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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

Thirty-fourth session Geneva, 11-13 February 2009 Item 5 (b) of the provisional agenda

RESOLUTION NO. 61 "RECOMMENDATIONS ON HARMONIZED EUROPE-WIDE TECHNICAL REQUIREMENTS FOR INLAND NAVIGATION VESSELS"

Amendments to Resolution No. 61

Note by the secretariat

INTRODUCTION

1. It is recalled that at its forty-ninth session, the Working Party on Inland Water Transport approved the Inventory of existing legislative obstacles that hamper the establishment of a harmonized and competitive pan-European inland navigation market supplemented with recommendations as to how to overcome the obstacles identified, prepared by its Group of Volunteers on Legislative Obstacles (TRANS/SC.3/168, para. 20). The Inventory recognized the importance of harmonization, to the largest extent possible, of the European regimes of technical requirements for inland navigation vessels, including, the UNECE Recommendations on Technical Requirements for Inland Navigation Vessels, the CCNR Regulation on the Survey of Rhine Vessels, the Danube Commission's Recommendations on Technical Requirements for Inland Navigation Vessels and the relevant EU legislation in this area (the EU Directive 82/714/EEC, nowadays repealed by Directive 2006/87/EC) (TRANS/SC.3/2005/1, para. 39).

- The work on the harmonization between the technical requirements on the Rhine and in the European Union is being carried out by a Joint Working Group of experts from the Member states of the European Union and the Central Commission for Navigation on the Rhine. The Danube Commission and Sava Commission also participate in this work. At its meeting in January 2008, the group adopted a set of proposals, which had been submitted to the Working Party at its thirty-third session (ECE/TRANS/SC.3/WP.3/2008/20). The Working Party recognized the need for countries to review the amendments to the directive and asked them to send their comments the secretariat by February 2009 session. (ECE/TRANS/SC.3/WP.3/66, para. 16).
- 3. The document updates document ECE/TRANS/SC.3/WP.3/2008/20 and reproduces the final text of the amendments to the EC Directive with the exception of the revised provisions on Unique European Vessel Identification Number, which have already been introduced in section 2-7 of the resolution (ECE/TRANS/SC.3/181, para. 28).
- 4. The Working Party may wish to take note of the amendments to the directive and to request countries to inform the group of volunteers on Resolution No. 61 on the desirability for reflecting these developments in Resolution No. 61, so that a preliminary proposal could be prepared for the SC.3/WP.3 June session.

PROPOSED AMENDMENTS TO THE ANNEX II OF DIRECTIVE 2006/87/EC LAYING DOWN TECHNICAL REQUIREMENTS FOR INLAND WATERWAY VESSELS

I. PROPOSED AMENDMENTS TO CHAPTER 1, "GENERAL"

- 5. Article $1.01^{\frac{1}{2}}$ shall be amended as follows:
 - a) Point 52 is replaced by the following: "52. "muster areas": areas of the vessel which are specially protected and in which persons muster in the event of danger;"
 - b) Point 76 is replaced by the following: "76. "draught (T)": the vertical distance in m between the lowest point of the hull without taking into account the keel or other fixed attachments and the maximum draught line;"
 - c) Point 76a is inserted after Point 76: "76a." "draught overall (T_{OA}) ": the vertical distance in m between the lowest point of the hull including the keel or other fixed attachments and the maximum draught line;"
 - d) Point 97a and 97b are inserted after Point 97:

"97a. navigation lights: light appearances of navigation lights for the identification of craft;

97b. light signals: lights appearances to accompany visual or sound signals;"

Article 1-2 in the annex to Resolution No. 61.

II. PROPOSED AMENDMENTS TO CHAPTER 6, "STEERING SYSTEM"

6. Amendments proposed to Articles 6.02, 6.03, 6.07 and 6.09 are contained in document ECE/TRANS/SC.3/WP.3/2008/20 (paras. 5-8).

