Amended proposal for a Directive of the European Parliament and of the Council amending Directive 82/714/EEC of 4 October 1982 laying down technical requirements for inland waterway vessels (1)

(2000/C 365 E/08)

(Text with EEA relevance)

COM(2000) 419 final — 97/0335(COD)

(Submitted by the Commission pursuant to Article 250(2) of the EC Treaty on 19 July 2000)

(1) OJ C 105, 6.4.1998, p. 1.

INITIAL PROPOSAL AMENDED PROPOSAL

THE COUNCIL OF THE EUROPEAN UNION.

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION.

Having regard to the Treaty establishing the European Community, and in particular Article 75.1 thereof,

Having regard to the Treaty establishing the European Community, and in particular Article 71.1 thereof,

Having regard to the proposal from the Commission,

Unchanged

Having regard to the opinion of the Economic and Social Committee.

Having regard to the opinion of the Economic and Social Committee (1),

Acting in accordance with the procedure laid down in Article 189c of the Treaty, in cooperation with the European Parliament,

Acting in accordance with the procedure laid down in Article 251 of the Treaty,

Whereas:

Whereas Council Directive 82/714/EEC of 4 October 1982 laying down technical requirements for inland waterway vessels (¹) introduced harmonised conditions for issuing technical certificates for inland waterway vessels in all Member States, whereas in the interest of safety these conditions have to be adapted to technical progress also taking into account changes in the Community's waterway network.

(1) Council Directive 82/714/EEC of 4 October 1982 laying down technical requirements for inland waterway vessels (2) introduced harmonised conditions for issuing technical certificates for inland waterway vessels in all Member States, albeit excluding operations on the Rhine. Nevertheless, at the European level, various technical requirements for inland waterway vessels will remain in force. Up to now, the coexistence of various international and national regulations has obstructed efforts to ensure mutual recognition of national navigation certificates without the need for an additional inspection of foreign vessels. Furthermore, the standards contained in Directive 82/714/EEC no longer reflect, in part, current technological developments; whereas in the interest of safety these conditions have to be adapted to technical progress also taking into account changes in the Community's waterway network.

⁽¹⁾ OJ C 157, 25.5.1998, p. 17.

⁽²⁾ OJ L 301, 28.10.1982, p. 1.

⁽¹⁾ OJ L 301, 28.10.1982, p. 1.

INITIAL PROPOSAL

Whereas the conditions and technical requirements for issuing inland navigation certificates under Article 22 of the Revised Convention for Navigation on the Rhine have been revised as from 1 January 1995. For competition and safety reasons it is desirable to adopt the scope and content of such technical requirements for the whole of the Community's network.

Whereas it is appropriate that Community inland navigation certificates attesting the full compliance of vessels with the aforementioned revised technical requirements shall be valid on all Community waterways.

Whereas it is desirable to ensure a greater degree of harmonisation between the conditions for issuing supplementary Community certificates by Member States for operations in Zone 1 and 2 waterways (estuaries), as well as for operations on Zone 4 waterways.

Whereas it is appropriate to provide for a transitional regime for vessels in service not yet carrying a Community inland navigation certificate when subjected to a first technical inspection under the revised technical requirements established by this Directive.

Whereas it is appropriate, within certain limits and according to the category of vessel concerned, to determine the period of validity of Community certificates in each specific case.

Whereas it is necessary, in order to allow for a more rapid adaptation of the annexes to the Directive to technical progress, to introduce procedures foreseen for this purpose based on Council Decision 87/373/EEC.

AMENDED PROPOSAL

- (2) Essentially, the technical requirements set out in the annexes to Directive 82/714/EEC incorporate the provisions laid down in the Revised Convention for the Navigation of the Rhine, in the version approved in 1982 by the Central Commission for Navigation on the Rhine (CCNR). The conditions and technical requirements for issuing inland navigation certificates under Article 22 of the Revised Convention for Navigation on the Rhine have been revised as from 1 January 1995. They are recognised as reflecting current technological developments and have been in force since 1 January 1995. For competition and safety reasons it is desirable, specifically in the interests of promoting harmonisation on a European scale, to adopt the scope and content of such technical requirements for the whole of the Community's waterway network. Account should be taken in this regard of the changes that have occurred in the Community's inland waterway network.
- (3) It is appropriate that Community inland navigation certificates attesting the full compliance of vessels with the aforementioned revised technical requirements shall be valid on all Community waterways.
- (4) It is desirable to ensure a greater degree of harmonisation between the conditions for issuing supplementary Community certificates by Member States for operations in Zone 1 and 2 waterways (estuaries), as well as for operations on Zone 4 waterways.
- (5) In the interests of passenger transport safety, it is desirable that the scope of the Directive be extended to include passenger vessels designed to carry more than 12 passengers, along the lines of the Regulation on Inspection of Shipping on the Rhine.
- (6) It is appropriate to provide for a transitional regime for vessels in service not yet carrying a Community inland navigation certificate when subjected to a first technical inspection under the revised technical requirements established by this Directive.
- (7) It is appropriate, within certain limits and according to the category of vessel concerned, to determine the period of validity of Community certificates in each specific case.
- (8) In accordance with Article 2 of Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission (1), measures for the implementation of this Directive should be adopted by use of the advisory procedure provided for in Article 3 of that Decision.

⁽¹⁾ OJ L 184, 17.7.1999, p. 23.

INITIAL PROPOSAL

Whereas it is necessary that the measures provided for in Directive 76/135/EEC of 20 January 1976 on reciprocal recognition of navigability licenses for inland waterway vessels (¹) remain in force for those vessels covered by it which are not covered by this Directive,

HAS ADOPTED THIS DIRECTIVE:

Article 1

Directive 82/714/EEC is hereby amended as follows:

- 1. The third indent of Article 1 is replaced by the following:
 - '— Zone 4: the other Community waterways listed in Chapter III of Annex I.'
- 2. Article 2 is replaced by the following:
 - 1. This Directive shall apply to:
 - vessels having a length of 20 metres or more;
 - vessels for which the product of L × B × T as defined in Annex II Article 1.01 is 100 m³ or more;
 - tugs and pusher craft, including those with a length of less than 20 metres or those for which the product of L × B × T as defined in Annex II Article 1.01 is less than 100 m³, provided that they have been built to tow or to push or to move alongside vessels as referred to in the first indent.
 - 2. The following are excluded from this Directive:
 - vessels intended for passenger transport which carry no more than 12 people in addition to the crew,
 - ferries,
 - pleasure craft with a length of less than 24 metres,
 - service craft belonging to supervisory authorities and fire-service vessels,
 - naval vessels,

AMENDED PROPOSAL

(9) It is necessary that the measures provided for in Directive 76/135/EEC of 20 January 1976 on reciprocal recognition of navigability licenses for inland waterway vessels (¹) remain in force for those vessels covered by it which are not covered by this Directive,

HAVE ADOPTED THIS DIRECTIVE:

Unchanged

INITIAL PROPOSAL AMENDED PROPOSAL

- sea going vessels, including sea going tugs and pusher craft operating or based on tidal waters or temporarily on inland waterways, provided that they carry the following valid navigation or safety certificates:
 - a certificate proving conformity with the 1974 International Convention for the Safety of Life at Sea (SOLAS), as amended, or equivalent,
 - a certificate proving conformity with the 1966
 International Convention on Load Lines, as amended, or equivalent, and an IOPP certificate proving conformity with the 1973 International Convention for the Prevention of Pollution from Ships (MARPOL), as amended,

where

- for passenger vessels not covered by all of these Conventions, a certificate issued in conformity with Council Directive 97/.../EC on safety rules and standards for passenger ships.'
- for passenger vessels not covered by all of these Conventions, a certificate issued in conformity with Council Directive 98/18/EC on safety rules and standards for passenger ships.'
- 3. The first and second indents of Article 3 are replaced by the following:

Unchanged

- '— a certificate issued pursuant to Article 22 of the Revised Convention for the Navigation of the Rhine or a Community inland-navigation certificate issued after 1 July 1998 pursuant to Article 8 attesting the full compliance of the vessel with the technical requirements of Annex II, when operating on a Zone R waterway,
- a Community inland navigation certificate issued to vessels in accordance with the provisions of this Directive and the technical requirements of Annex II when operating on waterways of other zones.'
- 4. Article 5 is replaced by the following:
 - 1. Each Member State may, subject to the requirements of the Revised Convention for the Navigation of the Rhine and subject to approval by the Commission acting in accordance with the procedure laid down in Article 19.3, adopt technical requirements additional to those in Annex II for vessels operating on Zone 1 and 2 waterways within its territory.

