

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

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Item 2 of the provisional agenda

Tanks

Definition of capacity of shell or shell compartment for tanks

Transmitted by the Government of France

Summary

Executive summary:	How to interpret the definition of tank shell capacity when it is impossible to fill the shell completely because of its shape.
Action to be taken:	Position to be taken for clarification.
Related documents:	TRANS/WP.15/AC.1/2005/5 (March 2015).

Introduction

1. In 2007 the following definition of tank shell capacity was introduced in Chapter 1.2 of RID/ADR:

"Capacity of shell or shell compartment" for tanks, means the total inner volume of the shell or shell compartment expressed in litres or cubic metres. When it is impossible to completely fill the shell or the shell compartment because of its shape or construction, this reduced capacity shall be used for the determination of the degree of filling and for the marking of the tank.

2. The last sentence introducing the notion of reduced capacity was added to the initial proposal (document -2005/5) to clarify the situation when for example the tank is fitted with a manhole recessed into the shell in order to avoid liquid to pass by the safety relieving device and gas recovery lines due to thermal expansion.

3. However, recent examination of tank design showed some situations where with a "banana-shaped" tank, the reduced capacity is not used in practice; the top areas which cannot be filled are taken into account in defining the capacity. Furthermore the "reduced capacity" is not always easy to determine.

Discussion

4. To adopt uniform practices, we would like to know how the above definition is understood and interpreted in such cases.