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 **19 March 2014**
Bern, 17–21 March 2014

Report of the Working Group on Tanks

1. The Working Group on Tanks met from 17 to 19 March 2014 in Bern on the basis of an appropriate mandate from the RID/ADR/ADN Joint Meeting, under the chairmanship of Mr. Arne Bale (United Kingdom) and with Mr. Michaël Bogaert (Belgium) 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 28 experts from 15 countries and 5 non-governmental organizations, dealt with the following official and informal documents :

Documents: ECE/TRANS/WP.15/AC.1/2014/1 (Germany)
ECE/TRANS/WP.15/AC.1/2014/5 (Romania)
ECE/TRANS/WP.15/AC.1/2014/6 (Germany)
ECE/TRANS/WP.15/AC.1/2014/9 (Russian Federation)
ECE/TRANS/WP.15/AC.1/2014/13 (Ukraine)
ECE/TRANS/WP.15/AC.1/2014/15 (CEN)
ECE/TRANS/WP.15/AC.1/2014/24 (Spain)
ECE/TRANS/WP.15/AC.1/2014/30 (AEGPL)
ECE/TRANS/WP.15/AC.1/2014/32 (EIGA)
ECE/TRANS/WP.15/AC.1/2014/34 (France)

Informal documents:INF.5 (France)
INF.9 (EIGA)
INF.15 (OTIF secretariat)
INF.24 (United Kingdom)
INF.25 (Belgium)
INF.28 (UNECE secretariat)
INF.30 (Sweden)
INF.33 (Germany)
INF.35 (EIGA)
INF.43 (Poland)
INF.48 (Russian Federation) – arrived 17/3/2014

Item 1: ECE/TRANS/WP.15/AC.1/2014/1 (Germany) – Continued use of fixed tanks (tank-vehicles), demountable tanks and battery-vehicles in accordance with the transitional provisions of ADR 1.6.3.1, 1.6.3.2 and 1.6.3.3 + INF.35 (EIGA) + INF.43 (Poland)

3. The Working Group considered the proposal from Germany in detail and regretted that some provisions for RID were already agreed upon in the RID standing working group for rail tankwagons. It was pointed out that these provisions did not provide for a transitional measure for rail tankwagons built before 1967 and that this should in any case be addressed or these tanks would have to be discontinued from further use on 1/7/2015.

4. The Group raised a number of question with regards to the reasoning behind the proposal and the proposed dates:

- What criteria were used to propose 45 years of service life for tank-vehicles, demountable tanks and battery-vehicles?
- Is there a safety issue experienced with these older tanks or a higher accident or failure rate witnessed?
- Why is there no difference made between the type of class 2 tanks (cryogenic, liquefied gases, compressed gases)?
- For RID, a different service life seems to have been adopted for different ages of tanks, why was the same approach not followed for ADR?
- Why is a maximum service life appropriate for class 2 tanks and not for instance for pressure receptacles, tube-trailers,…?
- Why is further use not dependent on individual technical assessment of design and type of intended further use, or even adapted test schemes to check for fatigue?
- Why was the focus for the cutoff dates only based on wall thickness (not welding,…)?

Consequently, a number of clarifications and responses were given:

- The intent of the paper is to install a transition regime to evolve towards a more harmonised safety level.
- ADR tanks built before 1978 had a lower prescribed minimum wall thickness.
- The lifespan of 45 years is an estimate of the service life of ADR tanks, which is considered to be shorter than the service life of rail tankwagons.
- In order to create a level playing field, a maximum service life for rail tankwagons should go hand in hand with a maximum service life for ADR tanks.
- Also for equipment and type approvals in accordance with standards, end dates are specified in the RID/ADR.

5. The discussion indicated that while for RID the provisions affected around 5000 rail tankwagons, for ADR only around 150 mostly cryogenic tanks would be impacted. Furthermore, many experts were of the opinion that there are more than solely technical arguments upon which the decision will be based. The Group did not reach a consensus on the matter and decided that the ultimate decision for ADR should be taken by WP.15, in the same way as the RID standing working group decided for RID. The RID Committee of Experts is at least invited at its May session to evaluate a transitional measure for tankwagons built before 1967.

Item 2: ECE/TRANS/WP.15/AC.1/2014/5 (Romania) – Comments on the new SP 664 in Chapter 3.3 of ADR and amendments to the definition of service equipment in 1.2.1

6. The Working Group supported the proposal set forward by Romania to be consistent in terminology between chapters 6.7 and 6.8 of RID/ADR. The term "discharge" was for that reason deemed more appropriate then "emptying". It was pointed out however that the difference between these terms is not apparent is some other languages, where both terms are covered under the same translation (e.g. French "vidange").

7. The second options of proposals 1 and 3 of the working document were endorsed by the Working Group. The second proposal, aimed at clarifying the first line of SP 664 with regards to discharge of the tank was not deemed necessary. Additionally, the Working Group took the opportunity to also propose the inclusion of "breather devices" in the definition of service equipment, which was omitted in the RID/ADR 2013 versions.

Proposal

8. In the "*Service equipment*" definition in 1.2.1, points (a) and (b), replace "emptying" with "discharge".

9. In the "*Service equipment*" definition in 1.2.1, point (a), replace "venting," with "breather,".

10. In the new special provision 664, in the second indent after "Additive devices", replace "emptying device" with "discharge device".

