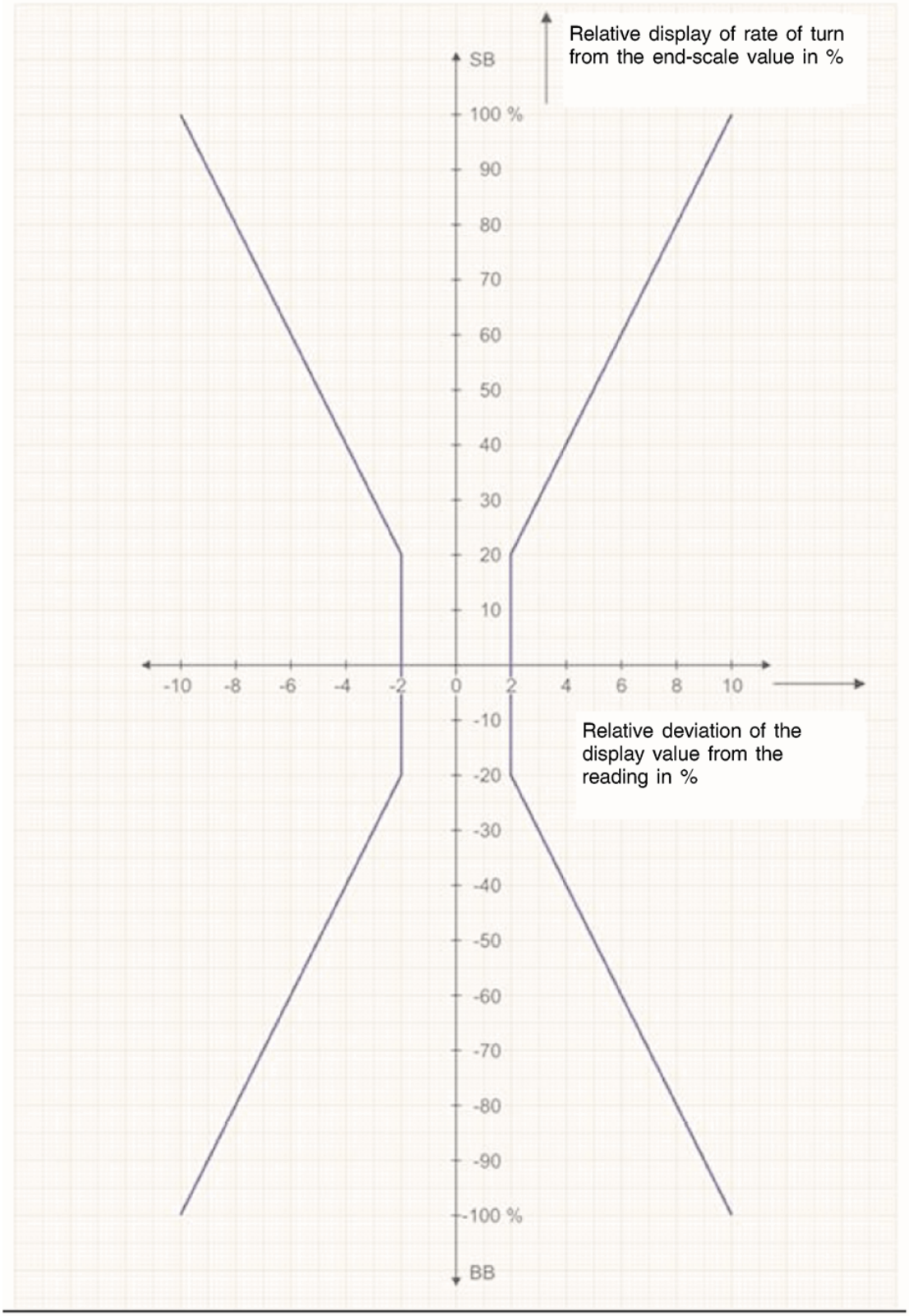
3.

All minimum requirements of Chapters 2 to 4 shall be met.

Appendix

Figure 1

Maximum tolerances for indication errors of rate-of-turn indicators



PART IIIRequirements for installation and performance tests for radar equipment and rate-of-turn indicators used on board inland waterway vesselsArticle 1General1.

