

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

21 March 2019

Report of the Working Group on Tanks

1. The Working Group on Tanks met from 18 to 20 March 2019 in Bern on the basis of the mandate from the RID/ADR/ADN Joint Meeting, under the chairmanship of Mr. Arne Bale (United Kingdom) 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 26 experts from 13 countries and 4 non-governmental organizations, the European Commission and European Union Agency for Railways, dealt with the following official and informal documents:

Documents:

ECE/TRANS/WP.15/AC.1/2019/1 (Belarus)
ECE/TRANS/WP.15/AC.1/2019/3 (Belgium)
ECE/TRANS/WP.15/AC.1/2019/6 (ITCO)
ECE/TRANS/WP.15/AC.1/2019/7 (Romania)
ECE/TRANS/WP.15/AC.1/2019/18 (United Kingdom)
ECE/TRANS/WP.15/AC.1/2019/19 (Poland)

Informal documents:

INF. 5 (France)	INF. 19 (Germany)
INF. 11 (United Kingdom)	INF. 21 (Netherlands)
INF. 12 (United Kingdom)	INF. 25 (European Union)
INF. 13 (United Kingdom)	INF. 29 (United Kingdom)
INF. 14 (Netherlands)	
INF. 16 (UIP)	

Due to time constraints the following documents could not be discussed:

INF 30 (United Kingdom)	INF 31 (United Kingdom)
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We took note that 2019/2 was considered in the standards working group and in plenary.

Item 1: ECE/TRANS/WP.15/AC.1/2019/1 (Belarus) – Amendment to the text of 6.8.2.5.1 of ADR and INF 29 (United Kingdom).

3. The proposal to amend 6.8.2.5.1 by replacing the term “test” by “inspection” was widely supported and adopted. It was said that periodic inspection and intermediate inspection contained several elements among others one or more tests and that the date was only applied when all elements of the inspection were completed with positive results.

Proposal 1: Amend the 9th indent of 6.8.2.5.1 of RID and ADR to read (new wording in Italics/underlined and deleted wording stricken through);

“- date and type of the most recent ~~test~~ *inspection*: “month, year” followed by a “P” when the inspection is the initial ~~test~~ *inspection* or a periodic ~~test~~ *inspection* in accordance with 6.8.2.4.1 and 6.8.2.4.2, or “month, year” followed by an “L” when the ~~test~~ *inspection* is an intermediate ~~test~~ *inspection* in accordance with 6.8.2.4.3;”

4. The consequential amendments in INF 29 by the United Kingdom were accepted. However it was decided that “ inspection” in the 10th indent of 6.8.2.5.2 and the 8th indent of 6.8.3.5.10 should be singular as each entry of a date would be done by one expert or one inspection body. It was also agreed that in 6.8.4 (d) TT6 the wording could be further simplified.

Proposal 2: Amend the following subsections (new wording in Italics/underlined and deleted wording stricken through):

6.8.2.5.1, 10th indent (RID and ADR)

stamp of the expert who carried out the ~~tests~~ *inspection*”.

6.8.3.5.10, 7th and 8th indent (RID and ADR)

- date (month and year) of initial ~~test~~ *inspection* and most recent periodic ~~test~~ *inspection* in accordance with 6.8.3.4.12 and 6.8.3.4.15)
- stamp of the expert who carried out the ~~tests~~ *inspection*.”

6.8.3.5.11, last indent (RID only)

- the date (month, year) of the next ~~test~~ *inspection* in accordance with 6.8.2.4.3 and 6.8.3.4.15.”

6.8.4 (RID and ADR):

“TT6 The periodic ~~tests~~ *inspection* ~~, including the hydraulic pressure test,~~ shall be carried out at least every 3 years.”

TT8 TT8 Tanks on which the proper shipping name required for the entry UN 1005 AMMONIA, ANHYDROUS is marked in accordance with 6.8.3.5.1 to 6.8.3.5.3 and constructed of fine grained steel with a yield strength of more than 400 N/mm² in accordance with the material standard, shall be subjected at each periodic ~~test~~ *inspection* according to 6.8.2.4.2, to magnetic particle inspections to detect surface cracking.”

6.10.4 (RID and ADR):

“Vacuum-operated waste tanks shall be subject every three years for fixed tanks or demountable tanks and at least every two and a half years for tank-containers and tank swap bodies to an examination of the internal condition, in addition to the ~~tests~~ *inspection* according to 6.8.2.4.3”

5. Regarding the question raised by Belgium in plenary it was decided that the use of “Exceptional check” in 6.8.2.4.4 should be “exceptional inspection”. As there was no formal proposal for the amendment it is suggested that the informal working group on the inspection and certification of tanks that would meet in London in June 2019 should take this on board. During discussions it was recognized that other consequential amendments concerning changing test(s) to inspection(s) were required. It was agreed to deal with these through the “ London” Working group as well.

