



Economic and Social Council

Distr.: General
10 June 2010

Original: English

Economic Commission for Europe

Inland Transport Committee

Working Party on the Transport of Dangerous Goods

Joint Meeting of Experts on the Regulations annexed to the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN) (ADN Safety Committee)

Seventeenth session

Geneva, 23-27 August 2010

Item 5 (b) of the provisional agenda

Proposals for amendments to the Regulations annexed to ADN: Amendments for entry into force on 1 January 2013

Proposed amendments to 9.3.x.40 and 7.2.4.40

Transmitted by the European Barge Union (EBU)^{1 2}

Introduction

1. The ADN has various requirements regarding fire extinguishing arrangements on board inland waterway vessels. Specifically, for inland tankers, 7.2.4.40 makes it clear that fire extinguishing systems need to be kept ready for operation in the cargo area during loading and unloading.
2. The current proposal was first introduced during the sixteenth session of the Safety Committee (see Informal document No. 13). However, it was decided that the proposal could only be discussed on the basis of an official document.

¹ Distributed in German by the Central Commission for the Navigation of the Rhine under the symbol CCNR/ZKR/ADN/WP.15/AC.2/2010/15.

² In accordance with the programme of work of the Inland Transport Committee for 2010–2014 (ECE/TRANS/2010/8, programme activity 02.7 (b) and ECE/TRANS/208, para. 106).

3. The existing text of 9.3.x.40.1 reads as follows:

"9.3.x.40.1 A fire-extinguishing system shall be installed on the vessel.

This system shall comply with the following requirements:

...

- It shall be provided with a water main fitted with at least three hydrants in the cargo area above deck. Three suitable and sufficiently long hoses with spray nozzles having a diameter of not less than 12 mm shall be provided. It shall be possible to reach any point of the deck in the cargo area simultaneously with at least two jets of water which do not emanate from the same hydrant.

...".

Background

4. An incident investigation in the Netherlands in 2007 led to an interpretation by the Dutch regulatory agencies regarding article 7.2.4.40 which has resulted in the rolling out of fire hoses on deck.

5. The existing text of 7.2.4.40, Fire-extinguishing arrangements, reads as follows:

"During loading and unloading, the fire extinguishing systems, the hoses and spray nozzles shall be kept ready for operation in the cargo area on deck."

6. The EBU believes that safety prevails above other issues. However, investments in newly developed technologies like the so-called mini monitor shown below are being frustrated by the current wording of 9.3.x.40.1 which specifies that sufficiently long hoses need to be present. No investments are being made in such technologies because the rolling out of fire hoses is considered mandatory during loading and unloading even after such new technologies are installed on board vessels.



Hydrant point equipped with a jet/spray nozzle – with a hose of sufficient length. Hoses could be replaced altogether by a fixed water line. However, current legislation indicates that a hose has to be present.

Proposal

7. Modify the text of 9.3.x.40.1 as follows:

"9.3.x.40.1 A fire-extinguishing system shall be installed on the vessel.

This system shall comply with the following requirements:

- It shall be supplied by two independent fire or ballast pumps, one of which shall be ready for use at any time. These pumps and their means of propulsion and electrical equipment shall not be installed in the same space;
- It shall be provided with a water main consisting of pumps with a permanent underwater connection, a fire-main with hydrant points, and/or fire hoses complete with couplings and jet nozzles or, preferably, jet/spray nozzles having a diameter of not less than 12 mm in the cargo area above deck. A sufficient number of hydrants shall be provided and located so as to ensure that two jets of water can reach any part of the deck simultaneously with at least two jets of water which do not emanate from the same point.

In cold weather, the freezing of fire-mains and hydrants shall be prevented by continuously bleeding water overboard from the hydrants at the extreme end of each fire-main. Alternatively, all low points of the fire-main may be kept drained.

A spring-loaded non-return valve shall be fitted to ensure no gases can escape through the fire-extinguishing system into the accommodation or service spaces outside the cargo area;

- The capacity of the system shall be at least sufficient for a jet of water to have a minimum reach of not less than the vessel's breadth from any location on board with two hydrant points being used at the same time."

8. Modify the text of 7.2.4.40, Fire-extinguishing arrangements, to read as follows:

"During loading and unloading, the fire extinguishing systems, the fire main with hydrant points and attached ~~the~~ hoses and/or jet/spray nozzles shall be kept ready for operation in the cargo area on deck."

Justification

9. Since the rolling out of fire hoses and fitting of spray nozzles correctly is time-consuming, these hoses are often left lying on deck even when there are no loading and unloading activities going on. During loading and unloading, the hoses form a bottleneck (contrary to occupational safety and health regulations) since one can easily trip over them. Furthermore, the hoses are more dangerous in the hazard zone increasing the chance of an accident in the event of an emergency and thus reducing the fire-fighting capacity of the crew.

10. The proposed text would align ADN with the text used in the International Safety Guide for Inland Tankers and Terminals (ISGINTT) and the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code).