Installation and performance tests of radar navigation equipment and rate-of-turn indicator systems must take place according to the following provisions.
2.Only equipment approved with:

(a) a type approval according to

(aa) Part I Article 6; or

(bb) Part II Article 1.05; or

(b) approved with a type approval recognised as equivalent according to Part VI; and

(c) bearing a corresponding type approval number

shall be authorised for installation.
Article 2Approved specialised firms1.The installation, replacement, repair or maintenance of radar navigation equipment and rate-of-turn indicators shall be carried out only by specialised firms approved by the competent authority.

The competent authorities responsible for approval shall be notified to the European Commission.
2.

Approval may be withdrawn by the competent authority.
3.

The competent authority shall immediately notify the European Commission of the specialised firms which it has approved.
Article 3Requirements for on-board power supply

All power supply leads for radar navigation equipment and rate-of-turn indicators shall have their own separate safety devices and if possible be fail-safe.
Article 4Installation of the radar antenna1.

The radar antenna shall be installed as close as possible to the fore-and-aft-line. There shall be no obstruction in the vicinity of the antenna causing false echoes or unwanted shadows; if necessary, the antenna shall be mounted on the forecastle. The mounting and attachment of the radar antenna in its operational position shall be sufficiently stable to enable the radar navigation equipment to perform within the required accuracy limits.
2.

After the angular error in the mounting has been corrected and the equipment has been switched on, the difference between lubber line and fore-and-aft-line shall not be greater than 1°.
Article 5Installation of the display unit and the control unit1.

The display unit and control unit shall be installed in the wheelhouse in such a way that the evaluation of the radar image and the operation of the radar navigation equipment present no difficulty. The azimuthal orientation of the radar image shall be in accordance with the normal situation of the surroundings. Holders and adjustable consoles shall be constructed in a way that they can be fixed in each position free of vibration.

2.

During radar navigation, artificial lighting shall not be reflected in the direction of the radar operator.
3.

When the control unit is not part of the display unit, it shall be located in housing within 1 metre of the display unit. Cordless remote controls shall not be permitted.
4.

If slave indicators are installed, they shall satisfy the requirements which apply to navigational radar equipment.
Article 6Installation of the rate-of-turn indicator1.

The rate-of-turn indicator shall be located ahead of the helmsman and within their field of vision.
2.

The sensor system shall be installed as far as possible amidships, horizontal and aligned with the ship's fore-and aft-line. The installation site shall as far as possible be free of vibration and be liable only to modest temperature variations. The indicator unit shall if possible be installed directly above the radar display.
3.

If slave indicators are installed, they shall satisfy the requirements which apply to rate-of-turn indicators.
Article 7Installation of the position sensor

For inland ECDIS equipment which is operated in navigation mode, the position sensor (e.g. DGPS antenna) must be installed in such a way as to ensure that it operates with the greatest possible degree of accuracy and is not adversely affected by superstructures and transmitting equipment on board ship.
Article 8Installation and performance test

Before the equipment is switched on for the first time after installation, or after renewals or extensions of the Community certificate (except according to Article 2.09(2) of Annex II), as well as after each modification of the vessel likely to affect the operating conditions of the equipment, an installation and performance test shall be carried out by the competent authority or the technical service designated by the competent authority or by a firm authorised in accordance with Article 2. For this purpose, the following conditions shall be fulfilled:

(a) the power supply shall have a separate safety device;

(b) the operating voltage shall be within the tolerance;

(c) the cabling and its installation shall satisfy the provisions of Annex II and, if applicable ADN;

(d) the rate of antenna revolutions shall reach at least 24 rpm;

(e) there shall be no obstruction in the vicinity of the antenna which impairs navigation;

(f) the safety switch of the antenna, if provided, shall be in good working order;

(g) the arrangement of display units, rate-of-turn indicators and control units shall be ergonomic and user-friendly;

(h) the lubber line of the radar navigation equipment shall not deviate from the ship's fore-and-aft-line by more than 1°;

(i) the accuracy of the range and azimuthal displays shall satisfy the requirements (measurements using known targets);

(j) linearity in short ranges shall be correct (pushing and pulling);