Item 2: ECE/TRANS/WP.15/AC.1/2019/3 (Belgium) – Application of 6.7.1.3: Carriage of a product classified under UN No. 3160 in T50 portable tanks.

6. Trifluorochloroethylene assigned to UN3160 is allowed to be carried in portable tanks under an interim approval according to 6.7.1.3 of the IMDG code. Belgium is requested by a consigner to issue an interim approval for inland carriage as now the country of origin will be Belgium.

7. As the interim approval was made under the IMDG code it was said that this was to allow for carriage while applying for introduction of applicable provisions in the regulations.

A proposal for assigning a portable tank instruction for this substance should be submitted to the Sub-Committee of Experts on the Transport of Dangerous Goods (TDG).

Item 3: ECE/TRANS/WP.15/AC.1/2019/6 (ITCO) – Amendment of section 1.2.1: Definitions.

8. The “enterprise in whose name the tank-container/portable is registered” is often a financial entity such as a leasing company or bank and takes no part in the tank-container/portable tank operators safety obligations. The tank is leased or otherwise made financially available by legally enforceable contract between the registered owner e.g. the bank or leasing company and the tank container/portable operator.

9. For the autumn 2018 session of the Joint Meeting ITCO forwarded INF 7 which was discussed in the Tanks Working Group. At that time it was noticed that the definition in RID also addressed the operator for tank-wagons and indirectly tank-wagon keepers. ITCO was asked to check if the amendment would create problems for the tank-wagon operator and tank-wagon keeper.

10. UIP stated that the operator of a tank-wagon is also the enterprise that registers the tank-wagon and that the amendment by ITCO would not improve the understanding in the case of tank-wagon operator or keeper. After considering several alternative options the working group could not come to a conclusion. It was decided that the document should be kept on the agenda for the next session.

In absence of the representative of ITCO the following options and ideas were considered for future discussion.

For ADR:

“*Tank-container/portable tank operator*” means any enterprise in whose name the tank-container/portable tank is ~~registered~~ *operated*.”

or

“*Tank-container/portable tank operator*” means any enterprise that operates a tank-container/ portable tank. Where the operator is not the owner, the operator is the enterprise to which the tank-container/portable tank is leased or otherwise made available for use by a legally enforceable contract. “

or

“*Tank-container/portable tank operator*” means any enterprise being the owner of a tank-container/portable tank or having the right to use it.”

For RID:

“*Operator of a tank-container, portable tank or tank-wagon*” means any enterprise in whose name the tank-container, portable tank or tank-wagon is operated ~~registered or approved for transport~~.”

or

“*Operator of a tank-container, portable tank or tank-wagon*” means any enterprise that operates a tank-container, portable tank or tank-wagon. Where the operator is not the owner, the operator is the enterprise to which the tank-container, portable tank or tank-wagon is leased or otherwise made available by a legally enforceable contract.”

or

“Operator of a tank-container, portable tank or tank-wagon” means any enterprise in whose name

the tank-wagon is registered
or approved for transport.

the tank-container/portable
tank is operated

Item 4: ECE/TRANS/WP.15/AC.1/2019/7 (Romania) – Proposal of amendments related to the terms “risk” and “hazard/danger” in the context of RID/ADR/ADN.

11. In particular the items related to 4.3, 6.8 and 6.10 were discussed as requested by the plenary. For 4.3 it was felt that in the English version, amending “additional hazard” in “other subsidiary hazard”, could be justified but that amendment along this line in the French version would be less straight forward and requires more consideration. Concerning the amendments for 6.8 and 6.10 it was felt that “risk” would be more appropriate than danger for mechanical constructions.

12. The representative of Romania agreed to take the comments made to the informal working group on the drafting of definitions for the terms “RISK” and “HAZARD/DANGER” in the context of the RID/ADR/ADN meeting for further consideration.

Item 5: ECE/TRANS/WP.15/AC.1/2019/17 (United Kingdom) – Clarification of protection required for the fittings and accessories mounted on the upper part of Vacuum-Operated Waste Tanks

13. Two arguments apply to protection of equipment mounted on top of tanks in general, in 6.8.2.1.28 for protection against overturning, and in 6.8.2.2.1 for protection against being wrenched off or damage during carriage or handling.

For vacuum operated waste tanks, according to 6.10.3.1, protection against being wrenched off during carriage and handling is provided if placed in a so called “protected area” as specified in 6.10.1.1.1. However 6.10.3.1 is worded in such a way that it does not address the protection against overturning as required by 6.8.2.1.28.

