TANKS

Transport of methane refrigerated liquid or natural gas, refrigerated liquid (UN 1972) in tanks

Transmitted by the Government of Portugal */

Background

During the last Joint Meeting session, the Government of Portugal presented informal document INF.45 to the Working Group on Tanks in order to know whether there were some support for a proposal to modify the current requirements of RID/ADR concerning the carriage in tanks of natural gas as a refrigerated liquid (UN No.1972). The Working Group on Tanks invited the Government of Portugal to present a formal proposal to the March 2006 session.

Justification

RID/ADR allows the carriage of UN 1972 NATURAL GAS, REFRIGERATED LIQUID both in vacuum-insulated tanks or in thermally insulated tanks by means of a continuous polyethylene sheathing. This second option is very favourable for road tanks because it reduces the weight of the shell and consequently increases the load capacity of the vehicle.

*/ Circulated by the Central Office for International Carriage by Rail (OCTI) under the symbol OCTI/RID/GT-III/2006/9.
In accordance with 6.8.3.2.17 of RID/ADR, shells intended for the carriage of refrigerated liquefied gases do not need to have an inspection opening, and most of them do not have it.

On the other hand, except for the case of vacuum-insulated tanks, and according to 6.8.2.4.2, tanks shall undergo periodic inspections which shall include an external and internal examination and as a general rule, a pressure test.

The Portuguese competent authority believes that a periodic inspection that does not include the internal examination of the shell does not supply sufficient information about the safety conditions of the tank and would not be in line with the requirements of RID/ADR.

It is also necessary to create a transitional measure for insulated tanks by means of continuous polyethylene sheathing and kept in service for the carriage of refrigerated liquefied gases without an inspection opening. For those tanks, using endoscopy techniques could be appropriate for the internal examination.

Proposal

6.8.3.2.17 Amend to read as follows:

“6.8.3.2.17 By derogation from the requirements of 6.8.2.2.4 vacuum-insulated shells intended for the carriage of refrigerated liquefied gases need not have an inspection opening.”

Add a new transitional measure to read as follows:

“1.6.X.X. Fixed tanks (tank-vehicles), intended for the carriage of refrigerated liquefied gases of Class 2 and not vacuum-insulated, built before the entry into force of the requirements applicable as from 1 July 2009 may be kept in service if the periodic tests includes internal inspection approved by the competent authority.”

Safety implications

The proposal improves safety.

Feasibility

No implications.

Enforceability

No implications.