(k) the displayed minimum range shall be 15 metres or less;

(l) the centre of the picture shall be visible and its diameter shall not exceed 1 mm;

(m) false echoes caused by reflections and unwanted shadows on the lubber line shall not occur or shall not impair the safety of navigation;

(n) sea-clutter and rain-clutter suppressors (STC and FTC preset) and the associated controls shall perform correctly;

(o) the gain adjustment shall be in proper working order;

(p) focus and picture definition shall be correct;

(q) the ship's turning direction shall be as indicated on the rate-of-turn indicator and the zero position at dead ahead shall be correct;

(r) the radar navigation equipment shall not be sensitive to transmissions by the ship's radio equipment or to interference from other on-board sources;

(s) the radar navigation equipment or rate-of-turn indicator shall not interfere with other on-board equipment.

Furthermore, in the case of inland ECDIS equipment:

(t) the statistical positional error affecting the chart shall not exceed 2 m;

(u) the statistical phase angle error affecting the chart shall not exceed 1°;

Article 9Installation and performance certificate

After successful completion of a test in accordance with Article 8, the competent authority, the technical service or the approved firm shall issue a certificate based on the model according to Part IV. This certificate shall be kept permanently on board.

If the test conditions have not been met, a list of defects shall be drawn up. Any existing certificate shall be withdrawn or sent to the competent authority by the technical service or the approved firm.

PART IV(MODEL)Installation and performance certificate for radar navigation installations and rate-of-turn indicators used on board inland waterway vessels

Vessel name/type: …

European Vessel Identification Number: …

Vessel owner: …

Name: …

Address: …

Radar navigation equipment Number: …

Item No	Type	Manufacturer	Type-approval number	Serial number

Rate-of-turn indicators Number: …

Item No	Type	Manufacturer	Type-approval number	Serial number

It is hereby certified that the radar navigation equipment and rate-of-turn indicators of this vessel meet the requirements of Directive 2006/87/EC Annex IX Part III concerning installation and performance tests of radar navigation systems and rate-of-turn indicators used on board inland waterway vessels.

Approved specialised firm/technical service/Competent authority[(12)]

Name: …

Address: …

Stamp/Seal Place … Date …

Signature
PART V(MODEL)1.Register of competent authorities for type approval of radar navigation equipment and rate-of-turn indicatorsIf no authority is given no competent authority was specified by the relevant country.CountryNameAddressTelephone numberE-mail addressBelgiumBulgariaDenmarkGermanyEstoniaFinlandFranceGreeceItalyIrelandLatviaLithuaniaLuxe
RepublicHungaryUnited KingdomCyprus2.Register of approved radar navigation equipment and rate-of-turn indicatorsItem NoTypeManufacturerHolder of type-approvalDate of type-approvalCompetent authorityType-approval No3.Register of radar navigation equipment and rate-of-turn indicators approved on the basis of equivalent type-approvalsItem NoTypeManufacturerHolder of typeapprovalDate of type-approvalCompetent authorityType-approval No4.Register of specialised firms approved for the installation or replacement of radar navigation equipment and rate-of-turn indicatorsBelgiumIf no approved firm is specified, no approval is granted for firms in this country.Item NoNameAddressTelephone numberE-mail addressBulgariaIf no approved firm is specified, no approval is granted for firms in this country.Item NoNameAddressTelephone numberE-mail addressDenmarkIf no approved firm is specified, no approval is granted for firms in this country.Item NoNameAddressTelephone numberE-mail addressGermanyIf no approved firm is specified, no approval is granted for firms in this country.Item NoNameAddressTelephone numberE-mail addressEstoniaIf no approved firm is specified, no approval is granted for firms in this country.Item NoNameAddressTelephone numberE-mail addressFinlandIf no approved firm is specified, no approval is granted for firms in this country.Item NoNameAddressTelephone numberE-