14. Two views were expressed. One was that the application of 6.8.2.1.28 is not overtaken by 6.10 and is not excluded in 6.10.1.2.1, the conclusion based on the wording of ADR is that vacuum operated waste tanks have to comply to 6.8.2.1.28. The other was that the applicability of 6.8.2.1.28 was never intended to apply when equipment is placed in a so called “protected area”.

15. It was also stated by some experts that there have been only a limited number of accidents and in the accidents with tanks without protection there was no loss of contents reported due to damaged equipment. However some particular designs may benefit from additional protection, while in other cases equipment is protected by other elements such as hose reels or suction booms.

16. Following the discussions it was not possible to come to a conclusion. However it was agreed that the text should be clarified to ensure a common interpretation and the United Kingdom was invited on behalf of the group to submit a modified document for a future session taking into account the comments made.

Item 6: ECE/TRANS/WP.15/AC.1/2019/18 (United Kingdom) – Report of the ninth session of the informal working group on the inspection and certification of tanks and INF 11, INF 12, INF 13 (United Kingdom), INF 21 (Netherlands) and INF 25 (European Union)

17. The chair of the informal working group introduced the documents from the group. The working group had met twice since the last session of the Joint Meeting and document 2019/18 and INF 11 contained the reports of these meetings. Special attention was drawn to INF 12 that contained in Annex I the fundamental principles on which the work was done. However it was felt that it would be helpful for the discussions if an overview of the main objectives of the project was provided, namely to establish a common approach of reciprocal recognition for the administrative controls and procedures for conformity assessments, type approval certification and inspections, in which:

- inspection bodies are approved on the basis of EN ISO/IEC 17020 and may be recognised by other RID/ADR contracting states/parties,
- such bodies are clearly made responsible for checking the conformity of the complete tank irrespective of wherever the various components are manufactured, and
- an entry into service verification is introduced for certain circumstances to ensure that the requirements of RID/ADR are fulfilled.

It was said that since the last session of the informal working group some questions and reservations remained. INF 13 contains the complete reworded sections 1.8.6, 1.8.7 and the amendments to chapter 6.8. These questions and reservations in square brackets were considered by the tanks working group.

18. In INF 21 attention was drawn to the benefits of having a national approval system for inspection bodies. The expert of the Netherlands expressed the view that systems based on the fundamental requirements of ISO 17020 were being applied in the Netherlands with very good results.

19. The European Commission presented INF 25 in which several amendments were proposed to help ensure the proper functioning of the Transportable Pressure Equipment Directive. In particular on the subject of a national system for the approval of inspection bodies a discussion led to new wording for 1.8.6.2.1 as follows:

“When the competent authority approves an inspection body, the approval scheme shall be based on EN ISO/IEC 17020:2012 (except clause 8.1.3) type A, or type B when allowed in chapter 6.2.

Except when 6.2.2.11, 6.2.3.6 and TA4 and TT9 of 6.8.4 apply, competent authorities may decide not to use accreditation according to EN ISO/IEC 17020:2012. In these circumstances the competent authority shall provide all the documentary evidence necessary for the verification of the competence and independence of the inspection bodies in accordance with 1.8.6.2.4.

When the competent authority does not approve inspection bodies but performs these tasks itself, the competent authority shall meet the provisions of 1.8.6.3. “

20. After making revisions to INF 13 and the wording above the experts of the tanks working group were of the opinion that from a technical point of view there could be confidence that the amendments would be effective. Some wording had to remain in square brackets mainly for editorial reasons, although one particular issue concerning the work done by inspection bodies in other territories was yet to be discussed.

21. Also, as this was the first time the complete set of amendments were available it was felt that the effects of the proposed wording should be further considered at the next meeting of the informal working group to be held on 12th to 14th of June 2019 in London. Delegates are invited to consider the proposals and submit comments to the working group in due time to enable the text to be finalized at this meeting with a view to adoption at the autumn session of the Joint Meeting.

Item 7: ECE/TRANS/WP.15/AC.1/2019/19 (Poland) – Carriage of tanks, battery-wagons/battery-vehicles and MEGCs following the expiry of deadlines for intermediate inspections.

22. In the March 2016 session of the Joint Meeting 4.3.2.3.7 was amended to allow carriage for an additional month after the expiry of the next periodic inspection when the tank was filled before. However, this option was not included for the intermediate inspection, and in 6.8.2.4.3 it is stated that the intermediate inspection could take place 3 months before or after the specified date, thus adding three months.

23. Poland proposes amendments to 4.3.2.3.7 to allow carriage when the tank is filled before the specified date for the intermediate inspection (based on the date of the previous inspection), up to 3 months after that date. Thus allowing the 3 months given in 6.8.2.3.4.

24. Discussion evolved on the exact meaning of the wording “ within three months before or after the specified date” in 6.8.2.3.4 , 4th paragraph. It was said that the intention is that the intermediate inspections may be performed up to 3 months after the specified date but that the tank may from the specified date no longer be used for carriage of dangerous goods.