INITIAL PROPOSAL AMENDED PROPOSAL

Such additional requirements shall be restricted to the subjects listed in Annex Va and shall be drawn up in conformity with the provisions thereof.

- 2. Compliance with these additional requirements shall be specified in the Community certificate referred to in Article 3 or, where Article 4(2) applies, in the supplementary Community certificate. Such proof of compliance shall be recognised on Community waterways of the corresponding zone.
- 3. Each Member State may, subject to approval by the Commission acting in accordance with the procedure laid down in Article 19.3, allow a reduction of the technical requirements of Annex II for vessels operating exclusively on Zone 4 waterways within its territory. Such a reduction shall be restricted to the subjects listed in Annex Vb. Where the technical characteristics of a vessel correspond to these reduced technical requirements it shall be specified in the Community certificate or, where Article 4(2) applies, in the supplementary Community certificate, that its validity is restricted to the Zone 4 waterways concerned.'
- 5. The following is added to Article 8(2):

In cases where the first such technical inspection is carried out after 1 July 1998, any failure to meet the requirements laid down in Annex II shall be specified in the Community certificate. Provided that the competent authorities consider that these shortcomings do not constitute a manifest danger, the vessels concerned may continue to operate until such time as those components or areas of the vessel which have been certified as not meeting the requirements are replaced or altered, whereafter these components or areas shall meet the requirements of Annex II.

The replacement of existing parts with identical parts or parts of an equivalent technology and design during routine repairs and maintenance shall not be considered as a replacement within the meaning of this paragraph.' INITIAL PROPOSAL AMENDED PROPOSAL

6. The following is added to Article 8:

The Community certificate shall be issued to vessels initially excluded from the scope of this Directive which become subject to it as a result of the modifications of Article 2, paragraphs 1 and 2 introduced by Directive 98/.../EC following a technical inspection which shall be carried out upon expiry of the vessel's current certificate, but in any case no later than 30 June 2008, to check that the vessel complies with the technical requirements laid down in Annex II. Any failure to meet these requirements shall be specified in the Community certificate. Provided that the competent authorities consider that these shortcomings do not constitute a manifest danger, these vessels may continue to operate until such time as those components or areas of the vessel which have been certified as not meeting the requirements are replaced or altered, whereafter these components or areas shall meet the requirements of Annex II.

The replacement of existing parts with identical parts or parts of an equivalent technology and design during routine repairs and maintenance shall not be considered as a replacement within the meaning of this paragraph.'

7. Article 11 is replaced by the following:

- 1. In each individual instance, the period of validity of the Community certificate shall be determined by the authority responsible for issuing this certificate. However, this period shall not exceed five years for passenger vessels or 10 years for other vessels.
- 2. Each Member State may, in the cases specified in Articles 12 and 16 of this Directive and in Chapter 2.05 of Annex II, issue temporary Community certificates, the period of validity of which shall not exceed six months.'
- 8. The following is added to Article 13:

'However, for the renewal of Community certificates issued before 1 July 1998 the transitional provisions of Chapter 24 of Annex II shall apply.'

9. The first sentence of the second paragraph of Article 15 shall read as follows:

Following this inspection, a new certificate stating the technical characteristics of the vessel shall be issued or the existing certificate amended accordingly.'

INITIAL PROPOSAL

AMENDED PROPOSAL

- 10. Article 19 is replaced by the following:
 - 1. Any amendments which are necessary to adapt the annexes of the Directive to technical progress, to developments in this area arising out of the work of other international organisations, in particular that of the Central Commission for Navigation on the Rhine, to ensure that the two certificates referred to in Article 3, first indent are issued on the basis of technical requirements which guarantee an equivalent level of safety, or to take account of the cases referred to in Article 5, shall be adopted by the Commission in accordance with the procedure laid down in the present Article, paragraphs 2 and 3.
 - 2. The Commission shall be assisted by the Committee established under Article 7 of Council Directive 91/672/EEC, hereinafter referred to as "the Committee".
 - 3. The representative of the Commission shall submit to the Committee a draft of the measures to be taken. The Committee shall deliver its opinion on the draft within a time limit which the chairman may lay down according to the urgency of the matter, if necessary by taking a vote. The opinion shall be recorded in the minutes; in addition, each Member State shall have the right to ask to have its position recorded in the minutes. The Commission shall take the utmost account of the opinion delivered by the Committee. It shall inform the Committee of the action taken in connection with its opinion.'
- 3. Where reference is made to this paragraph, the advisory procedure laid down in Article 3 of Decision 1999/468/EC shall apply, in compliance with Article 7(3)

The Commission shall be assisted by the Committee

established under Article 7 of Council Directive 91/672/EEC (¹) composed of representatives of the Member States and chaired by the representative of the

11. Article 20 is replaced by the following:

Unchanged

Commission.

and Article 8 thereof.'

For those vessels outside the scope of Article 2, paragraph 1, but falling within the scope of Article 1a. of Directive 76/135/EEC, the provisions of the latter shall apply.'

12. Annexes I, II and III shall be replaced by the new versions set out in the Annex attached to this Directive. Annexes Va, Vb and VI as set out in the Annex hereto are added to the Directive.

(1) OJ L 373, 31.12.1991.

INITIAL PROPOSAL

AMENDED PROPOSAL

Article 2

- 1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive at the same time not later than 1 July 1998 and shall inform the Commission thereof. They shall apply such laws, regulations and administrative provisions from 1 July 1998.
- 2. When Member States adopt these measures, they shall contain a reference to this Directive or shall be accompanied by such reference on the occasion of their official publication. The methods of making such a reference shall be laid down by the Member States.
- 3. Member States shall lay down the system of penalties for breaching the national provisions adopted pursuant to this Directive and shall take all the measures necessary to ensure that these penalties are applied. The penalties thus provided for shall be effective, proportionate and dissuasive.
- 4. The Member States shall immediately notify to the Commission all provisions of domestic law which they adopt in the field governed by this Directive. The Commission shall inform the Member States thereof.

Article 3

This Directive is addressed to the Member States.

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive at the same time not later than a year after the entry into force of the Directive and shall inform the Commission thereof.

Unchanged

ANNEX I

LIST OF COMMUNITY INLAND WATERWAYS DIVIDED GEOGRAPHICALLY INTO ZONES 1, 2, 3 AND 4

CHAPTER I

Zone 1

Federal Republic of Germany

Ems: from a line linking the Delfzijl church tower and the Knock lighthouse towards the open sea as far as latitude 53° 30' N and longitude 6° 45' E (i.e. somewhat outside the trans-shipment zone for dry-cargo carriers in the Alte Ems, taking account of the Ems-Dollard cooperation treaty).

Zone 2

Federal Republic of Germany

Ems: from a line going from the entrance of the port towards Papenburg crossing the Ems, which links the Diemen pumping station (Diemer Schöpfwerk) and the opening of the dyke at Halte as far as a line linking the Delfzijl and Knock lighthouses, taking account of the Ems-Dollard cooperation treaty.

Jade: inside a line linking the Schillighörn upper light and Langwarden church tower.

Weser: from the Bremen railway bridge to a line linking the Langwarden and Kappel church towers with the Schwerburg secondary arm including the Kleine Weser, Rekumder-Loch, and Rechter Nebenarm secondary arms.

Elbe: from the lower limit of the port of Hamburg to a line linking the Döse beacon and the north-west point of the Hohe Ufer (Dieksand) with the Este, Lühe, Schwinge, Oste, Pinnau, Krückau and Stör tributaries (in each case from the barrage to the mouth) including the Nebenelbe.

Meldorfer Bucht: inside a line linking the north-west point of the Hohe Ufer (Dieksand) and the Büsum west pier head.

Flensburger Förde: inside a line linking the Kekenis lighthouse and Birknack.

Eckernförder Bucht: inside a line linking Bocknis-Eck to the north-west tip of the mainland at Dänisch Nienhof.

Kieler Förde: inside a line linking the Bülk lighthouse and the Laboe naval memorial.

