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INLAND TRANSPORT COMMITTEE

**Diplomatic Conference for the adoption
of a European Agreement concerning
the International Carriage of Dangerous Goods
by Inland Waterway */**
(Geneva, 22-26 May 2000,
agenda item 8 (a))

**CONSIDERATION OF A DRAFT EUROPEAN AGREEMENT
CONCERNING THE INTERNATIONAL CARRIAGE
OF DANGEROUS GOODS BY INLAND WATERWAY (ADN)**

Annexes D.1 and D.2 **/

Note by the secretariat

Annexes D.1 and D.2 were elaborated by the Meeting of Experts on the European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway (ADN), at its third session, from 17 to 20 January 2000 (see TRANS/WP.15/AC.2/6, paras. 11-21 and annex 2).

*/ Organized jointly by the Economic Commission for Europe and the Central Commission for the Navigation of the Rhine (CCNR).

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Annex D.1 -GENERAL TRANSITIONAL PROVISIONS

1. Vessels in service shall meet the requirements of marginals and, where necessary, paragraphs and subparagraphs not mentioned in the table below within a period of not more than one year after the date of application of these Regulations.

The construction and equipment of vessels in service shall be maintained at least at the previous standard of safety.

In Annex D.1:

“Vessel in service” means a vessel according to Article 8 of the Agreement;

“N.R.M.” means that the requirement does not apply to vessels in service except where the parts concerned are replaced or modified, i.e. it applies only to vessels which are new, or to parts which are replaced or modified; where existing parts are replaced by spare or replacement parts of the same type and manufacture, this shall not be considered a replacement “R” as defined in these transitional provisions. Modification shall also be taken to mean the conversion of an existing type of tank vessel, a type of cargo tank or a state of cargo tank to another type or state at a higher level;

“Renewal of the certificate of approval” means that the requirement shall be met at the next renewal of the certificate of approval following the date indicated. If the certificate of approval expires during the first year after the date of application of these Regulations, the requirement shall be mandatory only after the expiry of this first year.

Table of transitional provisions		
Marginal	Subject	Time limit and comments
110 212 (1)	Ventilation of holds	N.R.M. The following requirements apply on board vessels in service: Each hold shall have appropriate natural or artificial ventilation; for the carriage of substances of Class 4.3, each hold shall be equipped with forced-air ventilation; the appliances used for this purpose must be so constructed that water cannot enter the hold.
110 212 (3)	Ventilation of service spaces	N.R.M.
110 217 (2)	Gas-tight openings facing holds	N.R.M. The following requirements apply on board vessels in service: Openings of accommodation and the wheelhouse facing the holds must be capable of being tightly closed.

Table of transitional provisions		
Marginal	Subject	Time limit and comments
110 217 (3)	Entrances and openings in the protected area	N.R.M. The following requirements apply on board vessels in service: Openings of accommodation and the wheelhouse facing holds shall be capable of being tightly closed.
110 231 (2)	Air intakes of engines	N.R.M.
110 232 (2)	Air pipes 50 cm above the deck	N.R.M.
110 234 (1)	Exhaust pipes	N.R.M.
110 235	Stripping pumps in the protected area	N.R.M. The following requirements apply on board vessels in service: In the event of the carriage of substances of Class 4.1, 52°, of all substances of Class 4.3 in bulk or unpackaged and polymeric beads, expandable, of Class 9, 4° (c), the stripping of the holds may only be effected using a stripping installation located in the protected area. The stripping installation located above the engine room must be clamped.
110 240 (1)	Fire extinguishers, two pumps, etc.	N.R.M.
110 240 (2)	Fire extinguishing systems permanently fixed in engine rooms	N.R.M.
110 241 in conjunction with 10 341	Fire and naked light	N.R.M. The following requirements apply on board vessels in service: The outlets of funnels shall be located not less than 2.00 m from the nearest point on hold hatchways. Heating and cooking appliances shall be permitted only in metal-based accommodation and wheelhouses.

