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**ECONOMIC COMMISSION FOR EUROPE**

**INLAND TRANSPORT COMMITTEE**

Working Party on Inland Water Transport  
(Forty-sixth session, 22-24 October 2002,  
agenda item 7 (c))

**REQUIREMENTS FOR PREVENTION OF POLLUTION FROM VESSELS**

Note by the secretariat

At its twenty-first and twenty-third sessions, the Working Party came back to the consideration of the text of the draft resolution on technical requirements for the prevention of pollution from vessels, as set out in TRANS/SC.3/2000/2, in the light of the comments by SC.3 appearing in TRANS/SC.3/153, para. 24 and amended its text as indicated in TRANS/SC.3/WP.3/42, para. 14 (i) and (ii) and in TRANS/SC.3/WP.3/47, para. 18. The secretariat was requested to issue an amended text of the draft resolution and transmit it for further consideration and adoption by the Working Party on Inland Water Transport (TRANS/SC.3/WP.3/47, para. 19).

The draft resolution, as approved by the Working Party SC.3/WP.3 is reproduced below.

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**AMENDMENTS TO RESOLUTION NO. 17, REVISED: RECOMMENDATIONS  
ON TECHNICAL REQUIREMENTS FOR INLAND NAVIGATION VESSELS**

**Resolution No. ...**

(adopted by the Working Party on Inland Water Transport on ... October 2002)

The Working Party on Inland Water Transport,

Considering resolution No. 17, revised (TRANS/SC.3/103, annex 1), containing in its annex the Recommendations on Technical Requirements for Inland Navigation Vessels (TRANS/SC.3/104 and Add.1-4),

Bearing in mind the report of the Working Party on the Standardization of Technical and Safety Requirements in Inland Navigation on its twenty-first and twenty-third sessions (TRANS/SC.3/WP.3/42, paras. 13-15 and TRANS/SC.3/WP.3/47, paras. 17-19),

Desirous of reducing to the maximum the pollution caused by inland navigation vessels on European inland waterways and of standardizing provisions in this regard,

Decides to amend the Recommendations on Technical Requirements for Inland Navigation Vessels by the text contained in the annex to this resolution,

Also decides that the requirements laid down in the annex to this resolution shall be mandatory for vessels whose construction or major refitting is contracted for after 31 December 2003; they shall apply to all other vessels after 31 December 2006,

Requests Governments and River Commissions to inform the Executive Secretary of the Economic Commission for Europe whether they accept this resolution,

Requests the Executive Secretary of the Economic Commission for Europe to place the question of the application of this resolution periodically on the agenda of the Working Party on Inland Water Transport.

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## Annex

Supplement the Recommendations on Technical Requirements for Inland Navigation Vessels (annex to resolution No. 17, revised) with a new Chapter 18 as follows.

### «CHAPTER 18

#### PREVENTION OF WATER POLLUTION

##### 18-1 GENERAL

###### 18-1.1 Definitions

Oil-containing water: mixture, formed in the course of operation of a vessel, of water and any quantity of oil.

Domestic waste water: waste water from galleys, messes, bathrooms (showers and wash basins) or laundries, and human waste water.

Household refuse: organic and inorganic household waste (e.g. remains of food, paper, glass and similar kitchen waste) which does not contain components of the other types of waste defined as connected with the operation of the vessel.

##### 18-2 Requirements for receptor facilities for used oil and oil-containing water

18-2.1 All necessary steps should be taken to reduce the filtration of oil on board vessels. Drip-trays to collect any leaking fuel or oil shall be placed under fittings and fuel and oil tank connections. Drip-trays shall also be placed under daily-service tanks in order to collect any leaking fuel.

18-2.2 Every self-propelled vessel and every non-self-propelled vessel having an internal combustion engine on board must be equipped with:

a collecting tank for oil containing water;

a system for the circulation and delivery of oil-containing water;

standard assemblies for the delivery of oil-containing water to receptor facilities.