Leda: from the entrance to the outer harbour of Leer sea lock to the mouth.

Hunte: from the port of Oldenburg and from 140 m downstream of the Amalienbrücke in Oldenburg to the mouth.

Lesum: from the Bremen-Burg railway bridge to the mouth.

Este: from the Buxtehude barrage gate to the Este barrage.

Lühe: from the mill 250 m upstream of the Marschdamm-Horneburg road bridge to the Lühe barrage.

Schwinge: from the footbridge downstream of the Güldenstern bastion at Stade to the Schwinge barrage.

Freiburger-Hafenpriel: from the Freiburg/Elbe sluices to the mouth.

Oste: from the Bremervorde mill dam to the Oste barrage.

Pinnau: from the Pinneburg railway bridge to the Pinnau barrage.

Krückau: from the Elmshorn watermill to the Kruckau barrage.

Stör: from Pegel Rensing to the Stör barrage.

Eider: from the Gieselau Canal to the Eider barrage.

Nord-Ostsee-Kanal (Kiel Canal): from a line linking the Brunsbüttel pierheads to a line linking the Kiel-Holtenau entry lights and the Schirnauer See, Bergstedter See, Audorfer See, Obereidersee with Enge, the Achterwehrer canal and the Flemhuder See.

Trave: from the railway bridge and the Holsten bridge (Stadttrave) in Lübeck to a line linking the two outer pierheads of Travemünde and the Pötenitzer Wick and the Dassower See.

Schlei: inside a line linking the Schleimünde pier heads.

Wismarbucht, Kirchsee.

Breitling, Salzhaff and Wismar harbour: seawards from the lines linking Hohen Wieschendorf Huk and the Timmendorf lights and the lights of Gollwitz on the isle of Poel and the southern tip of the Wustrow peninsula.

Unterwarnow and Breitling: seawards from the line linking the most northern points of the western, middle and eastern mole of Warnemünde.

Waters, encircled by the mainland and the Darß and Zingst peninsulas and the islands of Hiddensee and Rügen (including the Stralsund harbour):

towards the open sea as far as:

- latitude 54° 27' N between the Zingst peninsula and the island of Bock
- the line linking the northern tip of the island of Bock with the southern tip of the island of Hiddensee
- on the islands of Hiddensee and Rügen (Bug), the line linking the southeastern tip of Neubessin with the Buger Haken.

Greifswald Bodden and Greifswald harbour (with Ryck): towards the open sea as far as the line linking the eastern tip of Thiessower Haken (Süd perd) with the eastern tip of the island or Ruden and ending at the northern tip of the island of Usedom (latutitude 54° 10′ 37 N and 13° 47′ 51 E).

Waters encircled by the mainland and the island of Usedom (River Peene including the Wolgast harbour, backwaters, Stettin lagoon): towards the east as far as the German-Polish border line crossing the Stettin lagoon.

French Republic

Seine: downstream of the Jeanne-d'Arc bridge in Rouen.

Garonne and Gironde: downstream from the stone bridge at Bordeaux.

Rhône: downstream of the Trinquetaille bridge in Arles and beyond towards Marseille.

Dordogne: downstream from the stone bridge at Libourne.

Loire: downstream from the Haudaudine bridge of the Madeleine arm and downstream from the Pirmil bridge on the Pirmil arm.

Kingdom of the Netherlands

Dollard.

Eems.

Waddenzee: including the links with the North Sea.

IJsselmeer: including the Markermeer and IJmeer but excluding the Gouwzee.

Nieuwe Waterweg and the Scheur.

Caland Kanaal west from the Benelux harbour.

Hollands Diep.

Breeddiep, Beerkanaal and its connected harbours.

Haringvliet and Vuile Gat: including the waterways between Goeree-Overflakkee on the one hand and Voorne-Putten and Hoeksche Waard on the other.

Hellegat.

Volkerak.

Krammer.

Grevelingenmeer and Brouwerschavensche Gat: including all the waterways between Schouwen-Duiveland and Goeree-Overflakkee

Keten, Mastgat, Zijpe, Krabbenkreek, Eastern Scheldt and Roompot: including the waterways between Walcheren, Noord-Beveland and Zuid-Beveland on the one hand and Schouwen-Duiveland and Tholen on the other hand, excluding the Scheldt-Rhine Canal.

Scheldt and Western Scheldt and its mouth on the sea: including the waterways between Zeeland Flanders, on the one hand, and Walcheren and Zuid-Beveland, on the other, excluding the Scheldt-Rhine Canal.

CHAPTER II

Zone 3

Republic of Austria

Danube: from the border with Germany to the border with Slovakia.

Inn: from the mouth to the Passau-Ingling Power Station.

Traun: from the mouth to km 1,80.

Enns: from the mouth to km 2,70.

March: to km 6,00.

Kingdom of Belgium

Maritime Scheldt (downstream of Antwerp open anchorage).

Federal Republic of Germany

Danube: from Kelheim (km 2414,72) to the German-Austrian border.

Rhine: from the German-Swiss border to the German-Netherlands border.

Elbe: from the mouth of the Elbe-Seiten-Canal to the lower limit of the port of Hamburg.

Müritz.

French Republic

Rhine.

Kingdom of the Netherlands

Rhine.

Sneekermeer, Koevordermeer, Heegermeer, Fluessen, Slotermeer, Tjeukemeer, Beulakkerwijde, Belterwijde, Ramsdiep, Ketelmeer, Zwartemeer, Veluwemeer, Eemmeer, Alkmaardermeer, Gouwzee, Buiten IJ, afgesloten IJ, Noordzeekanaal, port of IJmuiden, Rotterdam port area, Nieuwe Maas, Noord, Oude Maas, Beneden Merwede, Nieuwe Merwede, Dordische Kil, Boven Merwede, Waal, Bijlandsch Canal, Boven Rijn, Pannersdensch Canal, Geldersche IJssel, Neder Rijn, Lek, Amsterdam-Rhine-Canal, Veerse Meer, Schelde-Rhine-Canal as far as the mouth in the Volkerak, Amer, Bergsche Maas, the Meuse below Venlo, Gooimeer, Europort, Calandkanaal (east from the Benelux harbour), Hartel-kanaal.

CHAPTER III

Zone 4

Republic of Austria

Thaya: up to Bernhardsthal.

March: above km 6,00.

Kingdom of Belgium

The entire Belgian network except the waterways in Zone 3.

Federal Republic of Germany

All Federal waterways except those in Zones 1, 2 and 3.

French Republic

The entire French network except the waterways in Zones 1, 2 and 3.

Kingdom of the Netherlands

All other rivers, canals and inland seas not listed in Zones 1, 2 and 3.

Italian Republic

River Po: from Piacenza to the mouth.

Milan-Cremona Canal, River Po: final stretch of 15 km to the Po.

River Mincio: from Mantua, Governolo to the Po.

Ferrara Waterway: from the Po (Pontelagoscuro), Ferrara to Porto Garibaldi.

Brondolo and Valle Canals: from the eastern Po to the Venice lagoon.

Fissero Canal-Tartaro-Canalbianco: from Adria to the eastern Po.

Venetian coastline: from the Venice lagoon to Grado.

Grand Duchy of Luxembourg

Moselle.