Table of transitional provisions		
Marginal	Subject	Time limit and comments
		<p>However:</p> <p>Heating appliances fuelled with liquid fuels having a flashpoint above 55° C shall be permitted in engine rooms;</p> <p>Central-heating boilers fuelled with solid fuels shall be permitted in spaces situated below deck and accessible only from the deck.</p>
120 231 (2)	Air intakes of engines	N.R.M.
120 234 (1)	Position of exhaust pipes	N.R.M.
120 241 in conjunction with 10 341	Fire and naked light	<p>N.R.M.</p> <p>The following requirements apply on board vessels in service:</p> <p>Outlets of funnels shall be located not less than 2.00 m from the nearest point on hold hatchways.</p> <p>Heating and cooking appliances shall be permitted only in metal-based accommodation and wheelhouses.</p> <p>However:</p> <p>Heating appliances fuelled with liquid fuels having a flashpoint above 55° C shall be permitted in engine rooms;</p> <p>central-heating boilers fuelled by solid fuels shall be permitted in spaces situated below the deck and accessible only from the deck.</p>
210 014	Limited explosion risk electrical apparatus	<p>N.R.M.</p> <p>The following requirements apply on board vessels in service:</p> <p>Limited explosion risk electrical apparatus is:</p> <p>Electrical apparatus which, during normal operation, does not cause sparks or exhibit surface temperatures exceeding 200° C; or</p> <p>electrical apparatus with a spray-water protected housing which, during normal operation, does not exhibit surface temperatures above 200° C.</p>

Table of transitional provisions		
Marginal	Subject	Time limit and comments
210 014	Hold space	Not applicable to Type N open vessels whose hold spaces contain auxiliary appliances and which are carrying only substances of Class 8, 1° (a), 1° (b) or 42° (b).
210 206	Approved gas detection system	N.R.M.
210 208 (2) and (3)	Classification of Type N open vessels with flame-traps and Type N open vessels	N.R.M.
210 219 (3)	Vessels used for propulsion	N.R.M.
210 320	Use of cofferdams for ballasting	On board vessels in service, cofferdams may be filled with water during unloading to provide trim and to permit residue-free drainage if possible.
210 320 (1)	Ballast water Prohibition against filling cofferdams with water	N.R.M. The following requirements apply on board vessels in service: Cofferdams may be filled with ballast water only when cargo tanks are empty.
210 320 (1)	Proof of stabilization in the event of a leak connected with ballast water for Type G vessels	N.R.M.
210 325 (1)(c)	Connections prohibited between pipes for loading and unloading and pipes located outside the cargo area	N.R.M. for oil-separator vessels.
210 331 (2)	Motor vehicles only outside the cargo area: Type N open	N.R.M. The following requirements apply in board vessels in service: The vehicle shall not be started on board.
210 342 (3)	Use of the cargo heating system	Not applicable to vessels in service of Type N open.
210 351 (3)	Live sockets for Type G and Type N vessels	N.R.M.

Table of transitional provisions		
Marginal	Subject	Time limit and comments
210 381 (1)(h)	Damage control plan: Type G	N.R.M.
210 381 (1)(i)	Documents concerning intact stability	N.R.M.
210 422 (1)	Opening of openings Type N open	N.R.M. On board vessels in service cargo tank hatches may be opened during loading for control and sampling.
311 200 (3)(d) 321 200 (3)(d) 331 200 (3)(d)	Fire-resistant materials of accommodation and wheelhouse	N.R.M.
331 208 (1) in conjunction with 210 208	Continuation of class for Type N open vessels with flame-traps and Type N open vessels	N.R.M. The following requirements apply on board vessels in service: Except where otherwise provided, the type of construction, the strength, the subdivision, the equipment and the gear of the vessel shall conform or be equivalent to the construction requirements for classification in the highest class of a recognized classification society.
311 210 (2) 321 210 (2) 331 210 (2)	Door coamings, etc.	N.R.M. The following requirements apply on board vessels in service, with the exception of Type N open vessels: This requirement may be met by fitting vertical protection walls not less than 0.50 m in height; On board vessels in service less than 50.00 m long, the height of 0.50 m may be reduced to 0.30 m in passageways leading to the deck.
311 211 (1)(b)	Ratio of length to diameter of pressure cargo tanks	Not applicable to Type G vessels whose keels were laid before 1 January 1977.
331 211 (1)(d)	Limitation of length of cargo tanks	N.R.M.

