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INLAND TRANSPORT COMMITTEE

Working Party on Inland Water Transport

Working Party on the Standardization
of Technical and Safety Requirements
in Inland Navigation

(Twenty-third session, 19-21 March 2002,
agenda item 3)

**AMENDMENT OF THE RECOMMENDATIONS ON TECHNICAL
REQUIREMENTS FOR INLAND NAVIGATION VESSELS
(ANNEX TO RESOLUTION NO. 17, REVISED)**

Transmitted by the Governments of Belarus and Ukraine

Note: Reproduced below are the comments of the Governments of Belarus and Ukraine concerning the text of amended chapters 3 (Freeboard and safety distance), 6 (Electrical installations) and 12 (Fire protection) of the annex to resolution No. 17 revised, which has already been provisionally approved by the Working Party on Inland Water Transport and is set out in documents TRANS/SC.3/2000/1 and Add.1; and also the proposals of Ukraine on the possible amendment of the existing text of section 15-9 of chapter 15 of the annex (Special provisions for passenger vessels) relating to life-saving appliances on board passenger vessels. The Working Party SC.3/WP.3 may wish to come back to the amended chapters 3, 6 and 12, which it has already approved, and suggest that Working Party SC.3 make a few corrections to them with due regard to the above-mentioned proposals by Belarus and Ukraine, if these are deemed appropriate. The proposals of Ukraine on chapter 15 may also be of help to the Working Party in the course of its consideration of the draft amended chapter 13 (Life-saving appliances) proposed by the Group of Volunteers and appearing in TRANS/SC.3/WP.3/AC.2/2001/1.

BELARUS

Chapter 3

1. In the fifth subparagraph of chapter 3 (Freeboard and safety distance), paragraph 3-4.1.3, (TRANS/SC.3/2000/1), the expression “of the centre of the ring” should be replaced by **“of the end of the horizontal band of the ring”**, which is what figure 1 shows.

Chapter 4

4. The first sentence of paragraph 1.4.7 of the appendix (Criteria for checking the stability of vessels) to chapter 4 (Stability and subdivision) should be worded as follows: **“Permissible angle θ_{perm} : angle of heel not exceeding that prescribed by the competent authority for the type of vessel under consideration.”**¹

Chapter 6

3. Paragraph 6-2.12.2 of chapter 6 (Electrical installations) should be worded as follows: **“Cables with conducting wires with a minimum cross-section of 1.5 mm² shall be used for power circuits and of 1.0 mm² for lighting circuits”**.²

UKRAINE

Chapter 12

4. We have studied amended chapter 12 (Fire protection) contained in document TRANS/SC.3/2000/1/Add.1 and, notwithstanding the fact that the text of the chapter has been tentatively approved by Working Party SC.3, we think it is necessary to reconsider this topic for the reasons outlined below.

5. The amended text of chapter 12 contains a set of specific fire protection requirements, yet it does not cover the complete range of fire protection measures which we think should be implemented on board internal navigation vessels.

6. Some of the requirements concerning fire protection on passenger vessels are listed in section 15-10 (Fire protection) of chapter 15 (Special provisions for passenger vessels). We do not think that these requirements should be split up and put under different chapters within the same document. They should be merged into a consolidated chapter 12 of the annex to resolution No. 17, revised.

¹ Note by the secretariat: A translation error appears to have crept into the Russian text. The first part of paragraph 1.4.7 should read “Dopustimy ugol krena θ_{perm} -ugol krena, kotory ne dolzhen prevyshatsya i kotory dolzhen byt predpisan kompetentnym organom ...”

² Note by the secretariat: There is obviously a misprint in the Russian text: the words “i osveshcheniya” should be deleted.