The engine-room bilges may be considered as a collecting reservoir for oil-containing water

18-2.3 Tanks must be fitted with:

- (i) an orifice for access and cleaning;
- (ii) a ventilation pipe with a flame-arrester;
- (iii) a device which transmits light and sound signals to the wheelhouse and the central control post when the level of the liquid reaches 80 per cent;
- (iv) a system for measuring the level of the liquid.

If heavy fuel is used on the vessel or the tank is installed in a place where negative temperatures are possible during operation, the tank shall be fitted with a heating device.

18-2.4 Facilities must be provided for discharge to moorings to port and to starboard.<sup>1/</sup> A stop button for the transfer pump must be installed in the area of the discharge connections. The discharge connections shall conform to European standard EN 1305 (diagram No. 1).

18-2.5 The installations for draining the machinery space shall be so arranged that any oil or oil-containing water should remain aboard. Where a drainage system incorporates permanently fixed pipes, the bilge drainage pipes for the collection of oil-containing water shall be fitted with closing devices sealed in the closed position by the competent national authority.<sup>2/</sup> The number and position of those closing devices shall be mentioned in an inspection certificate.

18-2.6 Should operating conditions so require, a specific container must be provided for the collection of used oil with a capacity equal at least to one and a half times the quantity of used oil from the sumps of all the internal combustion engines and all the installed machinery, as well as hydraulic oils from the hydraulic oil tanks. Should operating conditions so require, the competent authority may prescribe other standards for the dimensions of the built-in container. The container should be fitted with a device which transmits light and sound signals to the wheelhouse and the central control post when the level of the liquid reaches 80 per cent.

If the quantity of oil is less than 300 litres, the competent authority may no longer require that the containers should be built in.

18-2.7 For vessels operated over short distances only or for ferries, the competent authority may no longer require that the containers mentioned in 18-2.6 above should be wholly or partially built-in.

### 18-3 Requirements concerning equipment for processing oil-containing water

18-3.1 Built-in separation and filtration equipment may be installed if such equipment and its type as well as the type of its components are approved by the competent authority and can meet the following conditions.

18-3.2 After separation the oil content does not exceed 15 mg per litre (15 ppm).<sup>3/</sup> However, the oil content of the separated water must not exceed the admissible limit value laid down for the waterway concerned by the competent authority.

18-3.3 The separation and filtration equipment and its measuring apparatus and protective devices must operate reliably in any plane inclined at an angle of 15°.

18-3.4 The separation and filtration equipment must be fitted with an automatic device to measure the oil content of the mixture. In addition to emitting sound and light signals if the 15 ppm limit is exceeded, this device must automatically halt the discharge and activate a return flow into the collecting tank or bilge.

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<sup>1/</sup> On small vessels the discharge connections may be situated on one side.

<sup>2/</sup> Note by the secretariat: It is proposed to replace in this paragraph and elsewhere in this chapter the newly introduced term “competent (national) authority” with the term “Administration” defined and used in the annex to resolution No. 17, revised.

<sup>3/</sup> The Administration may impose more stringent requirements on some national inland waterways.

18-3.5 Vertical pipe sections must be fitted with sampling devices, which must protrude into the inside of the discharge tube to the extent of a quarter of its diameter. Provision must be made for cleaning and rinsing the sampling devices.

18-3.6 The separation and filtration equipment must operate reliably regardless of the oil concentration at the intake or must be reliably protected against an excessive inflow of petroleum products.

18-3.7 Regardless of whether the requirements listed in paragraphs 18-3.1 to 18-3.6 are met, the operation of oil separation and filtration devices is prohibited on waterways where discharges of any oil/water mixtures are generally prohibited. The competent national authority may put these devices out of action by sealing.

#### 18-4 Requirements concerning facilities for collecting and storing domestic waste water

18-4.1 Crewed and passenger vessels having 10 or more people on board shall be equipped with:

- (i) a built-in domestic waste-water collecting tank;
- (ii) a system for delivering domestic waste water to reception facilities; and
- (iii) standard assemblies for delivery of domestic waste water to reception facilities.

or, alternatively, with a domestic waste water treatment plant according to paragraph 18-5 below.

