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## ECONOMIC COMMISSION FOR EUROPE INLAND TRANSPORT COMMITTEE

Working Party on Inland Water Transport (Forty-eighth session, 19 – 21 October 2004, agenda item 7(a))

# AMENDMENT OF THE RECOMMENDATIONS ON TECHNICAL REQUIREMENTS FOR INLAND NAVIGATION VESSELS (annex to resolution No. 17, revised)

#### **Corrigendum 1**

### Note by the secretariat

The Working Party on the Standardization of Technical and Safety Requirements in Inland Navigation, at its twenty-seventh session, considered the reaction by the Group of Volunteers to the proposals of the Government of Ukraine concerning the texts of chapters 2, 3, 5, 6, 9, 10A and approved already by the Working Party SC.3 as reflected provisionally TRANS/SC.3/WP.3/2004/3 and agreed to modify the text of the chapters as indicated in TRANS/SC.3/WP.3/55, para. 6. The secretariat was requested to issue a relevant corrigendum to The TRANS/SC.3/2004/1. Working Party further considered document TRANS/SC.3/WP.3/2003/4/Add.1, reflecting the amendments to the Rhine Vessels Inspection Regulations concerning the application of the Inland ECDIS Standard, and requested the secretariat to formulate similar UNECE provisions with a view to their introduction into relevant chapters of the annex to resolution No.17, revised, and presentation to the Working Party SC.3 for consideration and adoption together with other amended chapters of the annex (TRANS/SC.3/WP.3/55, para. 18).

The consolidated text of the draft amended chapters of the annex as provisionally approved by the Working Party and reflected in TRANS/SC.3/2004/1 should, therefore, be rectified as indicated below.

- 1. The text of paragraph 2-2.3.2 should be deleted.
- 2. The text of the definition of "Type A" vessels in paragraph 3-2 should be modified to read:
  - "Type A: <u>Decked vessels</u>. Decked vessels are vessels whose hatch covers are satisfactorily strong, rigid, watertight for zone 1 and sprayproof for zones 2 and 3."
- 3. The text of the definition of "Type C" vessels in paragraph 3-2 should be modified to read:
  - "Type C: <u>Open vessels</u>. Open vessels are either vessels whose hatch covers are not satisfactorily strong, rigid, **sprayproof** or vessels whose cargo hatchways are open."
- 4. In paragraph 3-4.1.1 the term "**weathertight**" should be deleted from the list of definitions set out in this paragraph.
- 5. At the end of the title of paragraph 3-4.2 the words "in zones 1 and 2" should be added.
- 6. The text of paragraph 3-4.3.1 in French and Russian should be brought in line with the text in English reading:
  - "3-4.3.1 All outside doors of superstructure, deckhouses and companionways, situated on the freeboard deck shall be **watertight** on vessels in zone 1 and sprayproof on vessels in zones 2 and 3."
- 7. The text of paragraph 3-4.3.5 should be modified to read:
  - "3-4.3.5 Exposed cargo hatchways and other hatchways on the freeboard deck shall be fitted with **watertight** closures on vessels in zone 1 and sprayproof closures on vessels in zones 2 and 3."
- 8. The last sentence of paragraph 3-4.3.6 should be modified to read: "Ventilator heads for vessels in zone 1 must have **watertight** closures".
- 9. The text of paragraph 3-4.3.8 should be modified to to read:
  - "3-4.3.8 On vessels in zone 1, side scuttles in spaces below the freeboard deck, windows in superstructures, deckhouses and companionways and windows in skylights on the freeboard deck shall be watertight. In addition, side scuttles in spaces below the freeboard deck shall be provided with permanently attached deadlights. The distance between side scuttles in the shell and the maximum draught level shall not be less than 300 mm."
- 10. In paragraph, 3-4.3.10 the word "sprayproof", should be spelled correctly in English.
- 11. The text of paragraph 3.4.1.5 of Appendix to chapter 4 should be modified to read:

"3.4.1.5 The heeling arm resulting from the free-surface effects of rainwater and residual water inside the hold or double bottom shall be determined according to the following formula:

$$h_{fs} = \frac{C_{fs}}{\Lambda} \cdot \sum (b \cdot 1 \cdot (b - 0.55 \sqrt{b})) \quad (m)$$

where,

 $C_{fs} = \text{ parameter: } (C_{fs} = 0.015) [t/m^2],$ 

- b = breadth of hold or section of hold resulting from separation by watertight lengthwise partitions (m),
- 1 = length of hold or section of hold resulting from separation by watertight
  transverse partitions (m),

 $\Delta$  = displacement of loaded vessel (t)."

