Limitations to the approval of vacuum insulated tanks for the carriage of liquefied natural gases by indirect referenced standard

Transmitted by the Government of the Netherlands¹ ²

Summary

Executive summary: The aim of this document is to allow the approval for the carriage of liquefied natural gases (LNG) in vacuum insulated tanks constructed according to standards EN 1251-2 and EN 13530-2.

Action to be taken: Introduce a note in the tables with referenced standards in chapters 6.2 and 6.8 and initiate the modification of a material standard by CEN.

Related documents: None.

¹ In accordance with the programme of work of the Inland Transport Committee for 2014–2015 (ECE/TRANS/240, para. 100, ECE/TRANS/2014/23, cluster 9, para. 9.2).
² Circulated by the Intergovernmental Organisation for International Carriage by Rail (OTIF) under the symbol OTIF/RID/RC/2015/54.
Introduction

1. For the construction of vacuum insulated containments standards, EN 1251-2:2000 and EN 13530-2 have been referenced in RID/ADR. In both mentioned standards reference is made to EN 1252-1:1998 which is a specific standard for the toughness of the shell material at temperatures below -80 °C. However in the scope of this standard for toughness of the material, LNG is excluded. No alternative is given for EN 1252-1:1998 so that formally no vacuum insulated tanks can be approved for LNG.

2. The Netherlands is not aware of any technical objections to extent the scope of EN 1252-1:1998 to LNG. Carriage of LNG is relatively new in comparison to refrigerated liquefied "air gases"; carriage of LNG may not have been foreseen at the time of drafting the standard.

3. A long-term solution to this issue is for CEN to amend standard EN 1252-1:1998 in the appropriate Technical Commission (TC 268). However, an interim solution is needed until the standard has been updated. In consultation with the tanks working group, the Netherlands suggests to extend the application of the use of EN 1252-1:1998 for tanks intended to transport LNG (UN 1972) as well.

Proposal

The Netherlands proposes to add a new note to column 2 for entry EN 1251-2:2000 in the table of standards in section 6.2.4.1, and to column 2 for the entries for EN 13530-2 in the table of standards in section 6.8.2.6.1 stating the following:

"NOTE: Standard EN 1252-1:1998 referenced in this standard is also applicable to tanks for transport of LNG (UN No. 1972)".

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