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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)

Twenty-seventh session

Geneva, 24–28 August 2015

Item 3 (c) of the provisional agenda

Implementation of ADN:

Interpretation of the Regulations annexed to ADN

National interpretations

Transmitted by the Government of the Netherlands¹

Introduction

1. At its twenty-sixth session, the Safety Committee discussed informal document INF.17 (Netherlands) on the publication of national interpretations of ADN provisions.
2. As a result of the discussion on INF.17, the Safety Committee requested the delegation of the Netherlands to submit the national interpretations of the Netherlands Inspectorate to be discussed during the next meeting of the ADN Safety Committee. (ECE/TRANS/WP.15/AC.2/54, paras. 17-20). The three national interpretations can be found in the Annex.

Considerations

3. The ADN aims to provide regulations for the safe carriage of dangerous goods, to promote sustainability and to facilitate carriage and trade of dangerous goods on inland waterways.

¹ Distributed in German by the Central Commission for the Navigation of the Rhine in document CCNR/ZKR/ADN/WP.15/AC.2/2015/18.

4. To achieve these aims a common set of provisions is necessary. In the opinion of the Netherlands delegation the aims of the ADN imply not only shared provisions but also unified interpretations of these provisions. If the interpretations are not unified, differences in implementation of ADN provisions between ADN member States could occur. These differences would be obstructive to the objectives of the ADN, disturbing a level playing field and causing legislative inequality.

5. Therefore the Netherlands delegation favours achieving unified interpretations.

Proposals

6. The proposal is to discuss the three Netherlands interpretations of (1) 7.2.4.25.5, (2) 8.6.3 question 10 and (3) 1.2.1/7.2.3.22/7.2.4.16.9 as shown in the Annex, and decide whether these interpretations can be adopted or have to be rejected by the Safety Committee. In case of the latter, the Netherlands delegation would welcome an interpretation shared by the Safety Committee. The second interpretation is about a provision with an “open norm”. The first and third are not.

7. It is further proposed to discuss and agree upon a procedure to harmonize (national) interpretations in the future. The Netherlands delegation would like to propose a procedure whereby prior to implementation of national interpretations, member States submit these national interpretations as proposals to the Safety Committee. These proposals could then be discussed during the following meeting of the Safety Committee and either be accepted or rejected. National interpretations of provisions with an “open norm” could be excluded from this procedure, but even in these cases (large) differences between national interpretations could cause problems because vessels may be equipped differently as a result.

8. If accepted, these unified interpretations would be published on the UNECE website and implemented in all ADN member States.

Annex

1. Vapour return piping

Provision	ADN Text	Interpretation
7.2.4.25.5	The gas/air mixtures shall be returned ashore through a vapour return piping during loading operations when a closed type vessel is required in column (7) of Table C of Chapter 3.2.	<p>The properties of a gas/ air mixture that is released <i>during loading operations</i> determines whether or not a vapour return piping has to be used during loading operations.</p> <p>As a consequence, during loading of an open-type cargo, a vapour return piping has to be used during loading when <u>the previous cargo of the vessel</u> was a closed-type cargo and required a closed-vessel.</p> <p>(...)</p> <p>This does not apply to gasoline as stipulated in the</p> <p>“Regeling benzinevervoer in mobiele tanks 2006” (Regulations on the carriage of gasoline in portable tanks 2006).</p>

Explanation

The shore installation only takes into account the properties of the cargo to be loaded. The filler does not take into account the properties of the vapours from the previous cargo in the cargo tank. These vapours may be flammable, toxic and/or carcinogenic.

When a cargo is loaded for which the use of a vapour return piping is not mandatory, the vapours from the previous cargo in the tank are released. The crew will be exposed to these vapours.

With the interpretation as described above this situation is prevented.

Consequences

This interpretation means that before a tanker is loaded, the properties of the previous cargo have to be taken into account. Several shore installations (especially those dedicated to “open-substances”) are not equipped with a vapour return piping.

In this case these shore installations are not allowed to perform any loading operations to empty uncleaned vessels that previously carried a “closed” cargo.

2. *Supervision*

Provision	ADN text	Interpretation
8.6.3, question 10, also relevant: 1.4.3.3. u 1.4.3.7.1.1	Is continuous and suitable supervision of loading/unloading ensured for the whole period of the operation?	During loading / unloading effective supervision is to be insured without interruption, ie. permanently.

