LNG boil-off utilized as fuel (9.3.1.24.1)

Transmitted by the governments of Belgium and the Netherlands*,**

Summary

Executive summary: Allowing the use of LNG boil-off as fuel without the need for an derogation according to 15.3.2.

Action to be taken: See paragraph 3.

Related documents: ECE/TRANS/WP.15/AC.2/2017/17
Informal document INF.28 of the thirtieth session
ECE/TRANS/WP.15/AC.2/62 (Paragraphs 68 - 69)

** In accordance with the programme of work of the Inland Transport Committee for 2017-2018 (ECE/TRANS/WP.15/237, annex V (9.3.)).
Introduction

1. During its thirtieth session the ADN Safety Committee adopted the proposals from the informal working group on liquefied natural gas (LNG) in the form of INF.28. These proposals allow the use of LNG as fuel from 1 January 2019. To facilitate the use of LNG as a fuel in the meantime, Multilateral Agreement 020 was drafted which has been signed by a significant number of Contracting Parties to ADN.

2. Now that the use of LNG as a fuel no longer requires a derogation according to 1.5.3.2 of the Regulations annexed to ADN, an update of 9.3.1.24.1 is desirable. Belgium and the Netherlands therefore propose to amend 9.3.1.24.1, removing the obsolete reference to 1.5.3.2, and to harmonize 9.3.1.24.1 with the adopted proposals of the informal working group on liquefied natural gas.

I. Proposed amendments

3. Belgium and the Netherlands propose the following amendments (the cancelled text is strikethrough; the additional text is in bold underlined):

“9.3.1.24.1 Unless the entire cargo system is designed to resist the full effective vapour pressure of the cargo at the upper limits of the ambient design temperatures, the pressure of the tanks shall be kept below the permissible maximum set pressure of the safety valves, by one or more of the following means:

(a) A system for the regulation of cargo tank pressure using mechanical refrigeration;

(b) A system ensuring safety in the event of the heating or increase in pressure of the cargo. The insulation or the design pressure of the cargo tank, or the combination of these two elements, shall be such as to leave an adequate margin for the operating period and the temperatures expected; in each case the system shall be deemed acceptable by a recognized classification society and shall ensure safety for a minimum time of three times the operation period;

(c) For UN No. 1972 only, and when the use of LNG as fuel is authorized according to 1.5.3.2, a system for the regulation of cargo tank pressure whereby the boil-off vapours are utilized as fuel;

(d) Other systems deemed acceptable by a recognized classification society.”

II. Follow-up

4. The Safety Committee is invited to consider the proposal in paragraph 3 here above, and to take action as it deems appropriate.