

**Economic and Social Council**Distr.: General  
31 October 2018

Original: English

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**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)****Thirty-fourth session**

Geneva, 21–25 January 2019

Item 5 (b) of the provisional agenda

**Proposals for amendments to the Regulations annexed to ADN:  
other proposals****Bunkering of LNG****Transmitted by the Government of the Netherlands \*\*,\*\****Summary*

<b>Executive summary:</b>	Since LNG has become more and more a regular fuel for sea ships and inland vessels, the Dutch delegation considered it desirable to examine which ADN conditions should apply to the bunkering of liquified natural gas (LNG). The document contains four amendments to the Regulations annexed to ADN related to the bunkering of LNG.
<b>Action to be taken:</b>	The ADN Safety Committee is requested in paragraph 8 to adopt the four proposed amendments.
<b>Related documents:</b>	None

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\*\* In accordance with the programme of work of the Inland Transport Committee for 2018–2019, (ECE/TRANS/2018/21/Add.1 (9.3)).

## Introduction

1. The Regulations annexed to ADN contain some specific requirements for bunkering. Section 1.2.1 has a specific definition for supply vessels, Chapter 7.2 provides certain exemptions for supply vessels and sometimes as well for other vessels delivering products for the operations of vessels. Supply vessels are defined as open type N tank vessels with a dead weight of up to 300 tonnes. Other vessels delivering products for the operations of vessels are vessels delivering, until recently, just gas oil or heavy heating oil to other inland vessels or maritime ships.

2. Due to ambitions and regulations in both the maritime and the inland navigation sector, for example to reduce the fuel emission of harmful substances like sulphur, LNG has developed as a feasible alternative fuel. This of course leads to a growing demand for LNG bunker facilities and LNG bunker vessels. Inland vessels serving as LNG bunker vessels could be considered as “other vessels delivering products for the operation of vessels” as described in the Regulations annexed to ADN.

3. Taking into account these developments on the LNG market, the Dutch delegation considered it desirable to check which prescriptions already apply, should apply or should no longer apply to LNG bunker vessels as “other vessels delivering products for the operation of vessels”. The aim of this exercise has been to maintain the current level of safety during bunkering operations on European inland waterways and within ports. The result of this investigation can be found in the following paragraphs.

## Other vessels delivering products for the operation of vessels – LNG bunker vessels in ADN – Amendments

4. Subsection 7.2.4.7.2 states that “the handing over of products for the operation of vessels into the bunkers of other vessels shall not be taken to be loading or unloading within the meaning of 7.2.4.7.1”, which could lead to the conclusion that bunkering of LNG may take place at places which are not designated or approved for this purpose by the competent authority. Taking into account the hazardous characteristics of LNG, the Dutch delegation considers it desirable that these activities only take place at places which are designated or approved by the competent authority. Therefore the following amendment to the Regulations annexed to ADN is proposed (new text is shown in bold, underlined, deleted text is crossed out):

“7.2.4.7.2 The reception from other vessels of unpackaged oily and greasy liquid wastes resulting from the operation of vessels and the handing over of products, **other than liquefied natural gas (LNG)**, for the operation of vessels into the bunkers of other vessels shall not be **considered as** ~~taken to be~~ loading or unloading within the meaning of 7.2.4.7.1 above or transhipment within the meaning of 7.2.4.9.”

5. Subsection 7.2.4.17 regulates under which conditions entrances or openings of certain spaces shall remain closed. 7.2.4.17.3 provides however an exemption on this regulation for the handing over of products for the operation of vessels. According to the Dutch delegation this is as well an undesirable situation given the hazardous characteristics of LNG, which requires amendments of the Regulations annexed to ADN (new text is shown in bold, underlined):

“7.2.4.17.3 The provisions of 7.2.4.17.1 and 7.2.4.17.2 above shall not apply to the reception of oily and greasy wastes resulting from the operation of vessels

nor to the handing over of products, **other than liquefied natural gas (LNG)**, for the operation of vessels.”

6. In subsection 7.2.4.29, for the transport of refrigerated liquefied gases, a drip tray under the shore connection is required during loading and unloading. Since there is no shore connection during ship-ship bunkering, the Dutch delegation proposes to delete the word “shore” in 7.2.4.29 which makes the drip tray mandatory under all connections of the piping for loading and unloading (deleted text is crossed out).

“7.2.4.29 During loading or unloading the drip tray as mentioned in 9.3.1.21.11 shall be placed under the ~~shore~~ connection of the piping for loading and unloading in use, and a water film as mentioned in 9.3.1.21.11 shall be activated.”

7. During the preparation of this document, the French delegation drew the attention of the Dutch delegation to ISO 20519:2017 which sets specifications for bunkering of liquefied natural gas fuelled vessels. Via (the currently revised) article 3 of Regulation (EU) 2018/674 this standard has been incorporated in EU law. In order to harmonize the legislation applicable to the process of bunkering of LNG (International standards, the Regulations annexed to ADN, EU legislation) in Europe, the Dutch delegation proposes a reference to this standard in 8.1.6.2 of the Regulations annexed to ADN (new text is shown in bold, underlined).

“8.1.6.2 Hose assemblies used for loading, unloading or delivering products for the operation of the vessel and residual cargo shall comply with European standard EN 12115:2011-04 (Rubber and thermoplastics hoses and hose assemblies) or EN 13765:2010-08 (Thermoplastic multilayer (non-vulcanized) hoses and hose assemblies) or EN ISO 10380:2003-10 (Corrugated metal hoses and hose assemblies). They shall be checked and inspected in accordance with table A.1 of standard EN 12115:2011-04 or table K.1 of standard EN 13765:2010-08 or paragraph 7 of standard EN ISO 10380:2003-10 at least once a year, according to the manufacturer’s instructions, by persons authorized for this purpose by the competent authority. A certificate concerning this inspection shall be carried on board. **Hose assemblies used for loading, unloading or delivering liquefied natural gas for the operation of the vessel shall comply with the parts 5.3 to 5.7 of EN ISO 20519:2017 (Ships and marine technology – Specification for bunkering of liquefied natural gas fuelled vessels) and shall be checked in accordance with the provisions of part 5.8 of EN ISO 20519:2017.**”

## Action to be taken

8. The Dutch delegation requests the ADN Safety Committee to consider the proposed amendments in paragraphs 4 to 7 and to take action as it deems appropriate.