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

Report of the Joint Meeting of the RID Committee of Experts and the Working Party on the Transport of Dangerous Goods on its autumn 2019 session*

held in Geneva from 17 to 26 September 2019

Addendum**

Annex I

Report of the Working Group on Tanks

1. The Working Group on Tanks met from 17 to 19 September 2019 in Geneva based on the mandate from the RID/ADR/ADN Joint Meeting, under the chairmanship of Mr. Arne Bale (United Kingdom) and Mr. Kees de Putter (Netherlands) as secretary. The relevant documents were submitted to the plenary session and transferred to the Working Group for consideration.

2. The Working Group on Tanks, consisting of 32 experts from 12 countries and 5 non-governmental organizations and the European Commission, dealt with the following official and informal documents:

* Circulated by the Intergovernmental Organization for International Carriage by Rail (OTIF) under the symbol OTIF/RID/RC/2019-B. Unless otherwise indicated, the other documents referred to in this report under the symbol ECE/TRANS/WP.15/AC.1/ followed by the year and a serial number were circulated by OTIF under the symbol OTIF/RID/RC/ followed by the year and the same serial number.

** Circulated by the Intergovernmental Organisation for International Carriage by Rail (OTIF) under the symbol OTIF/RID/RC/2019-B/Add.1.
Documents:  
ECE/TRANS/WP.15/AC.1/2019/24 (United Kingdom)  
ECE/TRANS/WP.15/AC.1/2019/25 (United Kingdom)  
ECE/TRANS/WP.15/AC.1/2019/26 (United Kingdom)  
ECE/TRANS/WP.15/AC.1/2019/39 (United Kingdom)  
ECE/TRANS/WP.15/AC.1/2019/40 (United Kingdom)  
ECE/TRANS/WP.15/AC.1/2019/49 (Netherlands)  

Informal documents:  
INF.4 (OTIF)  
INF.15 (Secretariat)  
INF.17, INF.18 and INF.19 (United Kingdom)  
INF.19 (United Kingdom)  
INF.33 (Switzerland)  
INF.38 and INF.39 (France)  

3. Due to time constraints, informal documents INF.21 (Poland), INF.27 (France), INF.29 (France) and INF.37 (Poland) could not be discussed.

Item 1:  Clarification of protection required for the fittings and accessories mounted on the upper part of Vacuum operated waste tanks  
Document:  ECE/TRANS/WP.15/AC.1/2019/24 (United Kingdom)  
Informal document:  INF.33 (Switzerland)  

4. Additional wording was proposed to clarify in ECE/TRANS/WP.15/AC.1/2019/24 that 6.8.2.1.28 applied to vacuum operated waste tanks with additional provisions based upon suggestions from the Working Group on Tanks at previous sessions. Informal document INF.33 contained alternative proposals to the effect that 6.8.2.1.28 need not to be complied with for vacuum operated waste tanks.

5. The opinion of the experts on the need for this protection was divided, where several experts were of the opinion that 6.8.2.1.28 was never intended to apply when equipment is placed in a so called “protected area”, while others were of the opinion that additional protection of 6.8.2.1.28 needed to be applied.

6. The Working Group noted that 6.10 completes or modifies 6.8 for vacuum operated waste tanks. However, 6.8.2.1.28 was not modified or completed and as such it can be seen to apply. Nevertheless, the group also noted that there was flexibility within 6.8.2.1.28 for alternative approaches to be taken to protect fittings and accessories that may be fitted at the top of the tank. It was also said that the application of 6.8.2.1.28 for vacuum operated waste tanks could be discussed again on the basis of any evidence produced.

Item 2:  Interpretation of construction requirements applicable to the opening ends of Vacuum Operated Waste Tanks (VOWTs)  
Document:  ECE/TRANS/WP.15/AC.1/2019/25 (United Kingdom)  
Informal document:  INF.18 (United Kingdom)  

7. The representative of the United Kingdom sought the opinion of the experts of the Working Group on tanks on different clamping arrangements for openable ends, in particular the need to protect over the centre type hydraulic clamps.

8. Several experts explained that the “over centred clamp construction” is used in their countries without incidents and without additional protection. However, it was noted that the design of these clamps was more robust than the example shown in the document. The representative of the United Kingdom thanked the experts for their views.

