

Economic Commission for Europe

Inland Transport Committee

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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)

Twenty-third session

Geneva, 26 - 30 August 2013

Item 4 (b) of the provisional agenda

Proposals for amendments to the Regulations annexed to ADN:

Other proposals

Gas free

Transmitted by the Governments of the Netherlands and Belgium

I. Introduction

1. After each journey a vessel has to make its tanks gas-free (unless dedicated carriage is used). The ADN is contradictory when a cargo tank should be declared gas-free.

II. Relevant provisions of ADN

2. In 1.2.1 “gas free” is defined as: “*Cargo tank condition: (...) gas-free: not containing any measurable concentration of dangerous gases*”

3. The ADN has in 7.2.3.7 specific provisions for gas-freeing of empty cargo tanks. In 7.2.4.22.2 it is stated that:

“(...) only if the cargo tanks in question have been gas-freed and the concentration of flammable gases in the tanks is less than 10% of the lower explosive limit.”

This sentence seems to imply that a cargo tank is gas-free of flammable gases when the concentration of flammable gases in the tanks is less than 10% of the lower explosive limit.

3. The German version of 7.2.4.22.2 is clearer on 7.2.3.7. It reads:

“Wenn in Kapitel 3.2 Tabelle C Spalte 17 Explosionsschutz gefordert wird, ist das Öffnen der Ladetankluken oder des Gehäuses der Flammendurchschlagsicherung zum Ein- oder Ausbau der Flammensperre nur bei entladenen und entgasten Ladetanks gestattet. Die Konzentration an entzündbaren Gasen im Ladetank muss unter 10 % der unteren Explosionsgrenze liegen.”

III. Proposal

4. To change 7.2.4.22.2 (English version) as follows (changes underlined):

“Opening of sampling outlets and ullage openings and opening of the housing of the flame arrester shall not be permitted except for the purpose of inspecting or cleaning empty cargo tanks.

When in column (17) of Table C of Chapter 3.2 anti-explosion protection is required, the opening of cargo tank covers or of the housing of the flame arrester for the purpose of mounting or removing the flame arrester plate stack in unloaded cargo tanks shall be permitted only if the cargo tanks in question have been gas-freed. The concentration of flammable gases in the cargo tanks shall be less than 10% of the lower explosive limit.”

5. To change 1.2.1, definition of “Cargo tank (condition)”. At the January 2013 meeting, the ADN Safety Committee adopted a new definition of “Cargo tank (condition)” (ECE/TRANS/WP.15/AC.2/46) as follows:

“Cargo tank (discharged) means a cargo tank which after unloading may contain some residual cargo.

Cargo tank (empty) means a cargo tank which after unloading contains no residual cargo but may not be gas free.

Cargo tank (gas free) means a cargo tank which after unloading does not contain any residual cargo or any measurable concentration of dangerous gases.”

Proposal, changes underlined:

“Cargo tank (discharged) means a cargo tank which after unloading may contain some residual cargo.

Cargo tank (empty) means a cargo tank which after unloading contains no residual cargo but may not be gas free.

Cargo tank (gas free of flammable gases) means a cargo tank which after unloading has a concentration of flammable gases of less than 10% of the lower explosive limit;