ANNEX II

Minimum technical requirements applicable to vessels navigating on waterways in Zones 1, 2, 3 and 4

PART I

CHAPTER 1

GENERAL

Article 1.01

Definitions

The following definitions are contained in this Directive:

Types of craft

- 1. 'craft': a vessel or item of floating equipment;
- 2. 'vessel': an inland waterway vessel or sea-going ship;
- 3. 'inland waterway vessel': a vessel intended solely or mainly for navigation on inland waterways;
- 4. 'sea-going ship': a vessel admitted and intended mainly for maritime or coastal navigation;
- 5. 'self-propelled craft': an ordinary self-propelled craft or a self-propelled tanker;
- 'self-propelled tanker': a vessel intended for the carriage of goods in fixed tanks and built to navigate independently under its own motive power;
- 7. 'ordinary self-propelled vessel': a vessel, other than a powered tanker, intended for the carriage of goods and built to navigate independently under its own motive power;
- 8. 'canal barge': an inland waterway vessel not exceeding 38,5 m in length and 5,05 m in breadth;
- 9. 'tug': a vessel specially built to perform towing;
- 10. 'pusher': a vessel specially built to propel a pushed train of craft;
- 11. 'self-propelled craft': an ordinary self-propelled craft or a self-propelled tanker;
- 12. 'tank barge': a vessel intended for the carriage of goods in fixed tanks and built to be towed, either having no motive power of its own or having only sufficient motive power to perform restricted manoeuvres;
- 13. 'dumb barge': a vessel, other than a tank barge, intended for the carriage of goods and built to be towed, either having no motive power of its own or having only sufficient motive power to perform restricted manoeuvres;
- 14. 'lighter': a tank lighter, ordinary lighter or ship-borne lighter;
- 15. 'tank lighter': a vessel intended for the carriage of goods in fixed tanks, built or specially modified to be pushed, either having no motive power of its own or having only sufficient motive power to perform restricted manoeuvres when not part of a pushed train of craft;
- 16. 'ordinary lighter': a vessel, other than a tank lighter, intended for the carriage of goods and built or specially modified to be pushed, either having no motive power of its own or having only sufficient motive power to perform restricted manoeuvres when not part of a pushed train of craft;
- 17. 'ship-borne lighter': a pushed lighter built to be carried aboard sea-going ships and to navigate on inland waterways;
- 18. 'passenger vessel': a vessel built and fitted out to carry more than 12 passengers;
- 19. 'day-excursion vessel': a passenger vessel without overnight passenger cabins;

- 19a. 'passenger sailing vessel': a passenger vessel built and fitted out mainly with a view to propulsion under sail;
- 20. 'passenger-cabin vessel': a passenger vessel with overnight passenger cabins;
- 21. 'floating equipment': a floating installation carrying working gear such as cranes, dredgers, pile drivers or elevators;
- 22. 'worksite craft': an appropriate vessel, built and equipped for use at worksites, such as a reclamation dredger, hopper or pontoon barge, pontoon or block-layer;
- 23. 'recreational craft': a vessel other than a passenger vessel, intended for sport or pleasure;
- 24. 'floating establishment': any floating installation not normally intended to be moved, such as a swimming bath, dock, jetty or boathouse;
- 25. 'floating installation': a raft or other structure, object or assembly capable of navigation, not being a vessel or floating equipment or establishment;

Assemblies of craft

- 26. 'train of craft': a rigid or towed train of craft;
- 27. 'formation': the manner in which a train of craft is assembled;
- 28. 'rigid train': a pushed train or breasted-up formation;
- 29. 'pushed train': a rigid assembly of craft of which at least one is positioned in front of the craft providing the power for propelling the train, known as the 'pusher(s)'; a train composed of a pusher craft and a pushed craft coupled so as to permit guided articulation is also considered as rigid;
- 30. 'breasted-up formation': an assembly of craft coupled rigidly side by side, none of which is positioned in front of the craft propelling the assembly;
- 31. 'towed train': an assembly of one or more craft, floating establishments or floating installations towed by one or more self-propelled craft forming part of the train;

Particular areas on board

- 32. 'main engine room': space where the propulsion engines are installed;
- 33. 'engine room': space where combustion engines are installed;
- 34. 'boiler room': a space housing a fuel-operated installation designed to produce steam or a thermal fluid;
- 35. 'enclosed superstructure': a watertight, rigid, continuous structure with rigid walls joined to the deck in a permanent and watertight manner;
- 36. 'wheelhouse': the area which houses all the control and monitoring instruments necessary for manoeuvring the vessel:
- 37. 'accommodation': a space intended for the use of persons normally living on board, including galleys, storage space for provisions, toilets and washing facilities, laundry facilities, landings and gangways, but not the wheelhouse;
- 38. 'hold': part of the vessel, delimited fore and aft by bulkheads, opened or closed by means of hatch covers, intended for the carriage of goods, whether packaged or in bulk, or for housing tanks not forming part of the hull;

- 39. 'fixed tank': a tank joined to the vessel, the walls of the tank consisting either of the hull itself or of a casing separate from the hull;
- 40. 'working station': an area where members of the crew carry out their duties, including gangway, derrick and ship's boat:
- 41. 'passageway': an area intended for the normal movement of persons and goods;

Marine engineering terms

- 42. 'plane of maximum draught': the water plane corresponding to the maximum draught at which the craft is authorised to navigate;
- 43. 'safety clearance': the distance between the plane of maximum draught and the parallel plane passing through the lowest point above which the craft is no longer deemed to be watertight;
- 44. 'freeboard (F)': the distance between the plane of maximum draught and a parallel plane passing through the lowest point of the gunwale or, in the absence of a gunwale, the lowest point of the upper edge of the hull planking or plating;
- 45. 'margin line': an imaginary line drawn on the side plating not less than 10 cm below the bulkhead deck and not less than 10 cm below the lowest non-watertight point of the side plating. If there is no bulkhead deck, a line drawn not less than 10 cm below the lowest line up to which the outer plating is watertight shall be used;
- 46. 'water displacement' (∇): the immersed volume of the vessel in m^3 ;
- 47. 'displacement' (D): the total weight of the vessel, inclusive of cargo, in tonnes;
- 48. 'block coefficient (d)': the ratio between the water displacement and the product of length, breadth and draught T;
- 49. 'sheer plan above water (S)': sheer plan of the vessel above the waterline in m²;
- 50. 'bulkhead deck': the deck to which the required watertight bulkheads are taken and from which the freeboard is measured;
- 51. 'bulkhead': a wall of a given height, usually vertical, partitioning the vessel and delimited by the bottom of the vessel, the plating or other bulkheads;
- 52. 'transverse bulkhead': a bulkhead extending from one side of the vessel to the other;
- 53. 'wall': a dividing surface, usually vertical;
- 54. 'partition wall': a non-watertight wall;
- 55. 'length' (L): the maximum length of the hull, excluding rudder and bowsprit;
- 56. 'length overall': the greatest length of the craft in metres, including all fixed installations such as parts of the steering system or power plant, mechanical or similar devices;
- 57. 'length' (LF): the length of the hull in metres, measured at maximum draught;
- 58. 'breadth' (B): the maximum breadth of the hull in metres, measured to the outer edge of the shell plating (excluding paddle wheels, rubbing strakes, etc.);
- 59. 'overall breadth': the maximum breadth of the craft in metres, including all fixed equipment such as paddle wheels, plinths, mechanical devices and the like;
- 60. 'breadth' (BF): breadth of the hull in metres, measured from the outside of the side plating at the maximum draught line:

- 61. 'side height (H)': the shortest vertical distance between the top of the keel and the lowest point of the deck on the side of the vessel;
- 62. 'draught (T)': the vertical distance between the lowest moulded point of the hull or the keel and the maximum draught line;
- 63. 'forward perpendicular': the vertical line at the forward point of the intersection of the hull with the maximum draught line;
- 64. 'clear width of gunwale': the distance between the vertical line passing through the most prominent part of the gunwale on the coaming side and the vertical line passing through the inside edge of the slip guard (guard rail, foot rail) on the outer side of the gunwale;

Steering system

- 65. 'steering system': all the equipment required for steering the vessel, such as to ensure the manoeuvrability laid down in Chapter 5 of this Regulation;
- 66. 'rudder': the rudder or rudders, with shaft, including the rudder quadrant and the components connecting with the steering apparatus;
- 67. 'steering apparatus': the part of the steering system which produces the movement of the rudder;
- 68. 'steering control': the steering-apparatus control, between the power source and the steering apparatus;
- 69. 'power source': the power supply to the steering control and the steering apparatus produced by an on-board network, batteries or an internal combustion engine;
- 70. 'drive unit': the component parts of and circuitry for the operation of a power-driven steering control;
- 71. 'steering apparatus control unit': the control for the steering apparatus, its drive unit and its power source;
- 72. 'manual drive': a system whereby manual operation of the hand wheel, moves the rudder by means of a mechanical or hydraulic transmission, without any additional power source;
- 73. 'manually-operated hydraulic drive': a manual control actuating a hydraulic transmission;
- 74. 'rate-of-turn regulator': equipment which automatically produces and maintains a given rate of turn of the vessel in accordance with preselected values;
- 75. 'wheelhouse arranged for steering on radar by one person': a wheelhouse arranged in such a way that, during navigation on radar, the vessel can be manoeuvred by one person;

