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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-first session, 14-16 March 2001,
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**MINIMUM MANNING REQUIREMENTS AND WORKING AND REST HOURS OF
CREWS OF VESSELS IN INLAND NAVIGATION**

Addendum 1

Transmitted by the Central Commission for the Navigation of the Rhine (CCNR)

Note: The secretariat reproduces below the text of Appendix H to the Rhine Vessel Inspection Regulations (RVBR) concerning technical and operating requirements for tachographs, transmitted by CCNR. In accordance with article 23.05 of the Regulations, the tachograph in working order must be on board the vessel so that vessels navigating under operating mode A₁ or A₂ are not obliged to interrupt navigation for eight (A₁) or six (A₂) hours at a stretch.

Requirements to be met for tachographs and conditions for their installation on board

A. Requirements to be met for tachographs

1. Determination of the vessel's sailing time

In order to determine the vessel's sailing time using an on/off criterion, propeller rotation must be recorded at an appropriate location. If propulsion is other than by propeller, the movement of the vessel must be recorded in an equivalent form at an appropriate location. Where there are two or more propeller shafts, recording must be ensured as soon as any of the shafts turn.

2. Identification of the vessel

The official number of the vessel must be indelibly and legibly entered on the recording medium.

3. Recording on the recording medium

The following must be recorded in a tamper-proof and legible form on the recording medium: the operating mode of the vessel, the date and time of the operation and interruption of operation of the tachograph, the installation and removal of the recording medium and other operations on the apparatus. The tachograph must automatically record the time, the installation and removal of the recording medium, the turning on or off of the apparatus and the interruption of the energy supply.

4. Daily recording period

The date and the time when the propeller shaft begins and ends rotation must be recorded continuously every day from midnight to midnight.

5. Reading the recording

The recording must be unambiguous, easy to read and easy to understand. It must be possible to read the recording at any time without special alternative means of assistance.

6. Printing out the recording

It must be possible to make the recordings available at any time in the form of an easily-checked printout.

7. Reliability of the recording

It must be possible to record the rotation of the propeller in a tamper-proof form.

8. Accuracy of the recording

The rotation of the propeller must be recorded accurately in time. It must be possible to read the recording to the nearest five minutes.

9. Operating voltage

Voltage fluctuations of up to \pm of the rated value must not obstruct the working of the apparatus. The installation must also be able to withstand a 25 per cent increase in voltage over rated voltage without any deterioration of its operating capabilities.

10. Conditions of service

The apparatuses or their parts must be guaranteed to operate correctly under the following conditions:

- ambient temperature: 0°C to +40°C
- humidity: up to 85 per cent relative air humidity
- type of electrical protection: IP 54 in accordance with IEC Recommendation 529
- oil resistance: where they are intended to be installed in the engine room, the apparatuses or their parts must be oil-resistant
- permissible limits of errors in time-logging: \pm 2 minutes per 24 hours.

B. Requirements for installing tachographs on board

The following conditions must be met when tachographs are installed on board:

1. The installation of tachographs on board may only be carried out by specialized firms approved by the competent authority.
2. The tachograph must be installed in the wheelhouse or at any other readily accessible point.
3. It must be visually possible to check whether the apparatus is in operation. It must have a permanent electricity supply from an electrical circuit protected from power failures, fitted with its own fuse protection and directly connected to the energy source.
4. Data concerning the movement of the vessel, i.e. as to whether the vessel is “under way” or has “ceased to be under way” is derived from the propelling machinery. The signal must come from the rotation of the propeller, the propeller shaft or the running of the propelling engine. In the event of other systems of propulsion, an equivalent solution needs to be adopted.

5. The installation of the technical appliances involved in logging the movement of the vessel must ensure maximum operating reliability and be protected against untimely manipulation. The signal transmitting circuit (including the signal switch and access to the apparatus) from the propelling machinery to the apparatus must be appropriately protected and the breaking of the circuit kept under supervision. Seals or stamps with specific markings can be used, for example, and conduits fitted so as to be visible or monitoring circuits.

6. The specialized firm carrying out or supervising the installation must conduct a performance test once the installation has been completed. It must issue a certificate with the characteristics of the installation (in particular, location and type of seals or stamps and their markings, location and type of monitoring devices) and confirming that it is in working order; the certificate must also include data on the type of apparatus approved. A new performance test is required after any replacement, modification or repair; an entry must be made in the certificate for this test.

The certificate must contain at least the following data:

- name, address and symbol of the approved firm which carried out or supervised the installation;
- name, address and telephone number of the competent authority which approved the firm;
- official number of the vessel;
- tachograph type and series number;
- date of the performance test.

The certificate is valid for five years.

The purpose of the certificate is to provide evidence that the apparatus is approved, has been installed by an approved firm and has undergone a test confirming that it is in working order.

7. The steersmen must be instructed by the approved firm in the use of the apparatus and instructions for use must be issued and kept on board. This must be entered in the certificate of installation on board.