Administration may apply requirements different from those in 18-4.1 with regard to equipment of vessels navigating within its inland waterways.

18-4.2 The volume of domestic waste-water collection facilities must conform to the following formula:

$$V_{ww} = G_{ww} \cdot N \cdot T$$

where

$G_{ww}$	=	domestic waste-water discharge per person per day
$N$	=	maximum admissible number of people on board
$T$	=	period between emptyings of the on-board facilities in days.

18-4.3 If operating conditions so require, the competent authority may prescribe other standards for the dimensions of the built-in tank.

18-4.4 Tanks must be fitted with a level-monitoring device which emits sound and light signals when the tank is four-fifths full.

18-4.5 Tanks should have a smooth inner surface (i.e. framework and fittings on the outside) and a bottom sloping towards the drain.

18-4.6 Tanks should be fitted with apparatus for cleaning and breaking up sediment and, when operating conditions so require, with a connection for steam cleaning.

18-4.7 For discharge purposes, tanks should be equipped with pumps and adequate piping.<sup>4/</sup>

18-4.8 Facilities must be provided for discharge of domestic waste water to moorings to port and starboard.<sup>5/</sup> The discharge connections shall conform to European standard EN 1305 (diagram No. 2).

18-4.9 For vessels operated over short distances only, the competent authority may no longer require the facilities listed in paragraph 18-4-1 to be wholly or partially built-in.

#### 18-5 Requirements concerning equipment for the treatment of domestic waste water

18-5.1 Equipment for the treatment of domestic waste water may be installed if such equipment, its type and the type of its components are approved by the competent authority and meet the following conditions.

18-5.2 Treated water from vessels shall not be considered to be polluted if the pollution indexes do not exceed:

coliform count	1,000
substances in suspension	50 mg/litre
BOD <sub>5</sub> (VOD <sub>5</sub> ) (BRK <sub>5</sub> )	50 mg/litre

these characteristics being obtained by special treatment of the water; dilution of treated water is not permitted.<sup>6/</sup>

18-5.3 The equipment must operate reliably in any plane inclined at an angle of 15°.

18-5.4 The domestic waste-water treatment equipment must be fitted with devices for interrupting discharge if the effluent exceeds the set pollution standards.

18-5.5 The vertical pipe sections and the connections for discharge must be fitted with taps for sampling purposes.

#### 18-6 Facilities for the collection, storage and treatment of household refuse

18-6.1 Vessels carrying crew and passenger vessels must be equipped with facilities for the collection of household refuse.

18-6.2 The volume of household refuse collection facilities shall conform to the formula:

$$V_{hr} = G_{hr} @ N @ T$$

where

G<sub>hr</sub> = household refuse discharge per person per day

N = maximum admissible number of people on board

T = period between emptyings of the on-board collection facilities.

<sup>4/</sup> Pumps need not be fitted on small vessels. In such cases discharge shall be effected using onshore or floating cleaning stations.

<sup>5/</sup> On small vessels the discharge connections may be situated on one side.

<sup>6/</sup> The Administration may impose more stringent requirements on some national inland waterways.

18-6.3 If operating conditions so require, the competent authority may prescribe other standards for the dimensions of the container.

18-6.4 A separate container must be provided for oil-soaked refuse and items covered in thick grease.

18-6.5 All household refuse-collection devices must have easy-to-clean internal surfaces.

18-6.6 All household refuse-collection equipment must have tightly-closing lids and be installed in well-ventilated areas, preferably on the open deck, and must have fittings allowing them to be securely attached to the deck.

18-6.7 Removable equipment must be designed in such a way that it can be moved by one or two people. Otherwise, appropriate additional equipment must be provided.

#### 18-7 Requirements concerning facilities for the elimination of household refuse

18-7.1 Vessels may be equipped with a household refuse incinerator if the incinerator, its type and the type of its components are approved by the competent authority and meet the following conditions.