Properties of structural components and materials

- 76. 'watertight': a structural component or device fitted out in such a manner as to prevent any ingress of water;
- 77. 'spray-proof and weathertight': a structural component or device so fitted that in normal conditions it allows only a negligible quantity of water to penetrate;
- 78. 'gastight': a structural component or device so fitted as to prevent the ingress of gas and vapours;
- 79. 'non-combustible': material which does not burn or give off inflammable vapours in a sufficient quantity to ignite when it reaches a temperature of approximately 750° C;
- 80. 'fire-resistant': material which does not readily catch fire, or the surface of which does not readily catch fire, and which impedes the spread of fire in an appropriate manner;
- 81. 'fire-retardant': a structural component or device which meets certain fire-resistance requirements;

Other concepts

- 82. The following are considered to be 'approved classification societies': Germanischer Lloyd, Bureau Veritas and Lloyd's Register of Shipping;
- 83a. 'Community certificate': a certificate which, in accordance with Article 3 of the Directive, is issued by the competent authorities of a Member State for vessels complying with the technical requirements laid down in this Annex;
- 83b. 'supplementary Community certificate': according to Article 4(2) of the Directive, all vessels require a supplementary Community certificate, in addition to the Rhine certificate, for Zones 1 and 2 and for Zones 3 and 4, if they wish to take advantage of the reduction in technical requirements on these waterways;
- 84. 'inspection bodies': competent authorities appointed by the Member States, which inspect vessels on the basis of the provisions in this Annex and issue the certificate(s).

Article 1.02

(left void)

Article 1.03

(left void)

Article 1.04

(left void)

Article 1.05

(left void)

Article 1.06

Temporary requirements

After invoking the procedure provided for in Article 19 of the Directive the competent authority may issue temporary requirements where this would seem essential, in order to enable tests to be carried out without disrupting the safety or orderly functioning of navigation. Those requirements shall be valid for a maximum period of three years.

Article 1.07

Administrative instructions to the inspection bodies

In order to make the implementation of this Directive easier and uniform administrative instructions to the inspection bodies may be adopted if the procedure provided for in Article 19 of the Directive is applied.

Those administrative instructions shall be brought to the attention of the inspection bodies by the competent authorities.

The inspection bodies shall follow those administrative instructions.

PART II

CHAPTER 15

SPECIAL PROVISIONS FOR PASSENGER VESSELS

Article 15.01

General provisions

- 1. Articles 4.01 to 4.04 and 8.06, Section 7 are not applicable.
- 2. Vessels with no motive power of their own are not authorised to carry passengers.
- 3. In the case of vessels with a length L_F of 25 m or more, buoyancy in the event of a leak shall be demonstrated in accordance with Article 15.02 for all possible loading situations.
- 4. On all decks, passenger spaces shall be situated aft of the collision bulkhead.
- Spaces intended for the accommodation of on-board staff shall by analogy satisfy the requirements of Articles 15.07 and 15.09.
- 6. (a) Notwithstanding Article 3.02, Section 1(b), the minimum thickness t_{mind} of bottom, bilge and side plating of passenger vessels shall be the greater of the values obtained as follows:

$$t_{1mind} = 0.006 \cdot a \cdot \sqrt{T \text{ [mm]}}$$

$$t_{2mind} = f \cdot 0.55 \cdot \sqrt{L_F \; [mm]}$$

where

 $f = 1 + 0.0013 \cdot (a - 500)$, where 'a' is 400 mm or more,

a = spacing between the longitudinal or transverse pairs in [mm] (when the spacing of the pairs is less than 400 mm, it will be assumed that a = 400 mm.

The greater value produced by the formulae shall be taken as the minimum thickness. Plates shall be replaced when the thickness of bottom or side plating no longer attains the minimum value determined according to the above requirement.

- (b) Plate thickness may be less than the minimum value produced by the formulae where the permissible value has been determined and certified on the basis of calculated evidence of sufficient hull strength.
- (c) However the minimum thickness shall not be less than 3 mm at any point on the hull.

Article 15.01a

Passenger sailing vessels

The special provisions applicable to passenger vessels shall not apply in the case of passenger sailing vessels. For such vessels, other special provisions will be adopted, in accordance with the procedures of the committee provided for in Article 19 of the Directive, and will be incorporated in this Annex.

Article 15.02

Basic requirements for subdivision of vessels

- 1. The distribution of bulkheads shall be such that, if any watertight compartment becomes flooded, the hull does not sink below the margin line and the requirements of Article 15.04, Section 7, are met.
- 2. Watertight glazing may be installed below the margin line on condition that it cannot be opened, is sufficiently strong and meets the requirements of Article 15.07, Section 7.
- 3. Structural specifications shall be taken into account in calculating stability in the event of a leak.

In general, calculations should be based on a permeability factor of 95 %.

If it is established by calculation that the average permeability of any compartment is less than 95 %, the calculated permeability may be used instead. In such calculations, the following minimum values shall, however, be observed:

Passenger areas and areas set aside for the crew	95 %
Engine rooms (including boiler rooms)	85 %
Loading compartments, baggage and provisions rooms	75 %
Double-bottomed areas, fuel bunkers and other compartments in so far as these spaces are to be regarded, in keeping with their intended purpose, as either full or empty, the vessel's waterline being the line corresponding to	
the deepest subdivision load line.	0 or 95 %.

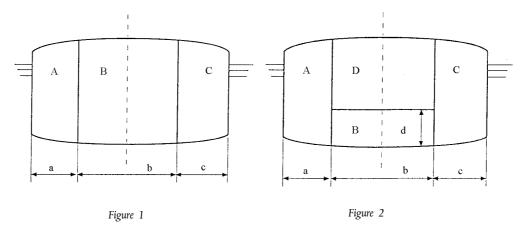
4. Between the collision bulkhead and the stern bulkhead, only those compartments having a length of at least $0.10~L_{\rm F}$, but not less than four metres, shall be considered watertight compartments for the purposes of Section 1 above. The inspection body may allow minor exceptions to this rule.

Where a watertight compartment is longer than required by the foregoing provisions and is subdivided so as to form watertight spaces which also meet the minimum length requirement, those spaces may be taken into account in calculating stability in the event of a leak.

The length of the first compartment aft of the collision bulkhead may be less than 0,10 L_F or four metres. In such cases, the fore peak and the adjacent compartment shall be taken as jointly floodable in the stability calculation. The distance between the forward perpendicular and the aft transverse bulkhead bounding this compartment may not, however, be less than 0,10 L_F or four metres.

The distance between the collision bulkhead and the forward perpendicular shall be at least 0,04 $\,L_F$ and not more than 0,04 $\,L_F + 2\,$ m.

- 5. Where a passenger vessel has longitudinal watertight subdivisions, asymmetries between the collision bulkhead and the rear bulkhead shall be taken into account as follows:
 - (a) provided that the longitudinal bulkheads are at least B_F from the skin plating at the maximum loaded draft line and at least B_F, but not less than 1,50 m, from each other, the stability calculation shall allow for the individual flooding of compartments A, B and C and the simultaneous flooding of compartments A + B and B + C (see fig. 1):
 - (b) if mid-compartment B has a watertight deck more than 0,50 m from the bottom of the vessel it is not necessary to allow for flooding of compartment D situated above that deck (see fig. 2). The conditions set out above regarding longitudinal bulkheads shall apply.



$$a = at least \frac{1}{5} B_F$$

b = at least $\frac{1}{6}$ B_F, and not less than 1,50 m

$$c = at least \frac{1}{5} B_F$$

d = at least 0,50 m.

Article 15.03

Transverse bulkheads

1. In addition to the bulkheads prescribed in Article 3.03, Section 1, the transverse bulkheads deriving from the subdivision calculation shall be required.

The prescribed transverse bulkheads shall be watertight and be carried up to the bulkhead deck. Where there is no bulkhead deck these bulkheads shall extend to a height at least 20 cm above the margin line. The requirements of Article 15.04, Section 8 shall be met.

Passenger spaces and the on-board staff's quarters shall be separated from the engine rooms and boiler rooms by gastight bulkheads.

2. The number of openings in watertight transverse bulkheads as defined in Section 1 above shall be as small as the type of construction and normal operation of the vessel permit. Openings and passageways shall not adversely affect the watertightness of bulkheads.

