

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

10 February 2022

Bern, 14-18 March 2022

Item 2 of the provisional agenda

Tanks

Interpretation of RID / ADR 6.8.2.2.11 on level gauges

Transmitted by the Government of the United Kingdom

Summary

Executive summary:	Following an initial exchange of views on working document ECE/TRANS/WP.15/AC.1/2022/3 at the intersessional meeting of the Working Group on Tanks (14 December 2021), this informal document sets out the points made so that discussions may resume.
Action to be taken:	Consideration of the questions set out in paragraph 4.
Related documents:	ECE/TRANS/WP.15/AC.1/2022/3 Informal document INF.23 (September 2021 Joint Meeting) ECE/TRANS/WP.15/AC.1/2016/26 ECE/TRANS/WP.15/AC.1/144/Add.1

Recent discussions

1. The United Kingdom submitted INF.23 on this subject to the September session of the Joint Meeting, but it was not possible for consideration to be given to this paper due to time constraints. As requested by the secretariat, informal document INF.23 has been resubmitted to the March 2022 session of the Joint Meeting as a working document (ECE/TRANS/WP.15/AC.1/2022/3).
2. However, an initial exchange of views on ECE/TRANS/WP.15/AC.1/2022/3 took place at the intersessional meeting of the Working Group on Tanks on 14 December 2021. Following this exchange, the United Kingdom agreed to submit this informal document to set out the questions raised and resume discussions.

Background

3. Following discussions in the Working Group on Tanks in September 2016 seeking to clarify RID / ADR Chapter 6.8 with respect to level gauges, as set out in ECE/TRANS/WP.15/AC.1/2022/3, the following amendments were made:

Deletion of the first sentence to 6.8.3.2.6:

~~“If the tanks are equipped with gauges in direct contact with the substance carried, the gauges shall not be made of a transparent material. If there are thermometers, they shall not project directly into the gas or liquid through the shell.”.~~

Insertion of a new paragraph (6.8.2.2.11):

“Glass level-gauges and level-gauges made of other fragile material, which are in direct communication with the contents of the shell, shall not be used.”

And inclusion of the following transitional provision (1.6.3.52):

“Fixed tanks (tank-vehicles) and demountable tanks constructed before 1 July 2019 in accordance with the requirements in force up to 31 December 2018 but which however do not conform to the requirements of 6.8.2.2.11 applicable from 1 January 2019 may continue to be used.”

Consideration

4. As indicated in ECE/TRANS/WP.15/AC.1/2022/3, given that RID / ADR 6.8.2.2.11 would seem to preclude only those level-gauges made of glass and other fragile material, the experts that spoke at the intersessional meeting of the Working Group on Tanks considered the following questions to require consideration at the March 2022 session of the Joint Meeting:

Q1. In the absence of the material properties that would be required for ‘non -fragile’ level gauges, should level gauges made of ‘non-fragile’ materials be considered acceptable?

Q2: If the answer to Q1 is **NO**, should RID / ADR 6.8.2.2.11 be clarified?

Q3: If the answer to Q1 is **YES**, should RID / ADR 6.8.2.2.11 make it clear how materials other than glass can be regarded as ‘fragile’ or ‘non-fragile’?

Q4: Also, should the safety provisions that have been developed for similar level-gauges which are permitted on Chapter 6.10 tanks be applied to Chapter 6.8 tanks? These safety provisions are:

“6.10.3.8

(f) The tank, or in case of compartmented tanks, every compartment, shall be equipped with a level indicating device. Glass level-gauges and level-gauges of other suitable transparent material may be used as level indicating devices provided:

- (i) they form a part of the tank wall and have a resistance to the pressure comparable to that of the tank; or they are fitted external to the tank;
- (ii) the top and bottom connections to the tank are equipped with shut-off valves fixed directly to the shell and so arranged that carriage with the valves in an open position is prevented;
- (iii) are suitable for operation at the maximum working pressure of the tank; and
- (iv) are placed in a position where they will not be liable to accidental damage.”

5. If a consensus can be reached the United Kingdom will look to propose amendments for a future session of the Joint Meeting.