18-7.2 Under all operating conditions, the burning temperature within the incinerator must be sufficient to burn up completely those types of household refuse which are authorized for incineration. The smoke produced must be clean (without soot) and odourless.

18-7.3 The household refuse incinerator must be fitted with an accident alarm system and a protection system which will be triggered after not more than five seconds in the following cases:

- (i) interruption of the air supply to the incinerator;
- (ii) extinction of the burners;
- (iii) breakdown of the electrical power supply;
- (iv) breakdown in the fuel supply system.

18-7.4 The household refuse incinerator must be installed in a well-ventilated area in the engine room or boiler compartment, or in a separate compartment. The system supplying fuel to the burners must enable them to be turned off from two places, one of which must be outside the area where the refuse incinerator is installed.

18-7.5 Special containers, securely attached to prevent movement, must be provided for storing ash and residues from combustion.

18-7.6 The refuse treatment equipment must include an efficient system of protection against pollution, damage and injury to the operating personnel.

18-7.7 Regardless of whether the requirements listed in paragraphs 18-7-1 to 18-7-6 are met, the operation of household refuse incinerators is prohibited on certain waterways as indicated by the competent national authority. This authority may put such devices out of action by sealing.”

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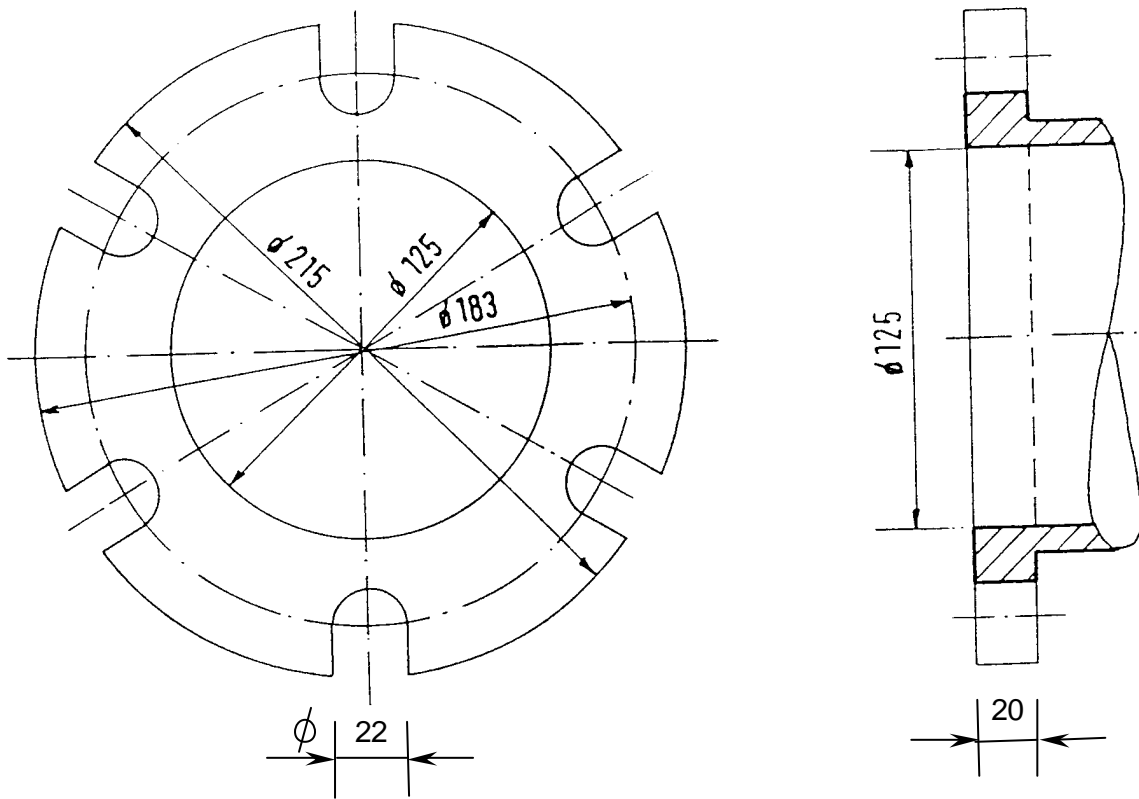