Collision bulkheads shall have neither openings nor doors.

The bulkheads separating engine rooms from passenger spaces or the on-board staff's quarters shall have no doors.

3. Doors in watertight bulkheads which are manually operated and not remotely controlled shall be authorised only in areas not accessible to passengers. They shall remain closed at all times and may be opened only temporarily to allow access. Rapid and safe locking shall be ensured by appropriate devices. The words 'Close door immediately after use' shall appear on both sides of such doors.

Notwithstanding the first sentence above, manually operated watertight bulkhead doors shall be permitted in passenger areas if:

- (a) the length L_F of the craft does not exceed 40 m;
- (b) the number of passengers does not exceed L_F;
- (c) the vessel has only one deck;
- (d) the doors are accessible directly from the deck and are not more than 10 m away from access to the deck;
- (e) the lower edge of the door is at least 30 cm above the floor of the passenger area;
- (f) the two adjacent compartments are equipped with a bilge level alarm system.
- 4. It shall be possible to close bulkhead doors which remain open for prolonged periods on the spot from either side and from any easily accessible place above the bulkhead deck. Once a door has been remotely closed, it shall be possible to reopen and close it safely on the spot. Closure shall not be impeded by carpeting, foot rails or other obstructions.

The duration of the remote closing operation shall be not less than 30 seconds and not more than 60 seconds. During the operation, an automatic alarm signal shall sound close to the door. At the point where the remote control operation is carried out, there shall be a device to indicate whether the door is open or closed.

- 5. Bulkhead doors and their opening and closing devices shall be located in an area bounded on the outside by a vertical plane at a distance of $^1/_5$ of the breadth B_F parallel to the side plating at the maximum loaded draft line. The wheelhouse shall be equipped with a visual alarm system which acts as a monitoring device and is activated whenever the bulkhead door is opened.
- 6. Open-ended piping and ventilation ducts shall be so installed that, in the event of a leak, no other spaces or tanks are flooded. If several compartments are connected by piping or ventilation ducts, such piping and ducts shall open into an appropriate place above the waterline corresponding to the worst possible flooding. Where this is not the case, transverse bulkheads shall be fitted with remote closing devices operated from above the bulkhead deck.

Piping which has no open orifice in a compartment shall be considered intact in the event of any damage to that compartment, provided that it is within the safety area defined in Section 5 above and is more than 0,50 m from the bottom.

7. Where openings and doors such as those referred to in Sections 2 to 6 above are authorised, the following operating instructions shall be entered on the inspection certificate:

'The crew shall be instructed that, in the event of danger, all openings and doors in watertight bulkheads are to be hermetically closed without delay.'

8. Transverse bulkheads may be recessed provided that all recess points are within the safety area defined in Section 5 above.

Article 15.04

Intact stability and stability in the event of a leak

- 1. The applicant shall show that the intact stability of the vessel is adequate by calculation based on the results of a lateral stability test and, if the inspection body so requests, of a turning test.
- 2. Proof of adequate intact stability by calculation shall be deemed to be furnished if, when fully rigged, with fuel bunkers, water tanks and waste water collection tasks half filled, while maintaining a residual freeboard and residual safety clearance conforming to Section 7 below, and under the simultaneous effects of:
 - (a) a lateral displacement of persons under the conditions set out in Section 4 below;
 - (b) wind pressure as defined in Section 5 below;
 - (c) the centrifugal force resulting from the turning of the craft under the conditions set out in Section 6 below,

the heel of the vessel does not exceed 12°. Under the sole effect of lateral displacement of persons, this angle shall not exceed 10°.

The inspection body may require the calculation also to be made for other degrees of filling of fuel bunkers and tanks

- 3. For vessels with a length L_F of less than 25 m, the proof of adequate intact stability by calculation required in Section 2 above may be replaced by a load test with the weight of half the authorised maximum number of passengers and the most unfavourable loading of fuel bunkers and water tanks. This weight shall be distributed from the side plating over the free deck area for passenger use at a ratio of 3¼ passengers per m^2 . During this test, the angle of heel shall not exceed 7° and the remaining freeboard and safety clearance shall not be less than $0.05 \ B + 0.20 \ m$ and $0.05 \ B + 0.10 \ m$ respectively.
- 4. The moment resulting from the lateral displacement of persons Mp shall be the sum of the moments for each deck accessible to passengers. These shall be calculated as follows:
 - (a) For free decks:

$$Mp_n = c_p \cdot b \cdot P [kNm]$$

where:

 c_p coefficient (cp = 1,5) [m/s²];

- b the greatest usable width of the bridge, measured at a height of $0,50\,$ m;
- P total mass in tonnes of the persons admitted on the deck in question.
- (b) For deck space occupied by fixed installations:

In calculating the lateral displacement of persons on decks partly occupied by fixed installations, such as benches, tables, dinghies or small shelters, a load of $3\frac{3}{4}$ passengers per m^2 of free deck area shall be used; in the case of benches, a width of 0.50 m and a depth of 0.75 m per passenger should be allowed for.

The calculation shall be made for displacement to starboard and to port.

For vessels with more than one deck, the distribution of the total weight of persons shall be the most unfavourable from the point of view of stability. Cabins, if any, shall be assumed to be unoccupied for the calculation of lateral displacement of persons.

The centre of gravity of a person shall be assumed to be at a height of one metre above the lowest point of the deck at $\frac{1}{2}$ L_F without allowing for the sheer or curvature of the deck and assuming a mass of 75 kg per passenger.

5. The moment resulting from the wind pressure Mw shall be calculated as follows:

$$M_w = p_v \cdot S \left(l_v + \frac{T}{2}\right) [kNm]$$

where:

 p_v specific wind pressure, i.e. 0,1 kN/m²;

- S sheer plan of the vessel above the plane of maximum draught in m²;
- l_{v} distance from the centre of gravity of the sheer plan of the vessel S at the plane of maximum draught in m.
- 6. The moment resulting from the centrifugal force exerted by the turning of the vessel shall be calculated as follows:

$$M_{gi} = C_{gi} \cdot \frac{D}{L_E} \; (\overline{H}_{\overline{g}} - \frac{T}{2}) \; [kNm]$$

where:

 C_{gi} a coefficient ($C_{gi} = 5$) [m^2/s^2];

 $\overline{H}_{\overline{\rho}}$ distance between the centre of gravity and the keel line in m.

Where the angle of heel during turning is verified by a test, the value so determined may be used in the calculation. The test shall be performed with the craft at half maximum speed fully loaded and on the smallest turning radius possible under these conditions.

7. With the vessel at the angle of heel resulting from the forces referred to in Section 2(a) to (c) the remaining freeboard must be not less than 0,20 m.

For vessels whose side glazing can be opened or whose sides contain other openings not guaranteed to be watertight a safety clearance of at least 0,10 m shall be maintained.

8. Proof by calculation of adequate stability in the event of a leak shall be deemed to have been furnished if at all the intermediate stages and the final stage of flooding the righting moment M_R defined by:

$$M_R = C_R \cdot \overline{MG}_{res} \cdot \sin \varphi \cdot D \ [kNm]$$

is greater than the heeling moment $M_g = 0.2 \; M_p \; [kNm].$

where

 C_R coefficient ($C_R = 10$) [m/s²];

 \overline{MG}_{res} Reduced metacentric height in m in the flooded state;

- φ the smaller of the following two angles: angle at which the initial opening of a non-immersed compartment begins to be immersed or angle at which the bulkhead deck begins to be immersed;
- M_p Moment resulting from the lateral displacement of persons, as referred to in Section 4.

Article 15.05

Calculation of the number of passengers on the basis of free deck area

- 1. If Articles 15.04 and 15.06 have been complied with, the inspection body shall set the authorised maximum number of passengers as follows:
 - (a) The calculation shall be based on the sum total free deck area normally reserved on board to accommodate passengers.

However, the deck areas of cabins and toilet compartments and of areas used permanently or temporarily for the operation of the vessel, even if accessible to passengers, shall not be included in the calculation. Moreover, areas located below the main deck shall not be taken into consideration. However, areas let into the main deck and including large glazing above it may be included in the calculation.