Table of transitional provisions		
Marginal	Subject	Time limit and comments
311 211 (2)(a)	Arrangement of cargo tanks	N.R.M.
	Distance between cargo tanks and side walls	Not applicable to Type G vessels whose keels were laid before 1 January 1977.
	Height of saddles, spacers	<p>N.R.M.</p> <p>The following requirements apply on board vessels in service:</p> <p>Where tank volume is more than 200 m³ or where the ratio of length to diameter is less than 7 but more than 5, the hull in the tank area shall be such that, in the event of a collision, the tanks remain intact as far as possible. This requirement shall be considered as having been met where, in the tank area, the vessel:</p> <p>is double-hulled with a distance of at least 80 cm between the side plating and the longitudinal bulkhead,</p> <p>or is designed as follows:</p> <p>(a) Between the gangboard and the top of the floorplates there shall be side stringers at regular intervals of not more than 60 cm;</p> <p>(b) The side stringers shall be supported by web frames spaced at intervals of not more than 2.00 m. The height of the web frames shall be not less than 10% of the depth and in any event not less than 30 cm. They shall be fitted with a face plate made of flat steel having a cross section of not less than 15 cm²;</p> <p>(c) The side stringers referred to in (a) shall have the same height as the web frames and be fitted with a face plate made of flat steel having a cross section of not less than 7.5 cm².</p>
311 211 (2)(b) 321 211 (2)(b) 331 211 (2)(a)	Cargo tank fastenings	N.R.M.

Table of transitional provisions		
Marginal	Subject	Time limit and comments
311 211 (2)(c) 321 211 (2)(c) 331 211 (2)(b)	Capacity of suction well	N.R.M.
311 211 (3)(a)	End bulkheads of cargo area with "A-60" insulation. Distance of 0.50 m from cargo tanks in hold spaces	N.R.M.
321 211 (3)(a) 331 211 (3)(a)	Width of cofferdams of 0.60 m Hold spaces with cofferdams or "A-60" insulated bulkheads Distance of 0.50 m from cargo tanks in hold spaces	N.R.M. The following requirements apply on board vessels in service: Type C: minimum width of cofferdams: 0.50 m; Type N: minimum width of cofferdams: 0.50 m, on board vessels with a deadweight of up to 150 t: 0.40 m; Type N open: cofferdams shall not be required with deadweight up to 150 t: The distance between cargo tanks and end bulkheads of hold spaces shall be at least 0.40 m.
331 211 (4)	Passages through the end bulkheads of hold spaces	Shall not apply to Type N open vessels whose keels were laid before 1 January 1977.
331 211 (6)(a)	Form of cofferdam arranged as a pump room	Shall not apply to Type N vessels whose keels were laid before 1 January 1977.
311 211 (7) 331 211 (7)	Arrangement of service spaces located in the cargo area below decks	N.R.M.
311 211 (8) 331 211 (8)	Dimensions of openings for access to spaces within the cargo area	N.R.M.
311 211 (8) 321 211 (10) 331 211 (8)	Interval between reinforcing elements	N.R.M.
311 212 (2) 331 212 (1)	Ventilation systems in double-hull spaces and double bottoms	N.R.M.

Table of transitional provisions		
Marginal	Subject	Time limit and comments
311 212 (3) 321 212 (2) 331 212 (2)	Height above the deck of the air intake for service spaces located below deck	N.R.M.
311 212 (6) 321 212 (5) 331 212 (5)	Distance of ventilation inlets from cargo area	N.R.M.
331 212 (6)	Approval of flame-arresters	Shall not apply to Type N vessels whose keels were laid before 1 January 1977.
311 213 331 213	General stability	N.R.M.
311 214 331 214	Intact stability	N.R.M.
311 215	Stability after damage	N.R.M.
311 216 (1) 331 216 (1)	Distance of openings of engine rooms from the cargo area	N.R.M.
331 216 (1)	Internal combustion engines outside the cargo area for Type N open vessels	N.R.M.
311 216 (2) 331 216 (2)	Hinges of doors facing the cargo area	Shall not apply to vessels whose keels were laid before 1 January 1977 where alterations would obstruct other major openings.
	Engine rooms accessible from the deck for Type N open vessels	N.R.M.
311 217 (1) 331 217 (1)	Accommodation and wheelhouse outside the cargo area	Shall not apply to vessels whose keels were laid before 1 January 1977, provided that there is no connection between the wheelhouse and other enclosed spaces.
	Type N open	Shall not apply to vessels up to 50 m in length whose keels were laid before 1 January 1977 and whose wheelhouses are located in the cargo area even if it provides access to another enclosed space, provided that safety is ensured by appropriate service requirements of the competent authority. N.R.M.