- 12. Paragraphs 3.4.1.6 and 3.4.4.4 of Appendix to chapter 4 should be deleted.
- 13. The text of paragraph 5-2.3 should be modified to read:
  - "5-2.3 A **reliable and effective** system of two-way communication shall be provided between the main machinery space and the wheelhouse."
- 14. The words "in order to collect any leaking fuel" at the end of paragraph 5-5.2 should be deleted. In paragraph 18-2.1 the third sentence should be replaced with the following: "The contents of drip trays shall be conveyed to collecting tanks".
- 15. The text of paragraph 5-5.3 should be modified to read:
  - "5-5.3 Fuel transfer pumps, fuel separators and oil burners, shall be fitted with a local control device **and** a stopping device situated in an **easily** accessible position outside the spaces where they are installed."
- 16. The text of paragraph 5-6.3 should be modified to read:
  - "5-6.3 The pumping capacity of the first bilge pump shall be calculated by the formula:

$$Q_1 = 0.1 \cdot d_1^2 \, [1/\min]$$

d<sub>1</sub> is calculated by the formula

$$d_1 = 1.5 \sqrt{L(B+H)} + 25 [mm]$$

The pumping capacity of the second bilge pump shall be calculated **by** the following formula:

$$Q_2 = 0.1 \cdot d_2^2 \left[ \frac{1}{\text{min}} \right]$$

d<sub>2</sub> is calculated by the formula:

$$d_2 = 2\sqrt{1(B+H)} + 25$$
 [mm].

However, the value  $d_2$  may be taken not to exceed value  $d_1$ . The length of the longest sealed compartment shall be taken to be l in order to determine  $Q_2$ .

In these formulae:

the length of the corresponding sealed compartment, in m;

 $d_1$  = the calculated internal diameter of the drainage pipe, in mm;

d<sub>2</sub> = the calculated internal diameter of the drainage spur, in mm."

- 17. The text of the title of section 5-6 should be modified to read: "BILGE PUMPING SYSTEMS".
- 18. The text of paragraph 5-6.5 in Russian should be modified to read:

"5-6.5 Допускается использование только осущительных насосов **самовсасывающего типа.**"

19. The text of paragraph 5-6.7 should be modified to read:

"5-6.7 It may  $\frac{1}{2}$  be possible to drain the **after-peak to** the main engine room by means of an easily accessible **self-closing valve attached to the after-peak bulkhead**".

20. The text of paragraph 5-6.8 should be modified to read:

"5-6.8 The drainage spurs for the various compartments shall be linked to the **bilge** main by means of **closing and** non-return valves or **equivalent devices**."

- 21. The text of paragraph 5-6.10 should be deleted.
- 22. In paragraph 6-2.1.1 (d) the word "motors" should be deleted. In footnote 1 the words "safety transformer" should be replaced by "isolating transformer".
- 23. By mistake, the text of paragraphs 6-2.1.2, 6-2.2 and 6-2.2.1 in the English version of TRANS/SC.3/2004/1 has been deleted and should be restored as follows:

Note by the secretariat: The Working Party may wish to replace the word "may" by "should" or even "shall".

- "6-2.1.2 If the required protective measures are applied higher voltages are acceptable:
  - (i) for power installations where their power so requires;
  - (ii) for special on-board installations such as radio and ignition systems.
- 6-2.2 <u>Protection against physical contact, the insertion of solid objects and the infiltration of water</u>
- 6-2.2.1 The type of minimum protection for parts of permanent fixtures shall be as set out in the table below or may be stricter in accordance with the requirements of the Administration.

	Type of minimum protection (in accordance with IEC publ. 529)					
Location	Generators	Motors	Transformers	Panels Distributors Switches	Installation equipment	Lighting devices
Service premises, engine rooms, steering-gear compartments	IP 22	IP 22	<sup>2)</sup> IP 22	1)2) IP 22	IP 44	IP 22
Holds					IP 55	IP 55
Battery and paint lockers						IP 44 u. (EX) <sup>3)</sup>
Unroofed decks and steering positions		IP 55		IP 55	IP 55	IP 55
Enclosed wheelhouse		IP 22	IP 22	IP 22	IP 22	IP 22
Accommodation apart from health facilities and washrooms				IP 22	IP 20	IP 20
Health facilities and washrooms		IP 44	IP 44	IP 44	IP 55	IP 44

#### Remarks

- 1. Where appliances release large amounts of heat: IP 12
- 2. Where appliances or panels do not have this type of protection their location shall meet the conditions applying to that type of protection.
- 3. Electrical equipment of the certified safety type as in accordance with IEC Publication 79."
- 24. The text of paragraph 6-2.4.5.3 should be modified to read:
  - "6-2.4.5.3 **Means shall be provided** to prevent the concurrent operation of the onboard network generators and the shore network or another external network. A brief period of concurrent operation shall be permitted when changing from one system to another without a break in voltage."
- 25. The text of paragraph 6-2.4.6 should be modified to read:
  - "6-2.4.6 Power supply to other craft
  - **6-2.4.6.1** When power is supplied to other craft, a separate connection shall be used.