III. PROPOSED AMENDMENTS TO CHAPTER 7, "WHEELHOUSE"

- 7. Amendments proposed to Article 7.02 are contained in document ECE/TRANS/SC.3/WP.3/2008/20 (para. 9).
- 8. Article $7.04^{\frac{2}{3}}$ shall be amended as follows:
 - a) Paragraph 3 is replaced by the following: "3. The direction of the propulsion thrust imparted to the vessel and the rotational speed of the propeller or main engines shall be displayed."
 - b) The second phrase of paragraph 9 is replaced by the following: "The requirements set out in (1) to (8) shall apply, *mutatis mutandis*, in view of the specific characteristics and arrangements selected for the abovementioned active steering and propulsion units. In analogy to (2) each unit shall be controlled by a lever which moves in the form of an arc within a vertical plane that is approximately parallel to the direction of the thrust of the unit. From the position of the lever the direction of the thrust acting on the vessel shall be clear. If rudder propeller or cycloidal-propeller are not controlled by means of levers, the inspection body may allow derogations from (2). These derogations shall be mentioned in the Community certificate in box 52."

IV. PROPOSED AMENDMENTS TO CHAPTER 8, "ENGINE DESIGN"

9. Amendments to Article 8.05 are contained in document ECE/TRANS/SC.3/WP.3/2008/20 (para. 10).

V. NEW CHAPTER 8A, "EMISSION OF GASEOUS AND PARTICULATE POLLUTANTS FROM DIESEL ENGINES"

10. The following Chapter $8a^{3}$ is inserted after Chapter 8:

"CHAPTER 8a

Emission of gaseous and particulate pollutants from diesel engines

Article 8a.01

Definitions

In this Chapter:

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Article 7-3 in the annex to Resolution No. 61.

³ Chapter 8a "Exhaust and pollutant particular emissions from diesel engines" exists already in the annex to Resolution No. 61.

- 1. "engine" means an engine which works on the compression-ignition principle (diesel engine);
- 1a. "propulsion engine" means an engine for the propulsion of a inland waterway vessel, as defined in Article 2 of Directive 97/68/EC;⁴
- 1b. "auxiliary engine" means an engine for use in applications other than the propulsion of a craft;
- 1c. "exchange engine" means a used, overhauled engine which is intended to replace a currently operational engine and which is of the same design (in-line engine, V-engine) as the engine to be replaced, which has the same number of cylinders and whose power output and speed do not differ by more than 10% from the power output and speed of the engine to be replaced;
- 2. "type-approval" means the procedure as defined in Article 2, 2nd indent of Directive 97/68/EC, as amended, whereby a Member State certifies that an engine type or an engine family with regard to the level of emission of gaseous and particulate pollutants by the engine(s) satisfies the relevant technical requirements.
- 3. "installation test" means the procedure whereby the competent authority makes sure that, even where an engine fitted to a craft has undergone, since the issuing of the type-approval, any modifications or adaptations with regard to the level of emission of gaseous and particulate pollutants, that engine still complies with the technical requirements of this Chapter;
- 4. "intermediate test" means the procedure whereby the competent authority makes sure that, even where a craft's engine has undergone, since the installation test, any modifications or adaptations with regard to the level of emission of gaseous and particulate pollutants, that engine still complies with the technical requirements of this Chapter;
- 5. "special test" means the procedure whereby the competent authority makes sure that, after each significant modification to a craft's engine with regard to the level of emission of gaseous and particulate pollutants, that engine still complies with the technical requirements of this Chapter;
- 6. (Left void);
- 7. "engine family" means a manufacturer's grouping of engines which through their design, are expected to have similar exhaust emission characteristics of gaseous and particulate pollutants as defined in Article 2, 4th indent of Directive 97/68/EC, as amended, and which comply with the requirements of the rules in accordance with Article 8a.03;
- 8. (Left void);
- 9. (Left void);
- 10. (Left void);
- 11. "manufacturer" as defined in Article 2 of Directive 97/68/EC, as amended, means the person or body who is responsible to the approval authority for all aspects of the

⁴ OJ L 59, 27.02.1998, p. 1.

type-approval process and for ensuring conformity of production. It is not essential that the person or body is directly involved in all stages of the construction of the engine;

- 12. (Left void);
- 13. (Left void);
- 14. (Left void);
- 15. (Left void);
- 16. "engine parameter protocol" means the document pursuant to Appendix V, in which all the parameters, together with changes, and including components and engine settings which affect the level of emission of gaseous and particulate pollutants from the engine are duly recorded;
- 17. "Engine manufacturer's instructions on monitoring the components and engine parameters of relevance in an exhaust gas context" means the document produced for the purpose of implementing the installation test and the intermediate or special tests.