Table of transitional provisions		
Marginal	Subject	Time limit and comments
311 217 (2) 321 217 (2) 331 217 (2)	Arrangement of entrances and openings of forward superstructures Entrances facing the cargo area Entrances and openings on Type N open vessels	N.R.M. Shall not apply to vessels up to 50.00 m in length whose keels were laid before 1 January 1977, provided that gas screens are installed. N.R.M.
331 217 (3)	Entrances and openings must be capable of being closed Type N open	N.R.M.
311 217 (4) 331 217 (4)	Distance of openings from the cargo area	N.R.M.
331 217 (5) (b), (c)	Approval of shaft passages and displaying of instructions Type N open	N.R.M.
311 217 (6) 331 217 (6)	Pump-room below deck	N.R.M. The following requirements apply on board vessels in service: Pump-rooms below deck shall meet the requirements for service spaces: for Type G vessels: marg. 311 212 (3) for Type N vessels: marg. 331 212 (2)
321 220 (1) 331 220 (1)	Access and ventilation openings 0.50 m above the deck	N.R.M.
321 220 (2) 331 220 (2)	Intake valve	N.R.M.
331 220 (2)	Filling of cofferdams with pump Type N open	N.R.M.

Table of transitional provisions		
Marginal	Subject	Time limit and comments
321 220 (2) 331 220 (2)	Filling of cofferdams within 30 minutes	N.R.M.
331 221 (1)(b)	Liquid level gauge Type N open with flame-trap Type N open	N.R.M.
331 221 (1)(c)	Level alarm device	Not applicable to open Type N vessels in service permitted only to carry sulphur in the molten state, UN No. 2448.
331 221 (1)(d) 321 221 (1)(d) 331 221 (1)(d)	Sensor for actuating the facility against overflowing	Applicable only to vessels to be loaded in a Contracting Party where the shore installation is equipped accordingly.
321 221 (1)(e)	Alarm of the instrument for measuring the pressure in each cargo tank in the event of the carriage of substances for which deck spraying is required	Renewal of certificate of approval after 1 January 1999.
321 221 (1)(f) 331 221 (1)(f)	Installation of the instrument for measuring the temperature	Renewal of certificate of approval after 1 January 1999.
331 221 (1)(g)	Sampling opening Type N open	N.R.M.
311 221 (4) 321 221 (4) 331 221 (4)	Independent liquid-level alarm device	N.R.M.
311 221 (5) 321 221 (5) 331 221 (5)	Socket close to the shore connections and cut-out of vessel's pump	N.R.M.
331 221 (5)(c)	Rapid closure device enabling the supply to be shut off	31 December 2003
311 221 (7) 321 221 (7) 331 221 (7)	Alarms for over-pressure, vacuum and temperature in cargo tanks	N.R.M.
331 221 (12)	Self-closing lid	N.R.M.
331 222 (1)(b)	Cargo tank openings 0.50 m above the deck	Shall not apply to vessels whose keels were laid before 1 January 1977.

Table of transitional provisions		
Marginal	Subject	Time limit and comments
311 222 (3) 321 222 (4)(b) 331 222 (4)(b)	Position of outlets of valves above the deck	N.R.M.
321 222 (4)(b) 331 222 (4)(b)	Pressure setting of high-velocity vent valves	N.R.M.
331 223 (2)	Test pressure for cargo tanks	Shall not apply to vessels whose keels were laid before 1 January 1977, for which a test pressure of 15 kPa (0.15 bar) is required. A test pressure of 10 kPa (0.10 bar) shall be sufficient.
331 223 (3)	Test pressure for pipes for loading and unloading	On board oil-separator vessels in service before 1 January 1999 a test pressure of 400 kPa is sufficient.
321 225 (1) 331 225 (1)	Shut-down of cargo pumps	N.R.M.
311 225 (1) 321 225 (1) 331 225 (1)	Distance of pumps, etc. from accommodation, etc.	N.R.M.
331 225 (2)(a)	Pipes for loading and unloading located in the below-deck area	N.R.M. for oil-separator vessels.
311 225 (2)(d) 321 225 (2)(d)	Position of loading and unloading pipes on deck	N.R.M.
311 225 (2)(e) 321 225 (2)(e) 331 225 (2)(e)	Distance of shore connections from accommodation, etc.	N.R.M.
311 225 (2)(i) 311 225 (2)(j) 311 225 (2)(k)	Position of cargo piping	N.R.M.
331 225 (8)(a)	Ballasting suction pipes located within the cargo area but outside the cargo tanks	N.R.M.
311 227 (2)	Refrigeration system List of 12° instead of 10°	N.R.M.
311 231 (2) 321 231 (2) 331 231 (2)	Distance of engine air intakes from the cargo area	N.R.M.