- **6-2.4.6.2** If power sockets rated at more than 16 A are used to supply current to other craft, steps shall be taken to ensure (for example, by the use of switches or interlocks) that connection and disconnection can take place only when the line is dead.
- **6-2.4.6.3** Cables and their connections shall not be subjected to any pulling load.
- **6-2.4.6.4** Instruction plates shall be affixed to **power supply connections** and to craft-coupling devices, stipulating that feeders must be disconnected before barges are uncoupled.
- **6-2.4.6.5** The supply to the barges of **a** convoy shall be controlled by means of switches installed on the pusher.
- **6-2.4.6.6** Paragraphs 6-2.4.5.3 6-2.4.5.7 shall apply by analogy."
- 26. The text of the first article of paragraph 6-2.7.1 should be modified to read:
  - "Switchboards shall be located in accessible and well-ventilated spaces and **be protected** against water and mechanical damage."
- 27. The text of paragraph 6-2.13.4 should be modified to read:
  - "6-2.13.4 When two or more lighting appliances are installed in **the machinery space as mentioned in 5-1**, they shall be supplied by at least two different circuits."
- 28. The text of paragraph 6-2.14.3 should be modified to read:
  - "6-2.14.3 Tell-tale lamps or other equivalent devices monitoring the signal lights shall be placed on the switchboard in the wheelhouse. No fault in the monitoring installation shall affect the operation of the light which it monitors."
- 29. The text of paragraph 6-2.15.1 should be modified to read:
  - "6-2.15.1 **Electrical equipment** operating **at** a voltage of more than 50 V needs to be earthed."
- 30. The text of paragraph 6-2.15.2 should be modified to read:
  - "6-2.15.2 Metal parts of electrical equipment that are not electrically live and can be touched by people, such as machinery frames and casings, appliances and lighting equipment, shall be earthed separately where these are not in electrical contact with the hull as a result of their installation."

- 31. The text of paragraph 6-2.15.3 should be modified to read:
  - "6-2.15.3 The housings of **mobile** electrical **consumers and portable appliances** shall be earthed by means of an additional conductor that is incorporated into the power cable."
- 32. Paragraph 6-2.16.5. The following modifications should be made to the text of some of the subparagraphs:
- Subparagraph (vi): The term "Emergency floodlight" should be translated in Russian as "аварийный прожектор";
- Subparagraph (viii): This subparagraph should be modified to read: "(viii) Fire pump and emergency pump (on passenger vessels), where the auxiliary set as mentioned in 6-2.16.3 (i) is used;";
- A new subparagraph (x) should be added to read: "(x) The rudder position indicator.".
- 33. The second sentence in paragraph 6-2.17.1 reading: "binary transmitters shall be designed on the quiescent-current principle or on the monitored load-current principle" should be deleted.
- 34. In paragraph 7-3.1 in Russian the term "опорный крюк" should be replaced by "отпорный крюк".
- 35. The following definitions should find their place ether in the text of chapter 10B or, together with other definitions, at the beginning of the amended annex to resolution No.17, revised:

"Radar equipment" means electronic assistance to navigation intended for the detection and representation of the environment and traffic;

"Inland ECDIS" means a standardized Electronic Chart Display and Information System for inland navigation, displaying selected information from an Inland System Electronic Navigational Chart drawn up by the manufacturer and, optionally, information from other vessel sensors;

"Inland ECDIS equipment" means equipment intended for the display of inland electronic navigational charts in the following two operational modes: Information Mode and Navigation Mode;

"Information Mode" means the use of the Inland ECDIS for information purposes only without overlaid radar image;

"Navigation Mode" means the use of the Inland ECDIS for conning the vessel with overlaid radar image."

36. Paragraph 10B-4.1 should be modified to read:

"10B-4.1 The radar equipment and rate-of-turn indicators must be of types that have been approved by the competent authorities. The requirements of the competent authority concerning installation and operational monitoring shall be met. Inland ECDIS equipment which may be used in Navigation Mode shall be considered to be radar equipment. The Inland ECDIS equipment shall also meet the requirements of the Inland ECDIS Standard prescribed by resolution No.48 (TRANS/SC.3/156), as amended."

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