7. We also propose the inclusion of supplementary requirements for tankers in chapter 12.
8. Schematically, chapter 12 should be laid out as follows:
 - 12-1. General requirements.
 - 12-1.1. Terms and definitions.
 - 12-1.2. Classification of materials by combustibility.
 - 12-2. Structural fire protection.
 - 12-2.1. General requirements.
 - 12-2.2. Materials requirements.
 - 12-2.3. Fire-resistant and fire-retardant structures.
 - 12-2.4. Exits, doors, stairways, trunks.
 - 12-2.5. Store-rooms for highly inflammable substances and materials.
 - 12-2.6. Heating.
 - 12-2.7. Galleys.
 - 12-2.8. Ventilation.
 - 12-2.9. Fuel tanks and pipelines.
 - 12-2.10. Supplementary requirements for passenger vessels.
 - 12-2.11. Supplementary requirements for tankers.
 - 12-3. Fire-fighting equipment, systems, alarms and inventory.
 - 12-3.1. General directions.
 - 12-3.2. Fire-extinguishing systems.
 - 12-3.3. Fire alarms.
 - 12-3.4. Fire inventory.
 - 12-3.5. Supplementary requirements for fire extinguishers on board passenger vessels.
 - 12-3.6. Supplementary requirements for fire extinguishers on board tankers.

9. A paragraph should be inserted stating that the requirements of chapter 12 apply only to vessels under construction and stipulating the date on which these requirements enter into force.
10. In our view, the Administration or a recognized Classification Society may exempt a vessel or specific categories of vessels from the application of any of the provisions of chapter 12 if they consider that the nature and conditions of the vessels' operation render these provisions undesirable or redundant.
11. In the light of the foregoing, we think that the text of chapter 12 could form a basis for subsequent work in this field. Accordingly, we propose the inclusion of certain amendments and additions to a number of the provisions in amended chapter 12, which will outline requirements for fire safety in more detail (the proposed amendments do not concern the layout of this chapter).
12. We propose that the text of paragraph 12-1.2 should be worded as follows:

“Lift trunks and hoistways in accommodation and service spaces shall be made of steel or equivalent material and shall prevent the passage of smoke and flame from one ’tweendeck to another. They shall be provided with means of closing that limit draught and the passage of smoke”.

A steel trunk or a trunk of equivalent construction, without appropriate means of closing cut-outs or openings, cannot by itself prevent the passage of smoke or flame.

Lifts and hoists may be designed not only for use by the crew of the vessel, but also for use by passengers.

13. **[Editorial change in Russian text only]**

14. To ensure a more detailed specification of fire safety requirements for structural elements, we propose the following wording for paragraph 12-1.4:

“Deck coverings in control stations, accommodation and service spaces, including corridors and escape routes, shall be made from materials which will not easily catch fire.

The lining of bulkheads and ceilings within spaces and the exterior surfaces of corridors and stairway enclosures shall be made of materials having low flame-spread characteristics.

In the event of fire or heating, these materials shall not release toxic or explosive gases in dangerous concentrations.

The quantity of combustible materials used in the manufacture of the grounds, linings, decorative furnishings, furniture and other equipment in the control stations, accommodation and service spaces of a vessel shall be minimized. The mass of the combustible materials per square metre of deck area within a space may be regulated by the Administration or a recognized Classification Society”.

15. We propose introducing a requirement to cover the material used in the manufacture not only of the stairways in machinery spaces, boiler rooms and bunkers, but of the vessel as a whole. Paragraph 12-1.5 should therefore be reformulated. The first subparagraph does not need to be changed. The second subparagraph should read: **“All interior and exterior stairways and ladders (inclined, vertical and fixed) shall be fixed permanently and made of steel or equivalent material”.**

16. We think it necessary to extend the requirement in paragraph 12-1.6 to cover not just machinery spaces but all other spaces in a vessel, and we also propose the introduction of a requirement concerning the use of aluminium paints in tankers:

“12-1.6. Varnishes, paints and similar products having a nitro-cellulose or other highly inflammable base shall not be used for the interior furnishings in a vessel’s spaces, machinery spaces and boiler rooms.

The use of aluminium paints is prohibited on tankers in the cargo sections (tanks), cofferdams, pump-rooms, and in the vicinity of the cargo decks and other areas where flammable vapours might accumulate”.

