



Economic Commission for Europe**Inland Transport Committee****Working Party on the Transport of Dangerous Goods****Joint Meeting of the RID Committee of Experts and the
Working Party on the Transport of Dangerous Goods**

Geneva, 21 September – 1 October 2021

Item 2 of the provisional agenda

Tanks**Validity of the provisions on the holding time for refrigerated
liquefied gases****Transmitted by the International Union of Railways (UIC)*, ******Introduction**

1. In informal document INF.17 of the RID/ADR/ADN Joint Meeting in March 2018, UIC asked whether the provisions for determining the holding time for refrigerated liquefied gases applied to both loaded and empty, uncleaned tank-wagons/tank-containers or only to loaded ones.

2. The report of the working group on tanks (ECE/TRANS/WP.15/AC.1/150/Add.1) noted the following:

“26. The Working Group shared the opinion of the industry, as mentioned in informal document INF.17, that determining the actual holding time is important, but that it might also be difficult to determine, taking the limited contents of the tank and unknown traffic conditions into account. Reference was made to the guidance document by EIGA, mentioned in footnote 4 to 4.3.3.5 (e), and it was suggested that EIGA should revisit the document in the light of the question raised by UIC.”

Provisions on holding time in RID/ADR

3. Although the current document by the European Industrial Gases Association (EIGA) referred to in footnote 4 to 4.3.3.5 (e) indicates that it is also necessary to determine the holding time for empty, uncleaned tanks, the provisions of RID/ADR are worded in such a way that the view can be taken that the issue is only relevant for loaded tanks. The reasons for this view are set out below.

4. Definition of “holding time” – RID/ADR 1.2.1:

* A/75/6 (Sect.20), para 20.51.

** Circulated by the Intergovernmental Organisation for International Carriage by Rail (OTIF) under the symbol OTIF/RID/RC/2021/29.

“Holding time” means the time that will elapse from the establishment of the initial filling condition until the pressure has risen due to heat influx to the lowest set pressure of the pressure limiting device(s) of tanks intended for the carriage of refrigerated liquefied gases;”.

An initial filling condition is only established when the tank is “actively” filled, and is established by the filler. After unloading, a filling condition is no longer established. Consequently, the definition of “holding time” in 1.2.1 only concerns loaded tanks.

5. Provisions for using tank-wagons/tank-containers – RID/ADR 4.3.3.5:

“The actual holding time shall be determined for each journey of a tank carrying a refrigerated liquefied gas on the basis of the following:

- (a) The reference holding time for the refrigerated liquefied gas to be carried (see 6.8.3.4.10) as indicated on the plate referred to in 6.8.3.5.4;*
- (b) The actual filling density;*
- (c) The actual filling pressure;*
- (d) The lowest set pressure of the pressure limiting device(s);*
- (e) The deterioration of the insulation*.”*

The provision does not apply to empty, uncleaned tanks as there is no carriage of a tank containing refrigerated liquefied gases. The tank is empty and uncleaned and no mass to be carried is indicated in the transport document (indicated mass = 0 kg).

Other comments on sub-paragraph (a):

The reference holding time indicated on the tank plate is only given for certain pressures in the filled condition and, therefore, does not apply to the carriage of empty, uncleaned tanks.

Other comments on sub-paragraphs (b) and (c):

For empty, uncleaned tanks, there is no actual filling density and no actual filling pressure, as no one is filling.

The provisions of 4.3.3.5 do not apply to the carriage of empty, uncleaned tanks for the reasons stated above.

Proposal for discussion

6. UIC therefore asks the RID/ADR/ADN Joint Meeting to consider again whether it is also necessary to determine and indicate the holding time in the transport document for empty, uncleaned tanks.

7. If the Joint Meeting is of the view that the provisions also apply to empty, uncleaned tanks, this could be achieved by clarifying the provisions as follows.

8. Introduce a new letter (f) in 4.3.3.5 as follows:

“(f) that for uncleaned, empty tank-wagons, tank-containers and portable tanks containing residues of refrigerated liquefied gases, the residual pressure in the tank may only be such that the lowest set pressure of the pressure relief devices is not exceeded during the holding time specified in the transport document (see 5.4.1.2.2 (d))”.

Consequential amendment

9. Amend the definition of holding time in 1.2.1 as follows (new text in bold and underlined):

“Holding time means the time that will elapse from the establishment of the initial filling condition **(filled tank)/the time that will elapse between lowering the residual pressure**

(empty tank) until the pressure has risen due to heat influx to the lowest set pressure of the pressure limiting device(s) of tanks intended for the carriage of refrigerated liquefied gases.

(The Note remains unchanged)”.

10. In addition, make an optional amendment to the consignor's obligations by introducing a new letter (f) in 1.4.2.1.1:

“(f) Ensure that the provisions concerning the holding time in 4.3.3.5 and 4.3.3.6 or 4.2.3.7.1 and 4.2.3.8 are complied with in the carriage of tanks containing refrigerated liquefied gases.”

11. If the RID/ADR/ADN Joint Meeting were to adopt the above proposals, UIC would be prepared to submit corresponding proposals to the UN Sub-Committee of Experts for Chapters 4.2 and 6.7 of the UN Model Regulations.