Item 3:  Vacuum Operated Waste Tanks (VOWTs) – diverting vapours from the outlets of pump/exhauster units to a place where they will not cause danger.  
Document:  ECE/TRANS/WP.15/AC.1/2019/26 (United Kingdom)  

9. The Working Group noted that toxic or flammable vapours expelled by the vacuum pump or exhauster unit should be diverted to a safe place. It was proposed to add wording to
6.10.3.8 to clarify that, where a low-level outlet was used, a hose should be applied to divert the vapours to a safe place.

10. The Working Group felt that the current wording of 6.10.3.8 did not prohibit the use of a low-level outlet, with a hose or not. The operator of the tank should decide on the location where it is safe to divert the vapours. It was also felt that the proposed wording would be too restrictive and give the impression that only a low-level exit could be used. As the current wording is not design restrictive and allows for different solutions, the proposed wording was felt to be unnecessary, but it was decided that a note would be helpful in the application of 6.10.3.8 (a).

Proposal 1:

Introduce a new note to 6.10.3.8 (a), to read:

"Note: This requirement may for example be complied with by the use of a vertical pipe or a low-level outlet with a connection which allows, when necessary, attachment of a hose."

Item 4: Cross sectional shape of shells in accordance with ADR 6.8.2.1.18 – Guideline for the application of the proposed addition to footnote 3 of ADR 6.8.2.1.18.

Document: ECE/TRANS/WP.15/AC.1/2019/39 (United Kingdom)

11. The amendment to footnote 3 of 6.8.2.1.18 had been accepted but kept in square brackets awaiting the inclusion of design requirements in the revised standard EN 13094. As the revision of EN 13094 was not likely to be published in time for the 2021 editions of RID/ADR, Working Group decided that WP.15 should introduce a guideline containing the relevant clauses from the standard.

12. Whilst it was confirmed that the revision of EN 13094 was not yet finalized, the relevant clauses had been agreed, and the proposed changes needed to be reflected in a revised version of ECE/TRANS/WP.15/AC.1/2019/39. During the meeting of the Working Group on Tanks the modifications were carried over in a revised version of the guideline that would be made available to the plenary. When endorsed by the plenary, the secretariat would be requested to forward the document to the Working Party on the Transport of Dangerous Goods for consideration at its November 2019 session.

Item 5: Report of the eleventh session of the informal working group on the inspection and certification of tanks

Document: ECE/TRANS/WP.15/AC.1/2019/40 (United Kingdom)

Informal documents: INF.16 (Germany)
INF.17 and INF.19 (United Kingdom)

13. The chair of the informal working group introduced the reports of the 11th and 12th sessions of the informal working group in ECE/TRANS/WP.15/AC.1/2019/40 and INF 17, that had met in London and Madrid respectively, and INF 19 that contained the complete revised wording of 6.8, 1.8.7 and 1.8.6. In addition, the proposals for consequential amendment of chapter 6.2 were introduced in INF 16.

The discussion included the following key items:

(a) Entry into service verification: A note was added to accommodate, for example, TPED by indicating that mutual recognition agreements should be taken into consideration when deciding on the application of the entry into service verification.

(b) The use of a single inspection body: It was decided that the placing of a provision that a single inspection body should be used for inspection, to prevent so called “tank tourism”, would be more appropriately referenced in 6.2 and 6.8 than in 1.8.7.

(c) The effect on mutual recognition was discussed and 1.8.6.2.5.3 was modified to clarify the intention of the proposal.

(d) It was also recognized that transitional measures for the introduction of the new arrangements should be developed.
14. The text that remained in square brackets was discussed and the remarks made by experts were considered. In this respect, informal documents INF.16/Rev.1 and INF.19/Rev.1 were developed and made available to the plenary for consideration.

15. In order to complete the wording and forward an official document for the March 2020 session of the Joint Meeting, all delegations were urged to study the proposals and to send written comments and proposals in English by email before the end of October 2019 to the chair of the informal working group for consideration by the group.

Item 6: Heating elements on Fibre-Reinforced Plastic (FRP) tanks

**Document:** ECE/TRANS/WP.15/AC.1/2019/49 (Netherlands)

16. It was proposed in the document to move the requirement on heating elements from 6.9 to 4.4 to prevent misinterpretation. The effect of the interpretation made at the previous session of the Working Group on Tanks was that in some countries FRP tanks with heating elements were not being granted periodic or intermediate inspection certificates.