mail addressFranceIf no approved firm is specified, no approval is granted for firms in this country.Item NoNameAddressTelephone numberE-mail addressGreeceIf no approved firm is specified, no approval is granted for firms in this country.Item NoNameAddressTelephone numberE-mail addressItalyIf no approved firm is specified, no approval is granted for firms in this country.Item NoNameAddressTelephone numberE-mail addressIrelandIf no approved firm is specified, no approval is granted for firms in this country.Item NoNameAddressTelephone numberE-mail addressLatviaIf no approved firm is specified, no approval is granted for firms in this country.Item NoNameAddressTelephone numberE-mail addressLithuaniaIf no approved firm is specified, no approval is granted for firms in this country.Item NoNameAddressTelephone numberE-mail addressLuxembourgIf no approved firm is specified, no approval is granted for firms in this country.Item NoNameAddressTelephone numberE-mail addressMaltaIf no approved firm is specified, no approval is granted for firms in this country.Item NoNameAddressTelephone numberE-mail addressNetherlandsIf no approved firm is specified, no approval is granted for firms in this country.Item NoNameAddressTelephone numberE-mail addressAustriaIf no approved firm is specified, no approval is granted for firms in this country.Item NoNameAddressTelephone numberE-mail addressPolandIf no approved firm is specified, no approval is granted for firms in this country.Item NoNameAddressTelephone numberE-mail addressPortugalIf no approved firm is specified, no approval is granted for firms in this country.Item NoNameAddressTelephone numberE-mail addressRomaniaIf no approved firm is specified, no approval is granted for firms in this country.Item NoNameAddressTelephone numberE-mail addressSwedenIf no approved firm is specified, no approval is granted for firms in this country.Item NoNameAddressTelephone numberE-mail addressSwitzerlandIf no approved firm is specified, no approval is granted for firms in this country.Item NoNameAddressTelephone numberE-mail addressSpainIf no approved firm is specified, no approval is granted for firms in this country.Item NoNameAddressTelephone numberE-mail addressSlovakiaIf no approved firm is specified, no approval is granted for firms in this country.Item NoNameAddressTelephone numberE-mail addressSloveniaIf no approved firm is specified, no approval is granted for firms in this country.Item NoNameAddressTelephone numberE-mail addressCzech RepublicIf no approved firm is specified, no approval is granted for firms in this country.Item NoNameAddressTelephone numberE-mail addressHungaryIf no approved firm is specified, no approval is granted for firms in this country.Item NoNameAddressTelephone numberE-mail addressUnited KingdomIf no approved firm is specified, no approval is granted for firms in this country.Item NoNameAddressTelephone numberE-mail addressCyprusIf no approved firm is specified, no approval is granted for firms in this country.Item NoNameAddressTelephone numberE-mail address5.Register of testing establishments specified for the type testing of radar navigation equipment and rate-of-turn indicatorsItem NoNameAddressTelephone numberE-mail addressStatePART VIEquivalent equipment(1)

Radar navigation equipment: type approvals based on Resolution 1989-II-33 of the Central Commission for the Navigation on the Rhine of 19 Mai 1989 last amended by Resolution 2008-II-11 of 27 November 2008[13]
(2)

Rate of turn indicators: type approvals based on Resolution 1989-II-34 of the Central Commission for the Navigation on the Rhine of 19 May 1989 last amended by Resolution 2008-II-11 of 27 November 2008[13]
(3)

Radar navigation equipment and Rate of turn indicators installed and functioning conform Resolution 1989-II-35 of the Central Commission for the Navigation on the Rhine of 19 May 1989 last amended by Resolution 2008-II-11of 27 November 2008[13]

(**1**) OJ L 389, 30.12.2006, p. 1.

(**2**) OJ L 33, 4.2.2012, p. 6.

(**3**) OJ L 33, 4.2.2012, p. 7.

(**4**) OJ L 33, 4.2.2012, p. 8.

(**5**) OJ L 373, 31.12.1991, p. 29.

(**6**) OJ L 46, 17.2.1997, p. 25.'

(**7**) OJ L 164, 30.6.1994, p. 15.

(**8**) OJ L 214, 26.8.2003, p. 18.'.

(**9**) OJ L 319, 12.12.1994, p. 20'.

(**10**) OJ L 91, 7.4.1999, p. 10

(**11**) OJ L 390, 31.12.2004, p. 24.

(**12**) Cross out what is not applicable.

(**13**) Requirements for the installation and functioning of radar navigation equipment and rate of turn indicators for the navigation on the Rhine.