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**

Fortieth session
Geneva, 15–17 February 2012
Item 7 (b) of the provisional agenda
**Resolution No. 61, "Recommendations on Harmonized Europe-Wide
Technical Requirements for Inland Navigation Vessels"**

Amendments to Chapter 7, "Wheelhouse"

Note by the Group of Volunteer Experts on Resolution No. 61

I. Mandate

1.   At its thirty-ninth session, the Working Party on the Standardization of Technical
and Safety Requirements in Inland Navigation (SC.3/WP.3) considered the draft provisions
on minimum technical requirements for computers installed on vessels (new section 7-3A
in Chapter 7), prepared by the Group of Volunteer Experts on Resolution No. 61,
"Recommendations on Harmonized Europe-Wide Technical Requirements for Inland
Navigation Vessels" (ECE/TRANS/SC.3/172/Rev.1). SC.3/WP.3 took note of the
comments from the United Kingdom of Great Britain and Northern Ireland and the Central
Commission for the Navigation of the Rhine and asked the Group of Volunteers to continue
to its work on draft section 7-3A particularly, to provide the definition of "navigation
computer" and explain the link between section 7-3A and Chapter 9 on "Electrical
Equipment". The Working Party invited the Group of Volunteer Experts to submit a revised
proposal on this issue to its next session (ECE/TRANS/SC.3/WP.3/78, para. 29).

2.   At its fifth meeting (Budapest, 6–9 September 2011), the Group of Volunteer
Experts took note of the comments of the delegations and revised Section 7-3A
accordingly.

3.   The Working Party may therefore wish to consider the revised proposal on draft
Section 7-3A, as presented below.

II. Draft Section 7-3A on requirements concerning onboard computers

7-3A   REQUIREMENTS CONCERNING ONBOARD COMPUTERS

7-3A.1   General

7-3A.1.1   For the purpose of this chapter "onboard computer" means a computer supporting the ship's services and systems without active interfering in these systems.

7-3A.1.2   Taking due account of sections 9-1.1 and 9-2.18 and the specific requirements for radar, Inland AIS and Inland ECDIS, onboard computers shall be designed for use in an atmosphere with air temperature 0 – 40 °C,[1] with 75 per cent relative humidity at a temperature of 35 °C, and at 95 ± 1 per cent relative humidity at a temperature of 20 °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°.

7-3A.2   Displays

7-3A.2.1   Displays designed for navigation information shall be colour displays, except in cases where the basin administration allows the use of monochrome displays.

7-3A.2.2   Colour displays, including multifunctional displays, shall support at least sixty four colours. Exceptions may be made for the displays of individual devices such as speed indicators or echo sounders.

7-3A.2.3   Displays in the wheelhouse shall support a minimum resolution of 1280 x 1024 pixels. Displays of individual devices such as speed indicators, echo sounders and radio navigation receivers, may use lesser resolution.

7-3A.2.4   The display shall ensure that information is easily readable for at least the helmsman and a second member of the crew, simultaneously from a standing and a sitting position, whatever the lighting conditions in the wheelhouse.

7-3A.2.5   Information and control functions shall be logically grouped. The information shall be arranged in accordance with its importance and purpose. Provision shall be made to prioritize 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.

7-3A.2.6   The information provided on navigation shall be displayed together with the parameters, units of measurement, its purposes and sources.

7-3A.2.7   The information shall be clearly presented on the workspace of the screen (for example, map images and radar information) and one (or more) dialogue field(s) (for example for menus, information or control functions).

7-3A.2.8   Alphanumeric data, text, signs and graphic information (such as radar information) shall be clearly visible from the steering position. The colour and brightness of the image shall be appropriate for the lighting in the wheelhouse in daytime, at night and at twilight.

7-3A.2.9   For the display of alphanumeric data and text, clear, non-italic fonts shall be used.

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[1] In the Russian Federation – from -10 °C to 40 °C