Economic and Social Council

Economic Commission for Europe

Inland Transport Committee

Working Party on Inland Water Transport

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

Thirty-sixth session
Geneva, 10–12 February 2010
Item 7 of the provisional agenda
**Resolution No. 61, "Recommendations on harmonized Europe-wide technical
requirements for inland navigation vessels"**

Additional amendments to Resolution No. 61

Proposal from the Russian Federation

Note by the secretariat

At its fifty-third session the Working Party on Inland Water Transport considered a proposal by the Russian Federation to amend ECE Resolution No. 61 with minimum technical requirements for computers installed on vessels and used for direct acquisition of information during the vessel movement, as provided in section 9 (c) of ECE/TRANS/SC.3/2009/13.

The Working Party on Inland Water Transport sent the proposal of the Russian Federation on to the Working Party on the Standardization of Technical and Safety Requirements in Inland Navigation for consideration and, if necessary, further action (ECE/TRANS/SC.3/183, para. 30).

The requirements contained in the rules of the Russian River Register (RRR) pertaining to navigation computers, and which may serve as a basis for the corresponding requirements in Resolution No. 61, are proposed below.

Navigation computer requirements in the rules of the Russian River Register

1.   The computer shall be designed for use in an atmosphere with 80 +/- 3% relative humidity at a temperature of $40 \pm 2°$ C, and at $95 \pm 1\%$ relative humidity at a temperature of $25 \pm 2°$ C, and also with an extended listing of the vessel of up to 15° and a pitch of up to 5° and a roll of up to 22.5°.

2.   Displays designed for navigation information shall be colour displays, except in cases where the rules allow for the use of monochrome displays.

3.   Colour displays, including multifunctional displays, shall support at least 64 colours. Exceptions may be made for the displays of individual devices such as knotmeters or echo sounders.

4.   Displays in the wheelhouse shall support a minimum resolution of 1280 x 1024. For displays of individual devices such as knotmeters, echo sounders, and radionavigation receivers, displays with less resolution may be used.

5.   The display shall ensure that information is legible to at least two boatmasters at the same time from a standing and sitting position, in any lighting conditions in the wheelhouse.

6.   The navigation information shall be displayed at an appropriate place for the screen in the vessel's control centre and shall correspond with the function carried out at that location.

7.   Information and control functions shall be logically grouped. The information shall be arranged in accordance with its importance and purpose. Provision shall be made for the prioritization of the posting of the information, which shall constantly be displayed and arranged in relation with other information. The display shall make use of the size and colour of the image and its placement on the screen to post high-priority information.

8.   The information provided on navigation shall be presented with the parameters, units of measurement and purposes of such information, with the sources and reliability of the information and, if possible, with all the information displayed.

9.   The information shall be clearly presented on the workspace of the screen (for example, map images and radar information) and one (or more) dialogue fields (for example for menus, information or control functions).

10.   Alphanumeric data, text, signs and graphic information (such as radar information) shall be clearly discernible from the workplaces of sailors on watch, in any lighting conditions in the wheelhouse.

11.   For the display of alphanumeric data and text, clear, non-italic fonts shall be used. The character size shall ensure that the information is legible from the work stations in the wheelhouse.

12.   Text messages shall be communicated clearly and without distortion.

13.   In the event pictogrammes (or icons) are used, their meaning shall be readily understandable from their appearance, arrangement and grouping.

14.   The colour of alphanumeric signs, text, signs and graphic information displayed on screen shall contrast with the background colour of the display in any lighting conditions in the wheelhouse.

15.   The colour and brightness of the image shall be appropriate for the lighting in the wheelhouse in daytime, at night and at twilight. In darkness, they shall not interfere with the night vision of personnel on watch in the wheelhouse. At night the information shall be presented on a dark, dull background with slight backlighting.

16.   The colour and contrast of the background shall not distort the colour and clarity of the displayed information.

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