17. Most experts had sympathy for the situation but preferred to await the outcome of the work currently being undertaken at the United Nations Sub-Committee of the Experts on the Transport of Dangerous Goods (TDG Sub-Committee). It was felt that additional requirements would be needed to protect the tank against possible negative effects from high temperatures and pressure.

18. The proposed amendments were considered to be premature as FRP tanks were currently being addressed by the TDG Sub-Committee. As an interim measure, it was suggested that operators should render the heating elements inoperable until the work of the FRP Working Group of the TDG Sub-Committee has been completed.

Item 7: Alignment of the different language versions

**Informal document:** INF.4 (OTIF)

19. The Working Group on Tanks checked the proposals by the secretariat of OTIF to align the wording used in the different language versions. It was agreed that the amendments for the definition of tank-wagon in 1.2.1 (English versions) and the proposed wording for 6.8.2.1.11 (English versions) were correct.

20. Concerning the amendment of 6.8.2.2.2 for the cleaning openings in the lower part of the shell, the group considered the proposal inappropriate. However, it was noted that an amendment to the current text of the German version was needed to align with the text of the English and French version.

**Proposal 2:**

In the English version of RID only, in 1.2.1 on the definition of “Tank-wagon”, replace “shells” by “tanks”.

**Proposal 3:**

In 6.8.2.1.11 of the English version of RID/ADR, replace “welded tanks” by “welded shells”.

**Proposal 4:**

In the German version of RID, last paragraph of 6.8.2.2.2, third sentence amend to read (new wording in italic script):

“… sind jedoch Reinigungsöffnungen (Handlöcher) *im unteren Teil* des Tanks zugelassen.”

Item 8: Changes of the loaded products in tank-vehicles

**Informal document:** INF.15 (Secretariat)

22. ECE/TRANS/WP.15/2019/9 described the case where a tank-vehicle intended for hydrocarbons carries orange plate markings belonging to a previous load with different properties than the current load. The tank was not cleaned before the change of load, and residue of the previous load remains in one of the three compartments and in sections of the discharge system. The questions arising from a change of load without cleaning the tank were whether this should be allowed and whether it would be useful to regulate the presence of vapour in the ullage space above the new load and in the discharge systems in the regulation.

23. It was confirmed that on road fuel tankers changes in load in compartments occurred. It was also noted that compartments of these tanks drain very well and that only a small amount of fuel remained in the tank. It was also confirmed that depending on the design of the discharge system other hydrocarbons remained, especially in metering devices. Cleaning was in general avoided due to the residue of water after cleaning.

24. It was noted that only a small amount of petrol in Biodiesel may change the flash point so that it may become a flammable substance.

25. The presence of orange plates from the previous load, in this case for petrol (1203/33) while Biodiesel (Fame) was carried, was found to be correct according to 5.3.2.1.7 because of the empty uncleaned compartment that had contained petrol before. Whether the “empty uncleaned” requirement would also apply to residue in the discharge system could not be answered. On the other hand, in the case of additive devices in special provision 664 (g) the marking and placarding was not affected by the additive.

26. It was recognized that more discussion was needed, and that clarification might be helpful, but care should be taken not to overcomplicate the regulation.

Item 9: Modification of the terminology used in 6.8.2.1.20

*Informal document:* INF.38 (France)

27. The Working Group on Tanks considered the document and accepted the proposed amendment.

**Proposal 5:**

In 6.8.2.1.20 (b) 1 of ADR delete “contained” and replace “volume” by “capacity” to read (deleted wording stricken through, new wording in *Italic* script);

“/ Volume Capacity contained between two partitions or surge plates of not more than 7500 L.”

Item 10: Amendment to Chapter 1.6 – transitional measures on tanks

*Informal document:* INF.39 (France)

28. It was proposed to delete transitional measures 1.6.3.16 and 1.6.4.18 on the tank record. However, the Working Group on Tanks felt that for tanks entering into service before 2007, that may not have the type approval certificate in the tank record, deletion of the transitional measure may result in a non-compliance with 6.8.3.1. It was suggested that the transitional measure should be modified to take this into account.

29. The Working Group on Tanks noted that in RID transitional measure 1.6.3.3.2 and 1.6.3.27 the last paragraph should be deleted for the 2021 edition of RID.

30. Given time constraints the group agreed that these transitional measures required further consideration on the basis of a new document for the March 2020 session of the Working Group on Tanks.