- (b) The following shall be subtracted from the total area calculated in accordance with (a) above:
 - the surfaces of corridors, companionways and other connecting surfaces,
 - surfaces beneath companionways,
 - surfaces permanently occupied by gear or furniture,
 - surfaces beneath dinghies, life-rafts and lifeboats, even where these are placed high enough for passengers to get beneath them,
 - small surfaces, including those between seats and tables, which are effectively unusable.
- (c) A load of 2,5 passengers should be allowed for per m² of free deck area, as determined in accordance with points (a) and (b); however, this load shall be 2,8 passengers in the case of vessels with a length L_F of less than 25 m.
- 2. The authorised maximum number of passengers shall be indicated on board by means of easily legible notices affixed in prominent places. In the case of cabin vessels also operated for day excursions, passenger numbers shall be calculated as for a day-excursion vessel and as for a cabin vessel and entered on the certificate.

Articles 15.02 and 15.04 shall be complied with for each of these passenger numbers.

In the case of vessels used exclusively for journeys involving overnight accommodation, the number of berths shall be determinant.

Article 15.06

Safety clearance, freeboard and draught marks

- 1. The safety clearance shall be at least equal to the sum of:
 - (a) the additional lateral draught, measured from the outside plating, resulting from the authorised angle of heel, and
 - (b) the residual safety clearance prescribed in Article 15.04, Sections 2 and 7.

For vessels without a bulkhead deck, the safety clearance shall be at least 0,50 m.

- 2. The freeboard shall be at least equal to the sum of:
 - (a) the additional lateral draught, measured from the outside plating, resulting from the angle of heel calculated in accordance with Article 15.04, Section 2, and
 - (b) the residual freeboard prescribed in Article 15.04, Sections 2 and 7.

The freeboard shall be at least 0,30 m.

3. The plane of maximum draught shall be determined in such a way as to comply with the safety clearance prescribed in Section 1, the freeboard prescribed in Section 2, and Articles 15.02 to 15.04. However, for safety reasons the inspection body may lay down a greater freeboard or a greater safety clearance.

4. Draught marks shall be affixed to each side of the vessel in accordance with Article 4.04. Authorisation will be given for additional pairs of marks or a continuous mark to be affixed. The position of such marks shall be clearly specified in the certificate.

Article 15.07

Passenger installations

1. Deck areas which are intended for passengers and are not enclosed shall be surrounded by a ship's rail or guard rail at least one metre high. The guard rail shall be fitted in such a way that children cannot fall through it. Openings and installations used to board or leave the vessel and openings used to load or unload it shall be fitted with an appropriate safety device.

Gangways shall be at least 0,60 m wide and shall be fitted with a railing on each side.

2. (a) Connecting corridors and companionways, and doors and exits intended for use by passengers, shall have a clear width of at least 0,80 m. This may be reduced to 0,70 m for doors to passenger cabins and other small rooms.

Where a part of the vessel or a room intended for passengers is served by a single connecting corridor or companionway, the clear width thereof shall be at least one metre. On vessels whose length L_F is less than 25 m, the inspection body may authorise a width of 0,80 m.

In the case of rooms or groups of rooms intended for more than 80 passengers, the sum width of all the exits provided for passengers and which the latter would have to use in an emergency shall be at least 0,01 m per passenger.

(b) Rooms or groups of rooms designed or arranged for 30 or more passengers or including berths for 12 or more passengers shall have at least two exits. A watertight bulkhead door complying with Article 15.03, Sections 2, 4 or 5 and giving access to an adjacent compartment from which the upper deck may be reached shall be considered to be an exit.

Such exits shall be appropriately planned. If the total width of the exits referred to at (a) is determined by the number of passengers, the width of each exit shall be at least 0,005 m per passenger. Except in the case of cabin vessels, one of these two exits may be replaced by two emergency exits.

Rooms located below the main deck shall have at least one direct exit, or where appropriate one emergency exit, giving onto the said deck or to the outside. This requirement does not apply to individual cabins.

Emergency exits shall have a clear opening of at least 0,36 m² and a shortest side not less than 0,50 m long.

- (c) Companionways below the main deck shall be located within two vertical planes at a distance of at least $^{1}/_{5}$ B_F from the side plating. This distance is not obligatory where there is at least one companionway on each side of the vessel in the same room. Companionways shall be fitted with handrails on each side; in the case of companionways less than 0,90 m wide a single handrail will be sufficient.
- 3. Doors to passenger day-rooms, except those opening onto corridors, shall be capable of opening outwards or shall be constructed as sliding doors.

Cabin doors shall be made in such a way that they can also be unlocked from the outside at any time.

- 4. Evacuation routes and emergency exits shall be clearly signed; these signs shall be lit by the emergency lighting system.
- 5. On board vessels authorised to carry up to 300 passengers there shall be at least one lavatory per 150 passengers. On board vessels authorised to carry more than 300 passengers there shall be separate lavatories for each sex, at the rate of at least one for every 200 passengers.
- 6. The entry of non-authorised persons into those parts of the vessel which are not intended for passengers, and in particular access to the wheelhouse and the engine rooms, shall be forbidden. In addition, the words 'No entry' or a corresponding symbol shall appear in a prominent place at the access points to such parts of the vessel.
- Only toughened glass, laminated glass or a synthetic material authorised for use in fire protection may be used for glazing located in the area accessible to passengers.

Article 15.08

Special requirements for survival equipment

1. Passenger vessels shall carry the number of lifebuoys indicated in the following table:

L _F in m	Maximum number of passengers admitted	Number of lifebuoys
up to 25	up to 200	3
over 25 and up to 35	over 200 and up to 300	4
over 35 and up to 50	over 300 and up to 600	6
over 50	over 600 and up to 900	8
_	over 900 and up to 1 200	10
_	over 1 200	12

The number of lifebuoys shall be determined by reference to the larger of the values resulting from the first and second columns.

Half the prescribed lifebuoys shall be fitted with a buoyant line at least 30 m long.

- 2. Vessels with a length L_F of less than 25 m shall, in addition to the lifebuoys required under Section 1, carry individual or collective survival equipment both for the entire maximum number of passengers authorised for the vessel's operating mode and for the vessel's service crew. Where buoyancy in the event of a leak has been checked, the requirements referred to in Section 3 shall be applied.
- 3. Survival equipment shall be stored on board in such a way that in case of need it can be easily and safely reached. Concealed storage places shall be clearly signed.
- 4. Individual survival equipment are the lifebuoys and life-jackets referred to in Article 10.05 and buoyancy aids and appropriate equipment capable of supporting a person in the water.

The buoyancy aids and appropriate equipment shall:

- (a) provide a buoyancy of at least 100 N in fresh water;
- (b) be made of a suitable material and be resistant to oil and oil-derived products, and to temperatures of up to 50 °C:
- (c) be fitted with appropriate devices enabling them to be grabbed;
- (d) have a fluorescent orange colour or have permanently fixed fluorescent surfaces measuring at least 100 cm².

Inflatable individual survival equipment shall be checked in accordance with the manufacturer's instructions.

- 5. Collective survival equipment is dinghies, life-rafts and appropriate equipment capable of supporting several persons in the water. These shall:
 - (a) bear an inscription indicating how they are to be used and the number of passengers for which they are approved;
 - (b) provide a buoyancy in fresh water of at least 100 N per person;
 - (c) assume and maintain a stable trim and, in this respect, be fitted with appropriate devices enabling them to be grabbed by the indicated number of persons;
 - (d) be made of a suitable material and be resistant to oil and oil-derived products, and to temperatures of up to 50 °C:
 - (e) have a fluorescent orange colour or have permanently fixed fluorescent surfaces measuring at least 100 cm²;
 - (f) be rapidly and safely launchable from their place of storage by a single person.

- 6. Inflatable survival equipment shall in addition:
 - (a) comprise at least two separate air compartments;
 - (b) inflate automatically or by manual command when launched;
 - (c) assume and maintain a stable trim whatever load it is supporting, even when only half the air compartments are inflated:
 - (d) be checked in accordance with the manufacturer's instructions.

Article 15.09

Fire protection and fire-fighting in passenger spaces

1. Decks separating passenger areas from one another or from the engine rooms and wheelhouse, and bulkheads and walls between passenger areas and engine rooms and between passenger areas and galleys shall be fire-retardant.

Partition walls and doors separating corridors from cabins and cabins from other cabins shall be fire-retardant.