Diagram 1

Comment: This flange is for pipes with an internal diameter of up to 125 mm, and is to be manufactured from steel or an equivalent material with a flat machined surface. The flange, together with a gasket of oil-resistant material, must be designed for a working pressure of 0.6 Mpa. Coupling is effected by means of six 20-mm bolts of the requisite length.



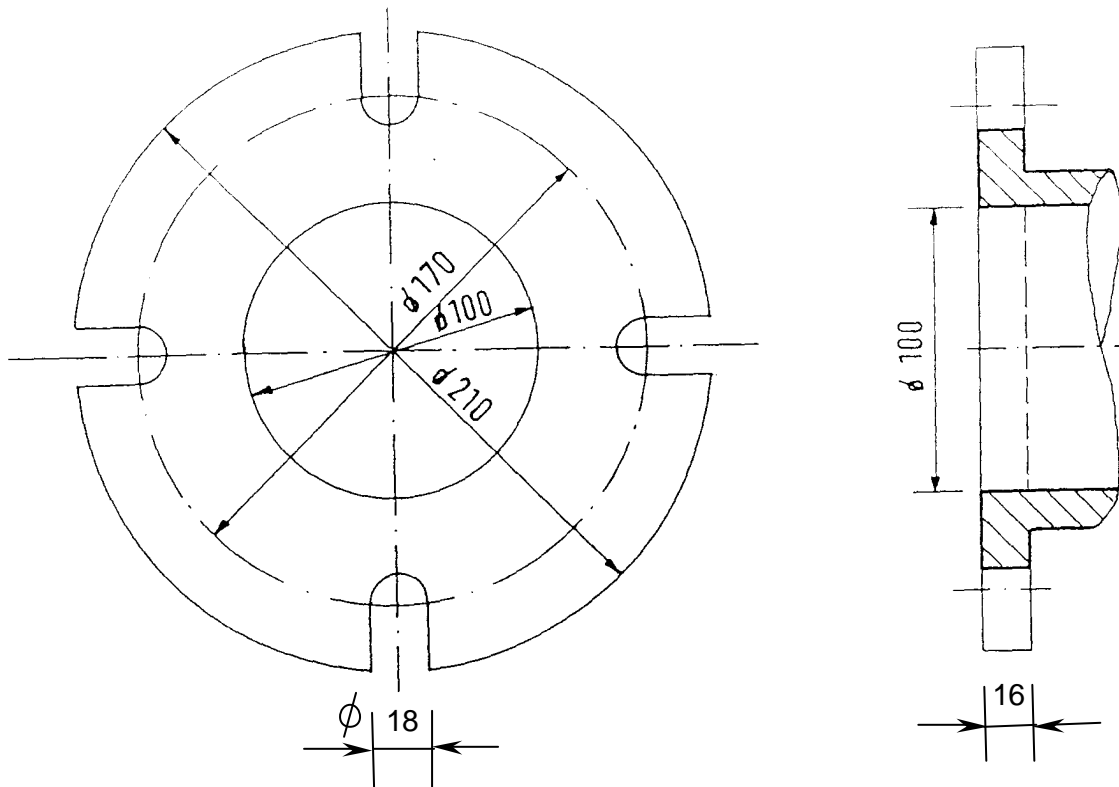


Diagram 2

Comment: This flange is for pipes with an internal diameter of up to 100 mm, and is to be manufactured from steel or an equivalent material with a flat machined surface. The flange, together with a gasket of oil-resistant material, must be designed for a working pressure of 0.6 Mpa. Coupling is effected by means of four 16-mm bolts of the requisite length.

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