Article 8a.02

General Provisions

- 1. Without prejudice to the requirements of Directive 97/68/EC, the provisions of this Chapter shall apply to all engines with a rated power output more than 19 kW installed in inland waterway vessels or in machinery on board such vessel.
- 2. The engines shall comply with the requirements of Directive 97/68/EC.
- 3. Compliance with the exhaust gas emission limit values of the applicable stage shall be determined on the basis of a type-approval pursuant to Article 8a.03.
- 4. Installation tests
 - a) After the installation of the engine on board, but before it is brought into service, an installation test shall be carried out. This test, which forms part of the initial inspection of the craft, or of a special inspection by virtue of the relevant engine having been installed, shall result either in the registration of the engine in the Community certificate to be issued for the first time or in the modification of the existing Community certificate.
 - b) The inspection body may dispense with an installation test pursuant to (a), if an engine having a rated power output PN of less than 130 kW is replaced by an engine covered by the same type-approval. As a precondition, the vessel's owner or his authorised representative shall be required to notify the inspection body of the engine's replacement and to submit a copy of the type-approval document and details of the identification number of the newly installed engine. The inspection body shall make the appropriate amendments to the Community certificate (cf. box 52).
- 5. Intermediate tests on the engine shall be carried out in the context of the periodical inspection pursuant to Article 2.09.
- 6. After each significant modification to an engine, where such modifications have the potential to affect the emission of gaseous and particulate pollutants from the engine, a special test must invariably be carried out.

- 6a. The results of the tests pursuant to Article 8a.02(4) to (6) shall be registered in the engine parameter protocol.
- 7. The inspection body shall indicate in the Community certificate, in box 52, the type-approval numbers and identification numbers of all the engines that are installed on board the vessel and that are subject to the requirements of this Chapter. For engines covered by Article 9(4)(a) of Directive 97/68/EC the identification number shall suffice.
- 8. For the purpose of discharging tasks pursuant to this Chapter, the competent authority may employ a technical service.

Article 8a.03

Recognised type-approvals

- 1. The following type-approvals shall be recognised, provided that the engine application is covered by the appropriate type approval:
 - a) type-approvals pursuant to Directive 97/68/EC;
 - b) type-approvals which, pursuant to Directive $97/68/EC^{5}$ are recognised as equivalent.
- 2. For each type-approved engine, the following documents or copies of them shall be kept available on board:
 - a) the type-approval document;
 - b) the engine manufacturer's instructions on monitoring the components and engine parameters of relevance in an exhaust gas context;
 - c) the engine parameter protocol.

Article 8a.04

Installation test and intermediate and special test

1. At the time of the installation test pursuant to Article 8a.02(4) and in the event of intermediate tests pursuant to Article 8a.02(5) and special tests pursuant to Article 8a.02(6), the competent authority will inspect the current state of the engine with reference to the components, adjustments and parameters specified in the instructions pursuant to Article 8a.01(17).

If the authority finds that the engine does not comply with the approved engine type or the approved engine family, it may:

- a) require that
 - aa) steps are taken to re-establish engine conformity,
 - bb) require appropriate modifications to the type-approval document, or
- b) order the actual emissions to be measured.

Alternative type-approvals recognised pursuant to Directive 97/68/EC are listed in Annex XII, §.2 of Directive 97/68/EC.

Failing the re-establishment of engine conformity or in the absence of appropriate modifications to the type-approval document or in the event that the measurements indicate non-compliance with the emission limit values, the competent authority shall refuse to issue a Community certificate or shall revoke any Community certificate that has already been issued.