Partition walls between corridors and cabins shall extend from deck to deck or shall extend up to a fire-resistant ceiling.

Where appropriate sprinkler systems have been fitted the prescriptions of the second and third paragraphs of this Section shall not be compulsory.

Fire spaces above ceilings, under floors and behind facings shall be subdivided at no more than 10 m intervals by fire-resistant structural parts.

Companionways, exits and emergency exits shall be so disposed that in the event of a fire in any area, the other areas may be evacuated safely.

Companionways, including their steps, shall include a frame made of steel or an equivalent non-flammable material. The steps shall be fire-resistant.

On cabin vessels they shall be located within a stairwell fitted with fire-retardant walls and with automatically closing fire-retardant doors.

A companionway which links only two decks need not be surrounded by a stairwell where one of these decks is surrounded by fire-retardant bulkheads with automatically closing fire-retardant doors or where appropriate sprinkler devices have been installed.

Stairwells shall link directly to the corridors and external decks.

- 3. Account shall be taken of the increased fire risk in galleys, hairdressing salons and perfume shops in accordance with the prescriptions of the competent authorities.
- 4. Paint, varnish and other surface treatment products used indoors, as well as materials used to face and insulate, shall be of a fire-resistant type. In the event of fire they shall not give off dangerous amounts of smoke or toxic gas.

Door-opening mechanisms shall function normally for a sufficiently long period in the event of fire.

- 5. Corridors which are more than 40 m long shall be subdivided by fire-retardant partition walls fitted with automatically closing doors at intervals of no more than 40 m.
- 6. Automatically closing fire-retardant doors which are left open during normal service shall be closable from a place which is permanently occupied by the vessel's crew and shall be closable on the spot.
- 7. Ventilation installations shall be built in such a way as to prevent the spread of fire through such installations. It shall be possible to close the air inlet and outlet vents.

Continuous ducts shall be subdivided at intervals of no more than 40 m by fire valves.

Ventilation ducts which pass through stairwell partition walls or engine room bulkheads shall be fitted with fire valves where they pass through such walls.

It shall be possible to switch off built-in ventilators from a central unit located outside the engine room.

- 8. On cabin vessels all cabins and day-rooms for passengers and crew members as well as the galleys and engine rooms shall be linked to an appropriate fire alarm system. The presence of a fire and its location shall be signalled automatically to a place which is permanently occupied by the vessel's crew.
- 9. Passenger vessels shall be fitted with a fire-fighting system comprising:
 - (a) a fixed, powered fire pump;
 - (b) piping with a sufficient number of hydrants;
 - (c) a sufficient number of fire hoses.

Fire-fighting installations shall be so arranged and of such dimensions that any point on the vessel may be reached from at least two different hydrants, in each case by using a single fire hose no more than 20 m long. Water pressure at the hydrant shall be at least 3 bar. On the highest deck it shall be possible to achieve a jet length of at least 6 m.

Fire pumps shall not be installed forward of the collision bulkhead. Where the fire pump is installed in the main engine room, a second powered fire pump shall be installed outside that room such as may be used independently of the engine room installations. This pump may be portable.

Normal service and deck wash pumps and deck wash pipes may be encompassed within the fire-fighting installation where appropriate.

On cabin vessels with a length L_F less than 25 m and on day-excursion vessels with a length L_F less than 40 m the following derogations are allowed:

- (a) the fire pump need not be a fixed installation;
- (b) where the fire pump is installed in the main engine room a second pump is not required;
- (c) it is sufficient that every point on the vessel may be reached from one hydrant using a single fire hose no more than 20 m long.
- 10. In addition to the extinguishers prescribed in Article 10.03, Section 1, the following extinguishers at least shall be carried on board:
 - (a) one extinguisher for every 120 m² of gross floor area, rounded up to the next 120 m², in day-rooms, dining rooms and similar areas;
 - (b) one extinguisher for every group of 10 cabins, rounded upwards.

These additional extinguishers shall be located around the vessel in such a way that one of them is to hand at all times no matter where a fire breaks out.

Article 15.10

Additional provisions

- 1. Lighting shall be provided solely by electric lighting systems.
- 2. There shall be an emergency electric lighting system with the meaning of Article 9.18, Section 2.
- 3. Where direct communication is not possible between the wheelhouse and the crew's living quarters, the operating areas, the fore and aft sections of the vessel and the passenger access points, a communication system providing a sure and reliable two-way link shall be provided.

- 4. Vessels with a length L_F of 40 m or more or authorised to carry more than 75 passengers shall be equipped with loudspeakers capable of reaching all passengers.
- 5. Cabin vessels shall have an alarm system. This shall comprise:
 - (a) an alarm system to warn the vessel command and the crew:

This alarm shall be given only in areas assigned to vessel command and the crew; it shall be possible for the vessel command to stop the alarm. It shall be possible to trigger the alarm from at least the following places:

- in each cabin,
- in the corridors, lifts and stairwells, with the distance to the nearest trigger not exceeding 10 m and with at least one trigger per watertight compartment,
- in the lounges, dining rooms and similar areas,
- in the engine rooms, galleys and similar areas exposed to fire risk.
- (b) an alarm system to warn passengers:

This alarm shall sound clearly and unmistakably in all areas accessible to passengers. It shall be possible to trigger it from the wheelhouse and from a location permanently occupied by the crew.

Alarm triggers shall be protected against unintentional use.

- Cabin vessels shall be equipped with a radio-telephone system allowing communication with the public telephone network.
- 7. The following points and areas at least shall be adequately lit:
 - (a) the points where collective survival equipment is stored and those where it is normally prepared for use;
 - (b) evacuation routes, passenger access points, corridors, lifts and companionways in the accommodation and the cabin and accommodation areas:
 - (c) signs indicating evacuation routes and exits;
 - (d) engine rooms and their exits;
 - (e) the wheelhouse;
 - (f) the room housing the emergency power source;
 - (g) the points where extinguishers and fire pumps are located;
 - (h) the areas in which passengers and crew muster in the event of danger.
- 8. On cabin vessels, a safety plan shall be kept on board indicating the tasks to be performed by the crew and staff in the event of an emergency in accordance with the police requirements in force. Tasks shall be indicated for the following cases:
 - (a) a leak;
 - (b) a fire on board;
 - (c) evacuation of passengers;
 - (d) a man overboard.

The safety plan shall include a plan of the vessel indicating clearly and precisely:

- (a) the survival and safety equipment;
- (b) the watertight doors located below deck and the position of their controls, as well as other openings such as those referred to in Article 15.03, Sections 2 and 6;
- (c) fire-retardant doors;
- (d) fire-dampers;
- (e) alarm installations;
- (f) Fire alarm system;
- (g) fire-fighting installations and extinguishers;
- (h) evacuation routes and emergency exits;
- (i) the emergency power source;
- (j) the ventilation system controls;
- (k) connection to the earthing network;
- (l) closing controls for fuel supply pipes;
- (m) liquefied gas plant;
- (n) loudspeaker systems;
- (o) radio-telephone installations.

The safety plan and the plan of the vessel shall bear the stamp of the inspection body and be displayed prominently at appropriate locations.

9. On cabin vessels a general evacuation plan shall be displayed for passengers at appropriate locations. The plan may be combined with the safety plan required under Section 8.

The requisite instructions to passengers on what to do in the event of an alarm, fire, damage to the vessel and evacuation and indicating the location of the survival equipment shall be provided in each cabin.

These instructions shall be written in Dutch, English, French and German.

10. In the case of vessels with a wooden, aluminium or synthetic hull, the engine rooms shall be constructed of materials referred to in Article 3.04, Sections 3 and 5, or be equipped with a permanently installed extinguishing system within the meaning of Article 10.03, Section 5.

Article 15.11

Waste water collection and disposal facilities

- Passenger vessels with more than 50 passenger berths shall be equipped either with waste water collection tanks or with on-board treatment plant.
- 2. Waste water collection tanks shall have sufficient volume. They shall be fitted with a device to indicate their content level. To empty the tanks, the vessel shall have its own pumps and pipes with which to evacuate the waste water to berths situated to either side of the vessel. The pipes shall be fitted with waste water evacuation joints in accordance with European standard EN 1306.
- 3. The on-board treatment plant shall, at all times and without dilution, be able to ensure the exit limit value required by the police provisions in force and shall be fitted with a sampling device.