Definition for “Closure”, “Tank” and “Shell”

Submitted by the Government of Romania¹, ²

Summary

Executive summary: Analysis of the terms “Shell”, “Tank” and “Closure” within the Tank Working Group.

Action to be taken: The eventual amendment of the tree terms accordingly.

Related documents:
- ECE/TRANS/WP.15/AC.1/126, para. 63, Joint Meeting, March 2012
- Informal document INF.11, Joint Meeting, March 2012
- ECE/TRANS/WP.15/AC.1/124, para.104, Joint Meeting, September 2011
- Informal document INF.10, Joint Meeting, September 2011
- ECE/TRANS/WP.15/AC.1/120, para. 37, Joint Meeting, September 2010
- Informal document INF.36, Joint Meeting, March 2010

¹ In accordance with the programme of work of the Inland Transport Committee for 2010–2014 (ECE/TRANS/208, para. 106, ECE/TRANS/2010/8, programme activity 02.7 (c)).
² Circulated by the Intergovernmental Organisation for International Carriage by Rail (OTIF) under the symbol OTIF/RID/RC/2012/23.
Introduction

1. This document is the result of the discussions held within the two previous sessions of the working group on Definitions and of the mandate included in the Report of the Joint Meeting at its March 2012 and September 2011 session.

2. The definitions mentioned in the present document are definitions no. 20 “Closure”, no. 118 “Receptacle”, no. 134 “Shell” and no. 138 “Tank” in all tables presenting various language versions of RID/ADR/ADN or comparisons of RID/ADR/ADN vs. UN Model Regulations, i.e.:

(a) Informal document INF.11 – Annex in Excel, second file of the table - Definitions is 12 languages, Joint Meeting, March 2012;

(b) Informal document INF.10/Add.1 – Comparative table of inland transport regulations vs. UN Model Regulations, Joint Meeting, September 2011;

(c) Informal document INF.3 – pages 2 – 72, Joint Meeting, September 2010;


Excerpt from the March 2012 report (ECE/TRANS/WP.15/AC.1/126):

“63. For the definitions concerning tanks (paragraphs 21 to 23 of the report – Inf.11), the Joint Meeting thought it would be a good idea to bring the group’s considerations to the attention of the working group on tanks. In particular, it should be checked whether the definition of shell is correct, i.e. if the wording also includes closures, and if the term “closure” itself is appropriate in the case of tanks, because while it is used in the text, the definition in the French text refers to “moyens d’obturation”.”.

Excerpt from the September 2011 report (ECE/TRANS/WP.15/AC.1/124):

“8. Definition No. 20 – “closure”

104. The issue should be brought to the attention of the Working Group on Tanks.”.

3. In order to avoid any misunderstanding, the excerpts from the reports of the Bucharest and Paris informal working groups with regard to the subject are reproduced below.


21. The working group analysed the difference between these definitions.

The difference between the two definitions of the inners – inner packaging and inner receptacle was analysed. The inner receptacle means a receptacle which “always”/”toujours”/”immer” requires an outer packaging in order to perform its containment function.

The analysis continued with the comparison of the definitions “Packaging” and “Receptacle” as these are the two hierarchical terms which include the previously mentioned terms.

A possible solution was to replace, in the definition of the “receptacle” the sequence “a containment vessel” with “means of containment”. 

It was also observed that the definition of “tank” in 1.2.1 in the UN Model Regulations does not seem to be relevant because this chapter contains definitions that are applicable and used throughout these regulations and this is not the case for the tank definition. The latter is not needed because there is a definition for tank in the chapter where tanks are dealt with.

When looking at the definition “Closure”, the working group observed that there is a difference of use in RID/ADR/ADN and in the UN Model Regulations. In the UN Model Regulations, the definition of “tank” includes “receptacle”.

To cover all cases, the WG proposes to add the word shell in the definition of closure.

Proposal

Add “or a shell” at the end of the definition of “Closure”.

22. The working group analysed the definition no. 134 “Shell”- which is RID/ADR specific. There is no definition in 1.2.1 UN Model Regulation, but “Shell” is defined for the purposes of Chapter 6.7 in 6.7.2.1, which is reproduced in Chapter 6.7 RID/ADR also.

Proposal

“Shell” means the sheathing wall and ends of the tank containing the substance (including the openings and their closures);

NOTE 1: This definition does not apply to receptacles.

NOTE 2: For portable tanks, see Chapter 6.7.

23. It was also noticed that the French version of RID/ADR needed to be amended in 6.8.2.1.18, Footnote 2, 2nd sentence, as follows:

“For ces formes de section, les rayons de bombardement de la virole ne doivent pas”.

B. Informal document INF.10 - Report of the informal working group on Definitions (Bucharest, 12-14 April 2011)

“Definition no. 20 – “Closure”

123. The problems with regard to the definition in the Romanian documents were debated, and the working group observed that one of the sources of this confusion is the fact that at the UN level, the definition of “tank” also includes “receptacles”.

124. One option for solving the problem seemed to be the adoption of the definition of “Tank” as it currently appears in the UN Model Regulations in the inland transport regulations.
125. It was also observed that closures for tanks can vary and thus there is more than one option to close the tank, by using valves, caps etc. The current definition is only valid for a part of the types of closures. The closing device is more complex. This difficult situation can be solved within the tank working group.

126. Nevertheless, the German delegate mentioned paragraph 6.8.2.2.2 which refers to closures for different tank codes. He pointed out that, sometimes, the closing device closes a pipe, not a receptacle.

127. It was also observed that the definition as it currently stands both in the UN and in RID/ADR/ADN is too close to common language and it thus creates confusion.

128. The term “closure” is used in standards also.

Proposal

129. The working group suggested that it might not be necessary to have a definition of closure in 1.2.1. Nevertheless, the working group invited the tank working group to analyse this definition and to clarify, if possible, the matter.

130. The matter can be brought up at UN level also."

4. In the opinion of the Romanian delegation, which mirrors some of the opinions expressed within the working group and the Joint Meeting, the issue of the use of the term “Closure” is the tip of the iceberg generated from the existence of three definitions: “Receptacle”, “Shell” and “Tank” in RID/ADR/ADN, where in the UN Model Regulations there are only two such definitions (Receptacle and Tank). “Shell” is specific to the European inland transport regulations.

5. Furthermore, the term “Closure” is used elsewhere in 1.2.1 with regard to the “Body (For all categories of IBCs other than composite IBCs)” (definition no. 10), “Receptacle (Class 1)” (definition no. 117), “Leakproofness test” (definition no. 82), “Rigid inner receptacle (for composite IBC)” (definition no.126), “Shell” (definition no. 134).

6. The Romanian delegation would like the Tank working group to discuss these issues related to tank, shell and receptacle, and, afterwards, the Joint Meeting to analyse the situation of the other situations in which “closure” occurs.

7. The present document is supplemented by 2 annexes reproduced in informal document INF. 3, as follows:

Annex I: Table regarding the use of the term “closure” in English and French,
Annex II: Excerpts in which “closure” or its equivalents are used in English and French.