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)

Forty-third session
Geneva, 22-26 January 2024

Item 5 (b) of the provisional agenda

Proposals for amendments to the Regulations annexed to ADN:
other proposals

Correction to 9.3.2.22.4 (b) of ADN — Vacuum valve with detonation-proof flame arrester

Submitted by the European Barge Union and the European Skippers Organization (EBU/ESO)*.**

Introduction

1. EBU/ESO would like to bring to the attention of the ADN Safety Committee a discrepancy among 9.3.2.22.4 (b), 9.3.2.22.5 (a) and 9.3.3.22.4 (d) of ADN on the requirements for the vacuum valve.

2. In 9.3.2.22.5 (a) as well as in 9.3.3.22.4 (d) the deflagration safety of the vacuum valve is correctly required. Instead, 9.3.2.22.4 (b) stipulates that the vacuum valve must be equipped with a detonation-proof flame arrester.

3. In view of the fact that in practice only atmospheric deflagration can occur, but not detonation, this cannot be considered necessary. Consequently, it is sufficient for safety if the end valves (pressure relief valves and vacuum valves) connected to an opening to the atmosphere are deflagration-proof.

4. The situation is different for pipeline armatures within the piping systems. Due to the fact that the run-up lengths to the tank are very long and, therefore, detonations are possible, these must indeed be equipped to be detonation-proof.

5. EBU/ESO assume that this is an editorial error in 9.3.2.22.4 (b) of ADN and refer to the correct requirement for the vacuum valve in 9.3.2.22.5 (a) and 9.3.3.22.4 (d) of ADN.

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** A/78/6 (Sect. 20), table 20.5
Proposal

6. EBU/ESO request to correct the wording of 9.3.22.4 (b), first indent as follows (changes are in bold and underlined, deleted text is strikethrough):

"...At the connection to each cargo tank, the venting piping and the vacuum valve shall be equipped with a flame arrester capable of withstanding a detonation and the vacuum valve shall be equipped with a flame arrester capable of withstanding a deflagration; and..."