Table of transitional provisions		
Marginal	Subject	Time limit and comments
311 231 (4) 321 231 (4) 331 231 (4)	Temperature of outer parts of engines, etc.	N.R.M. The following requirements apply on board vessels in service: the temperature of outer parts shall not exceed 300° C.
311 231 (5) 321 231 (5) 331 231 (5)	Temperature in the engine room	N.R.M. The following requirements apply on board vessels in service: the temperature in the engine room shall not exceed 45° C.
311 232 (2) 321 232 (2) 331 232 (2)	Ventilation pipes 0.50 m above the deck	N.R.M.
331 234 (1)	Exhaust pipes	N.R.M.
311 235 (1) 331 235 (1)	Stripping and ballast pumps in the cargo area	N.R.M.
331 235 (3)	Suction pipes for ballasting located within the cargo area but outside the cargo tanks	N.R.M.
311 240 (1) 321 240 (1) 331 240 (1)	Fire extinguishing systems, two pumps, etc.	N.R.M.
311 240 (2) 321 240 (2) 331 240 (2)	Fixed fire extinguishing system in engine room	N.R.M.
311 241 (1) 331 241 (1)	Outlets of funnels located not less than 2 m from the cargo area	Not applicable to vessels whose keels were laid before 1 January 1977.
331 241 (1)	Outlets of funnels	N.R.M. for oil-separator vessels.
311 241 (2) 321 241 (2) 331 241 (2) in conjunction with 210 341	Heating, cooking and refrigerating appliances	N.R.M.

Table of transitional provisions		
Marginal	Subject	Time limit and comments
331 242 (2)	Cargo heating system: Type N open	N.R.M. The following requirements apply on board vessels in service: This can be achieved by an oil separator fitted to the condensed water return pipe.
311 251 (2) 321 251 (2) 331 251 (2)	Visual and audible alarm	N.R.M.
311 251 (3) 321 251 (3) 331 251 (3)	Temperature class and explosion group	N.R.M.
331 252 (1)(b) 331 252 (1)(c) 331 252 (1)(d) 331 252 (1)(e)	Electrical installations: Type N open	N.R.M.
311 252 (1)(e) 331 252 (1)(e)	Electrical installations of the “certified safe” type in the cargo area	Shall not apply to vessels whose keels were laid before 1 January 1977. The following conditions shall be met during loading, unloading and gas-freeing on board vessels having non-gastight wheelhouse openings (e.g. doors, windows, etc.) giving on to the cargo area: (a) All electrical installations designed to be used shall be of a limited explosion-risk type, i.e. they shall be so designed that there is no sparking under normal operating conditions and the temperature of their outer surfaces does not rise above 200° C, or be of a type protected against water spray the temperature of whose outer surfaces does not exceed 200° C under normal operating conditions; (b) Electrical installations which do not meet the requirements of (a) above shall be marked in red and it shall be possible to switch them off by means of a central switch.
331 252 (2)	Accumulators located outside the cargo area	N.R.M.

Table of transitional provisions		
Marginal	Subject	Time limit and comments
331 252 (5)	Cut-out switch for continuously driven generator: Type N open	N.R.M.
331 252 (6)	Permanently fitted sockets: Type N open	N.R.M.
311 256 (1) 331 256 (1)	Metallic sheaths for all cables	Shall not apply to vessels whose keels were laid before 1 January 1977.
331 256 (1)	Metallic sheath	N.R.M. for oil-separator vessels.
311 256 (3) 321 256 (3) 331 256 (3)	Movable cables in the cargo area	N.R.M.

2. The goods for which Type N open, Type N closed with a minimum valve setting of 10 kPa (0.10 bar) is required in the list of substances (Annex B.2, Appendix 4) may be carried in tank-vessels in service of Type N closed with a minimum valve setting of 6 kPa (0.06 bar) (cargo tank test pressure of 10 kPa (0.10 bar)).
3. Vessels carrying only the dangerous goods referred to below shall be subject to this Agreement as from 1 January 2005 only:

Classe 4.1 3175 solids or mixtures of solids (such as preparations or wastes) containing flammable liquid n.o.s. having a flashpoint up to 61 °C of 4° (c);

1350 sulphur (also flowers of sulphur) of 11° (c);

Class 4.2 substances of 3° (c) and 16° (c) in bulk;

Class 9 2969 castor beans of 35° (b).