25. There was principle agreement with the proposal but the wording needed some improvement. As this amended wording should be checked it was decided to adopt it for the time being in square brackets.

Proposal 3: Amend 4.3.2.3.7 to read as follows (new wording shown bold and underlined, deleted wording stricken through):

[“4.3.2.3.7 Tank-wagons, demountable tanks, battery-wagons (RID)/Fixed tanks (tank-vehicles), demountable tanks, battery-vehicles (ADR), tank-containers, tank swap bodies and MEGCs may not be filled or offered for carriage after the specified date ~~deadline~~ for the ~~test~~ ~~or~~ inspection required by 6.8.2.4.2, 6.8.2.4.3, 6.8.3.4.6 and 6.8.3.4.12 ~~has expired~~.

However, tank-wagons, demountable tanks, battery-wagons (RID)/fixed tanks (tank-vehicles), demountable tanks, battery-vehicles (ADR), tank-containers, tank swap bodies and MEGCs filled prior to the specified date ~~of expiry~~ of the last ~~periodic~~ inspection may be carried:

(a) for a period not to exceed one month after the specified date for the ~~of expiry of these deadlines~~ the last periodic inspection;

(b) unless otherwise approved by the competent authority, for a period not to exceed three months after the specified date for the ~~expiry of these deadlines~~ the last periodic inspection in order to allow the return of dangerous goods for proper disposal or recycling. Reference to this exemption shall be mentioned in the transport document-;

(c) for a period not to exceed three months after the specified date for the intermediate inspection as specified in 6.8.2.4.3.”]

Item 8: INF.5 (United Kingdom) – Testing pressure relief valves of LPG road tankers at intermediate inspections.

26. The Tanks Working Group was informed on the preliminary findings of the LPG road tanker Pressure Relief Valve test programme being undertaken in the United Kingdom. The purpose of the test programme is to build up an evidence base that will allow inspection bodies at intermediate inspections to justify a check of the documentation or the marking of pressure relief valve set pressures (as permitted by EN14334:2014) rather than physically testing such valves (as required by EN12972:2007 and 2018). In the test programme 145 valves were tested so far and only one had deviating opening pressure probably from new. Besides this all functioned properly.

27. The working group thanked the United Kingdom for the information. It was remarked that the tanks constructed according to EN 12493 could be inspected based on EN 14334 which allows visual inspection of the pressure relief valve.

Item 9: INF.14 (Netherlands) – Approval of portable tanks as tank-containers.

28. The approval of portable tanks as tank-containers may present confusion for inspection bodies and users and enforcers which increases the risk of dangerous situations. For the users there are certain benefits for having dual approval and it is suggested that when the benefits by having approval as tank-container also apply to portable tanks the dual approval will stop.

29. The absence of a portable tank instruction for entries that do have a tank code, allowance to have bottom discharge for tank-containers while for portable tanks top-discharge is prescribed and the higher degree of filling for tank-containers are given as arguments for dual approval.

30. The expert of the Netherlands explained that an option could be to introduce additional portable tank instructions in the table A of chapter 3.2, that would be applicable for inland use only and should be clearly recognizable as such. The same could apply for a special provision or special provisions to allow for a similar degree of filling as for tank-containers clearly recognizable for inland transport use only. However it was said that to organize this issue of tank instructions in an orderly fashion involved a lot work and that there should be agreement in principle for such way forward.

31. Several experts were of the opinion that this approach would have positive results in preventing dual approvals. Most of the delegates expressed the view that dual approvals should no longer be issued. It was then decided that there was no need to continue with the project.

Item 10: INF.16 (UIP) – Interpretation of requirements by EN 14025: minimum diameter of manholes in tanks.

32. EN 14025 requires manholes in tanks to be a minimum of 500 mm in diameter. However the reference in EN 14025:2008 to EN 12561 allows for standard flanges that have an outside diameter slightly over 500 mm but an internal diameter of 492 mm due to the wall thickness. In the past tank-wagons were built with manholes with these standard flanges but as the reference is no longer included in EN 14025 the discussion is whether standard flanges with an internal diameter of 492mm can still be used.

33. It was stated that the minimum internal diameter of 500 mm needs to be satisfied. It was said that in that case a transitional measure could be required for tank-wagons built according to EN 14025-2008.

Item 11: INF.19 (Germany) – Sub-section 6.9.1.3 of RID/ADR: Heating elements for FRP tanks

34. Germany requested an interpretation on whether heating elements are allowed on FRP tanks. Although in the English and French texts the wording of 6.9.1.3 states that “heating elements shall not be used for FRP tanks”. As this appears in the chapter dealing with design and construction of these tanks the majority view was that these tanks should not be equipped with heating elements.