- 2. In the case of engines with exhaust gas after treatment systems, checks shall be carried out to establish that these systems are functioning properly in the context of the installation test and the intermediate or special tests.
- 3. The tests according to (1) are made on the basis of the engine manufacturer's instruction on monitoring the components and engine parameters of relevance in an exhaust gas emission context. The instruction, to be drawn up by the manufacturer and to be approved by a competent authority, shall specify the exhaust relevant components as well as adjustments and parameters, whereby continuous compliance with the exhaust gas emission limit values can be assumed. The instruction contains at least the following details:
 - a) type of engine and, where appropriate, engine family with an indication of the rated output and rated speed;
 - b) list of the components and engine parameters of relevance in an exhaust gas emission context:
 - c) unambiguous features to identify the permitted components of relevance in an exhaust gas emission context (e.g. part numbers appearing on the components);
 - d) engine parameters of relevance in an exhaust gas emission context such as setting ranges for the injection timing, permitted cooling water temperature, maximum exhaust gas backpressure, etc..

In the case of engines fitted with exhaust gas after treatment systems, the instruction shall also include procedures to check that the exhaust gas after treatment installation is operating efficiently.

- 4. The installation of engines in craft shall comply with the restrictions set out in the scope of the type approval. In addition, the intake under pressure and the exhaust gas back pressure shall not exceed the values indicated for the approved engine.
- If the engines being installed on board belong to an engine family, no readjustments or modifications which could adversely affect exhaust gas and particulate emissions or which lie outside the proposed adjustment range may be carried out.
- 6. If, after type-approval, readjustments or modifications to the engine need to be made, these should be accurately entered in the engine parameter protocol.
- 7. If the installation and intermediate tests show that, in relation to their parameters, components and adjustable features, the engines installed on board comply with the specifications set out in the instructions pursuant to Article 8a.01(17), then it may be assumed that the exhaust gas and particulate emissions from the engines likewise comply with the basic limit values.
- 8. Where an engine has obtained type-approval, the competent authority may, at its own discretion, reduce the installation test or intermediate test pursuant to these provisions. However, the full test shall be carried out in respect of at least one

cylinder or one engine of an engine family and may only be reduced if there is reason to believe that all other cylinders or engines behave similarly to the cylinder or engine under investigation.

Article 8a.05

Technical services

- 1. The technical services shall comply with the European standard on general requirements for the competence of testing and calibration laboratories (EN ISO/IEC 17025: 2000), having due regard to the following conditions:
 - a) Engine manufacturers cannot be recognised as technical services.
 - b) For the purposes of this chapter, a technical service may, with permission of the competent authority, use facilities outside its own test laboratory.
 - c) If requested to do so by the competent authority, technical services shall demonstrate that they are recognised to perform the type of activities described in this paragraph within the European Union.
 - d) Third country services may only be notified as a recognised technical service in the framework of a bilateral or multilateral agreement between the European Union and the third country in question.
- 2. Member States shall inform the Commission about the names and addresses of the technical services which, together with their national competent authority are responsible for the application of this chapter. The Commission shall make this information available to the Member States."

VI. PROPOSED AMENDMENTS TO CHAPTER 9, "ELECTRICAL EQUIPMENT"

11. In Article $9.15(9)^{6}$ the following sentence is added: "9. The number of cable joints shall be kept to a minimum."

VII. PROPOSED AMENDMENTS TO CHAPTER 10, "EQUIPMENT"

- 12. Amendments to Articles 10.03 and 10.05 contained in document ECE/TRANS/SC.3/WP.3/2008/20 (paras. 12-15).
- 13. The title of Article 10.03a⁷ is replaced by the following: "Permanently installed fire-fighting systems for protecting accommodation spaces, wheelhouses and passenger spaces".
- 14. The title of Article $10.03b^8$ is replaced by the following: "Permanently installed fire-fighting systems for protecting engine rooms, boiler rooms and pump rooms".

 $\frac{7}{1}$ In the annex to Resolution No. 61, a single article (Article 10-3) deals with all types of fire-fighting appliances.

⁶ Absent in the annex to Resolution No. 61.

⁸ In the annex to Resolution No. 61, a single article (Article 10-3) deals with all types of fire-fighting appliances.