Explanation

The supervision of loading and unloading operations both on board and on shore has to be executed in such a manner that dangers which may occur in the vicinity of the cargo piping between ship and shore are noticed immediately.

When the supervision is executed using (additional) technical means, the shore installation and the vessel have to reach agreement on how this is guaranteed.

The effectiveness of the supervision has to be assured. This means that supervision from the vessel and from the shore is arranged in such a way that hazards that can arise are noticed immediately, and under all circumstances.

Supervision from the shore has to be executed by the filler/unloader of cargo tanks in the area between the connection of the venting piping (on board) with the vapour return piping (on shore) and the connection of the venting piping (on board) to the manifold in use, including a radius of at least 3 meters around the manifold.

Justification

Supervision of the complete process of loading and unloading of a liquid cargo is essential. Any imminent possibility of loss of cargo should be detected immediately, and appropriate measures should be taken.

This supervision is the shared responsibility of both the crew on board the vessel and the shore facility that loads or unloads the cargo.

Supervision should therefore be carried out continuously during loading and/or unloading procedures.

3. *Relief valve, under pressure and overpressure*

Provision	ADN text	Interpretation
1.2.1	<p>Vacuum valve means a spring-loaded device which is activated automatically by pressure the purpose of which is to protect the cargo tank against unacceptable negative internal pressure;</p> <p>Pressure relief device means a spring-loaded device which is activated automatically by pressure the purpose of which is to protect the cargo tank against unacceptable excess internal pressure;</p>	Vacuum valves and pressure relief devices are safety devices to protect the cargo tank against unacceptable excess negative or internal pressure and are activated automatically
7.2.3.22	Entrances to hold spaces, cargo pump-rooms below deck and cofferdams, openings of cargo tanks and residual cargo tanks; closing devices.	Cargo tanks should always remain closed, with the exception of the exemptions mentioned in Part 7
Also relevant: 7.2.4.16.9, 9.3.2.22.4a) ; 9.3.3.22.4a) .	<p>The cargo tanks, residual cargo tanks and entrances to cargo pump-rooms below deck, cofferdams and hold spaces shall remain closed. This requirement shall not apply to cargo pump-rooms on board oil separator and supply vessels or to the other exceptions set out in this Part.</p> <p>During loading or unloading in a closed tank vessel of substances for which an open type N vessel with a flame arrester is sufficient according to columns (6) and (7) of Table C of Chapter 3.2, the cargo tanks may be opened using the safe pressure-relief device referred to in 9.3.2.22.4 (a) or 9.3.3.22.4 (a).</p>	<p>Cargo tanks should always remain closed, with the exception of the exemptions mentioned in Part 7</p> <p>During loading or unloading of "open" substances in a type C or N-closed tanker, the cargo tanks are only allowed to be opened using the device for the safe depressurization of the tanks ("pressure relief device/ Entspanvorrichtung").</p>

3. *Relief valve, under pressure and overpressure*

Explanation

The safety devices against unacceptable over and under pressure protect the cargo tanks and the common vapour piping against unacceptable internal over- and under pressures.

Manipulating the vacuum valve or the pressure relief device is not allowed. These safety devices may not be activated during carriage, including loading and unloading. The opening pressures of these safety devices must not be exceeded.

When carrying cargo for which a type N open vessel or a type N-open vessel with flame arrester is obligatory, the cargo tanks may only be opened using the regular pressure-relief device with a small diameter for depressurising cargo tanks (“pressure relief device/ Entspanvorrichtung”).

Note, not part of the official interpretation: during the 21st session of the ADN Committee, INF.26 (EBU) was discussed and adopted (ECE/TRANS/WP.15/AC.2/44).

This document was about safe pressure equalization during loading when “open” substances are loaded and carried in a closed vessel. INF.26 (EBU) explicitly mentioned the use of the “pressure relief device/ Entspanvorrichtung” as not appropriate for safe depressurisation due to the small diameter.

The Safety Committee document decided to allow - for safe depressurization during loading and unloading - the use of a bend, equipped with a flame arrester, to be attached to the manifold not in use. The opening of the bend should be facing down to avoid the inlet of water. ADN 7.2.4.16.9/ 9.3.x.22.4 was allowed to be interpreted accordingly.