Vessels must, however, still meet the requirements of marginals 10 011(2) and 10 351(4) of Annex B.1.

Annex D.2

Supplementary transitional provisions applicable to specific inland waterways

Vessels applying the transitional provisions and transitional periods set out in the table below have to comply with all marginals and, where necessary, paragraphs and subparagraphs, not mentioned in this table or in the table of the general transitional provisions within a period of not more than one year after the date of application of these Regulations.

The construction and equipment of those vessels shall be maintained at least at the previous standard of safety.

In Annex D.2:

"Vessel in service" means a vessel according to Article 8 of the Agreement;

"N.R.M." means that the requirement does not apply to vessels in service except where the parts concerned are replaced or modified, i.e. it applies only to vessels which are new, or to parts which are replaced or modified; where existing parts are replaced by spare or replacement parts of the same type and manufacture, this shall not be considered a replacement "R" as defined in these transitional provisions. Modification shall also be taken to mean the conversion of an existing type of tank vessel, a type of cargo tank or a state of cargo tank to another type or state at a higher level.

Table of transitional provisions		
Marginal	Subject	Time limit and comments
110 211 (1) (b)	Holds, common bulkheads with oil fuel tanks	<p>N.R.M.</p> <p>The following requirements apply on board vessels in service:</p> <p>Holds may share a common bulkhead with the oil fuel tanks, provided that the cargo or its packaging does not react chemically with the fuel.</p>
110 292	Emergency exit	<p>N.R.M.</p> <p>The following requirements apply on board vessels in service:</p> <p>Spaces the entrances or exits of which are partly or fully immersed in damaged condition shall be provided with an emergency exit not less than 0.075 m above the damage waterline.</p>
110 295 (1) (c)	Height of openings above damage waterline	<p>N.R.M.</p> <p>The following requirements apply on board vessels in service:</p> <p>The lower edge of any non watertight openings (e.g. doors, windows, access hatchways) shall, at the final stage of flooding, be not less than 0.075 m above the damage waterline.</p>

Table of transitional provisions		
Marginal	Subject	Time limit and comments
110 295 (2) 321 215 (2)	Extent of the stability diagram (damaged condition).	N.R.M. The following requirements apply on board vessels in service: At the final stage of flooding the angle of heel shall not exceed: 20° before measures to right the vessel; 12° following measures to right the vessel.
210 208 (1)	Classification of Type N open vessels	N.R.M.
311 211 (1) (a) 321 211 (1) (a) 331 211 (1) (a)	Maximum capacity of cargo tanks.	N.R.M. The following requirements apply on board vessels in service: The maximum permissible capacity of a cargo tank shall be 760 m ³ .
311 212 (3) 321 212 (2) 331 212 (2)	Position of air inlets	N.R.M. The following requirements apply on board vessels in service: The air inlets to be positioned at least 5.00 m from the safety-valve outlets
321 211 (1) (d)	Length of cargo tanks	N.R.M. The following requirements apply on board vessels in service: The length of a cargo tank may exceed 10 m and 0.2 L.
331 208 (1)	Classification of Type N open vessels	N.R.M.

Table of transitional provisions		
Marginal	Subject	Time limit and comments
321 215 (1) (c)	Height of openings above damage waterline	<p>N.R.M.</p> <p>The following requirements apply on board vessels in service:</p> <p>The lower edge of any non watertight openings (e.g. doors, windows, access hatchways) shall, at the final stage of flooding, be not less than 0.075 m above the damage waterline.</p>
321 220 (2) 331 220 (2)	Filling of cofferdams with water	<p>N.R.M.</p> <p>The following requirements apply on board vessels in service:</p> <p>Cofferdams shall be fitted with a system for filling with water or inert gas.</p>
311 292 321 292	Emergency Exit	<p>N.R.M.</p> <p>The following requirements apply on board vessels in service:</p> <p>Spaces the entrances or exits of which are partly or fully immersed in damaged condition shall be provided with an emergency exit not less than 0.075 m above the damage waterline.</p>