VIII. PROPOSED AMENDMENTS TO CHAPTER 14, "LIQUEFIED GAS INSTALLATION FOR DOMESTIC PURPOSES"

15. Amendments to Articles 14.13 are contained in document ECE/TRANS/SC.3/WP.3/2008/20 (para. 16).

IX. PROPOSED AMENDMENTS TO CHAPTER 15, "SPECIFIC REQUIREMENTS APPLICABLE TO PASSENGER VESSELS"

16. Amendments to Articles 15.03 and 15.06 are contained in document ECE/TRANS/SC.3/WP.3/2008/20 (paras. 17-18).

17. Article 15.03^{9} shall be amended as follows:

- a) Section 3(e), first sentence shall be amended as follows: "e) In each of the following two cases the heeling angle φ_{mom} shall not exceed 12:
 - (aa) in application of the heeling moment due to persons and wind according to sections 4 and 5;
 - (bb) in application of the heeling moment due to persons and turning according to sections 4 and 6."

18. Article 15.06^{10} shall be amended as follows:

- a) Section (5) (a) is replaced by the following: "(a) They shall have a clear width of at least 0,80 m. If they lead to rooms used by more than 80 passengers, they shall comply with the provisions mentioned in (3)(d) and (e) regarding the width of the exits leading to connecting corridors."
- b) Section (8) (e) is replaced by the following: "(e) if fixed seats or benches are located in a room in which muster areas are defined the corresponding number of persons need not be taken into account when calculating the total area of muster areas according to (a). However, the number of persons for whom fixed seats or benches in a certain room are taken into account must not exceed the number of persons for whom muster areas are available in this room;"
- c) Section (8) (f) is replaced by the following: "(f) life-saving appliances shall be easily accessible from the evacuation areas;"
- d) Section (8) (g) is replaced by the following: "(g) it shall be possible to evacuate people safely from these evacuation areas, using either side of the vessel;"
- e) Section (8) (h) is replaced by the following: "(h) the muster areas shall lie above the margin line;"
- f) Section (8) (i) is replaced by the following: "(i) the muster and evacuation areas are to be shown as such in the safety plan and signposted on board the vessel;"

 $[\]frac{9}{10}$ Article 15-3 in the annex to Resolution No. 61.

 $[\]frac{10}{10}$ Article 15-6 in the annex to Resolution No. 61.

- Section (8) (j) is replaced by the following: "(j) the provisions of (d) and (e) g) shall also apply to free decks on which muster areas are defined;"
- Section (8) (1) is replaced by the following: "(1) however, in all cases where h) reductions according to (e), (j) and (k) are applied, the total area according to (a) shall be sufficient for at least 50 % of the maximum permitted number of passengers."
- contained i) Additional amendments to Article 15.06 are in document ECE/TRANS/SC.3/WP.3/2008/20 (para. 19).
- Article 15.08^{11} shall be amended as follows: 19.
 - Section 6 is replaced by the following: "6. a) A bilge pumping system with permanently installed pipe work shall be available."
- Article 15.09^{12} shall be amended as follows: 20.
 - In section 1, the first subparagraph is replaced by the following: "In addition to the lifebuoys specified in Article 10.05(1), all parts of the deck intended for passengers and not enclosed shall be equipped with suitable lifebuoys, which shall be positioned on both sides of the vessel not more than 20 m apart. Lifebuoys shall be considered as suitable if they comply with
 - the European standard EN 14144: 2003, or
 - the International Convention for the Safety of Life at Sea (SOLAS 1974) Chapter III Rule 7.1 and the International Life-Saving Appliance - (LSA-) Code, paragraph 2.1."
- Amendments to Article 15.10, 15.11, 15.12 and 15.15 are contained in document ECE/TRANS/SC.3/WP.3/2008/20 (para. 20-23).

X. PROPOSED AMENDMENTS TO CHAPTER 21, "SPECIFIC REQUIREMENTS APPLICABLE TO RECREATIONAL CRAFT"

22. Article 21.02 Amendments to are contained in document ECE/TRANS/SC.3/WP.3/2008/20 (para. 24).

PROPOSED AMENDMENTS TO APPENDIX I OF DIRECTIVE 2006/87/EC XI.

Amendments to Appendix I are contained in document ECE/TRANS/SC.3/WP.3/2008/20 23. (para. 25).

Article 15-8 in the annex to Resolution No. 61.

 $[\]frac{12}{12}$ Article 15-3 in the annex to Resolution No. 61.