17. Heating systems used on inland navigation vessels may include not only electric radiators but also radiators of the steam or water type. It would therefore be sensible to broaden the range of radiator types authorized for installation on board vessels and reformulate paragraph 12-1.9 stipulating the temperature of the radiator surface for safety purposes:

“All radiators shall be of such a design and shall be positioned in the spaces of the vessel in such a way as not to constitute a direct source of fire. The temperature of the radiator surface shall not exceed 60^o, otherwise the radiators must be securely protected by special casings”.

It may be necessary to restrict the radiators used and installed on inland navigation vessels to radiators of a type and design approved by the Administration or the recognized Classification Society.

It should be noted that auxiliary boilers for heating water or generating steam and their burners must also conform to the requirements of paragraph 5-1.1.6 of chapter 5 (Machinery) of the annex to resolution No. 17, revised.³

³ Note by the secretariat: This is apparently a reference to the current text of paragraph 5-1.1.6 of chapter 5 (Machinery) in document TRANS/SC.3/104 (or TRANS/SC.3/131). What is probably meant is paragraph 5-1.6 of amended chapter 5, provisionally approved by Working Party SC.3 and contained in document TRANS/SC.3/2000/1.

18. In the light of the requirements set out in chapter 12 (Fire protection), corresponding amendments should be made to the text of paragraph 5-1.3.7 of chapter 5 (Machinery) of the annex to resolution No. 17, revised. This paragraph should be reformulated as follows:

“Bulkheads, walls, landings, doors, skylights, window frames, stairways and ladders (inclined, vertical and fixed) shall be made of steel or equivalent material”.⁴

19. The amendments and additions proposed above do not exhaust all the possible changes that could be made if the layout of chapter 12 is modified (pursuant to an appropriate decision by the Working Party).

Chapter 15

20. Because certain amendments and additions have been made to chapter 13 (Life-saving appliances), as set out in TRANS/SC.3/WP.3/AC.2/2001/1, we also think it necessary to edit section 15-9 (Specific requirements for life-saving appliances) of chapter 15 (Special provisions for passenger vessels) of the existing annex to resolution No. 17, revised.

21. The text of paragraph 15-9.1 should be amended to read:

“Passenger vessels shall be provided with the number of lifebuoys conforming to the requirements of paragraph 13.3.3 shown in the following table:”

After the table, the following should be added: **“At least two lifebuoys shall be fitted with sources of illumination if the vessel makes voyages at night”.**

22. Delete “Up to one-third of the prescribed number of lifebuoys, however, may be replaced by double that number of floating balls”.

Floating balls are not included in the definition of individual life-saving appliances (see paragraph 13-1.6 of draft amended chapter 13).

⁴ Note by the secretariat: This is apparently a reference to the current text of paragraph 5-1.3.7 of chapter 5 (Machinery) in document TRANS/SC.3/104 (or TRANS/SC.3/131). The paragraph does not appear in the amended text of chapter 5, tentatively approved by Working Party SC.3 and contained in document TRANS/SC.3/2000/1, but it seems fully to reflect section 12-1 of amended chapter 12 (Fire protection) as contained in document TRANS/SC.3/2000/1/Add.1, also provisionally approved by Working Party SC.3.

23. We also propose amending the contents of paragraph 15-9.2 as follows:

“Vessels not more than 25 m in length which are not subject to any requirement regarding proof of buoyancy shall carry on board, in addition to lifebuoys (the number of which must conform to paragraph 15-9.1), individual and/or collective life-saving appliances for the maximum number of passengers and crew.

The number of such life-saving appliances shall be regulated by the Administration.

With the agreement of the Administration, it is possible for such vessels not to carry a ship’s boat if their manoeuvrability, the proximity of rescue services and the hydrological conditions of the basin do not necessitate compliance with this requirement.

Vessels more than 25 m in length shall carry on board a sufficient number, as determined by the Administration, of individual and collective life-saving appliances. The equipment shall include at least one ship’s boat”.

24. In our view, paragraphs 15-9.3 and 15-9.4 should be deleted, since they basically duplicate section 13-1 (Definitions and explanations) of the amended text of chapter 13.