Item 3: INF.25 (Belgium) – Transitional measure for additive devices

11. The Working Group considered the items of INF.25 which fell within the remit of their work. After a discussion, the Working Group concluded the following:

- The transitional measure 1.6.3.44 should also allow the competent authority to cover testing requirements in the national approval.
- Instead of asking the approval for continued use of additive devices not conforming to SP 664 in every country of use, it was preferable to ask this approval only from the competent authority in charge of the type approval of the tank in question.
- The term "agreement" is preferable instead of the word "approval" in 1.6.3.44.
- The transitional measure should be redrafted to allow a further use of existing systems until the next intermediate or periodic inspection, at which time their conformity with SP 664 will be assessed and they are either discontinued from further use or the subject of an approval from the competent authority as set out above.

Alternatively, several experts were of the opinion that is was preferable to delete the requirement for a competent authority approval for further use of the existing additive devices not conforming to SP 664 altogether.

12. The representative of Belgium agreed to communicate this to the next WP.15 meeting in the form of a proposal for amendment of 1.6.3.44 for the ADR 2015 version.

Item 4: ECE/TRANS/WP.15/AC.1/2014/6 (Germany) – Chapter 6.10 Vacuum-operated waste tanks + ECE/TRANS/WP.15/AC.1/2014/34 (France) + INF.5 (France)

13. The Working Group welcomed representatives from the French and German associations for vacuum operated waste tanks, who gave presentations on the current practices, existing concerns and recommendations for ways forward. A technical discussion was held in the Working Group on the two different established practices:

a) Equipping the tank vacuum pump/exhauster unit liable to generate a source of ignition completely with flame traps to prevent a spark from igniting flammable vapours within the tank.
b) Designing the tank to be explosion pressure shock resistant to contain the effects of a possible ignition within the tank itself.

Both systems seemed to present advantages and disadvantages (not limitative):

	System A	**System B**
Advantages	Prevention of ignition, also towards fixed installations linked to the exhaust line.	Tank can withstand explosion (less risk when a spark is created in the tank by a foreign object)
Disadvantages	Tank cannot withstand explosion	Operational procedures necessary to avoid ignition or propagation of a flame (e.g. during start and end of pump cycle)

14. The Working Group ultimately agreed on a more general wording for a new paragraph in 4.5.2.5 recognising the merits of both systems and addressing the need avoid propagation of the effects of ignition in the tank to the exhaust line. Interested parties were invited to come back to the Tank Working Group with further proposals if deemed necessary.

Proposal

15. Insert a new 4.5.2.6:

"4.5.2.6 When a vacuum pump/exhauster unit which may provide a source of ignition is used to fill or discharge liquids with a flashpoint of not more than 60°C, precautions shall be taken to avoid ignition of the substance or to avoid the propagation of the effects of the ignition outside the tank itself."

Adopt the proposal in the second line of paragraph 7 of document 2014/34:
6.10.3.8 b) A device to prevent the immediate passage of flame shall be fitted to *all openings* of a vacuum pump/exhauster unit …

(ADR only) Insert a new 4.5.2.5 which reads: "(reserved)".

Item 5: ECE/TRANS/WP.15/AC.1/2014/9 (Russian Federation) – Proposal of modifications of the special provisions for the carriage of UN 1131 and related issues

16. The Working Group recognised the ongoing efforts of harmonisation between RID and SMGS appendix 2 and discussed the working document in detail. The document mainly comprised two sets of proposed amendments:

a) Assigning TU22 and a new TU51 to UN 1131
b) Deleting TP2 and TP7 against UN 1311 and replacing them with a new TP 41and TP42.

17. For the first set of proposals, an analysis showed that the current filling ratio as applicable in chapter 4.3 and the proposed TU22 constituted a difference of only 1% in degree of filling. Hence it was not deemed necessary to attribute TU22, typically attributed to substances of classes 4.2 and 4.3, also to UN 1131. Instead of the detailed prescriptions in the newly proposed TU51, the Group preferred to assign the existing TU2 to UN 1131 to cover the requirement for carriage under an inert layer of gas.

18. It was acknowledged that for the second set of proposals, the decision is made by the UN SubCommittee of Experts and that the issue should be taken up at that level. In light of the discussion on a) above however, the Group did not see an immediate necessity to replace TP2 and TP7 with a new TP41 and TP42. The systematic approach of closed protective caps for the closures and the prohibition on the carriage of foodstuffs within RID/ADR which does not exist in the UN Model Regulations could however be taken into account in that discussion.

Proposal

19. Insert "TU2" in column 13 of Table A of Chapter 3.2 for UN 1131.

Item 6: ECE/TRANS/WP.15/AC.1/2014/13 (Ukraine) – Proposals of amendments to special provisions TU21 and TU16 to align with the requirements of SMGS, Appendix 2 + INF.48 (Russian Federation)

20. The Working Group considered the document from Ukraine in detail. Unfortunately, INF.48, which was issued on 17 March 2014, arrived too late to be considered by the Working Group, which had concluded its discussion on the topic before being aware of INF.48.

21. This topic was discussed taking into account the harmonization efforts between RID and SMGS Appendix II. The document was introduced by Latvia on behalf of Ukraine and the SMGS Working Group. Two elements are put forward in the paper: an amendment to TU21 and an amendment to TU16.

22. The Group agreed that the current provisions under TU21 require either the use of nitrogen or the use of both water and nitrogen for the transport of phosphorus (UN 2447 and UN 1381). With regards to the incident described in the working paper, the Group questioned if the tank was hermetically sealed and if nitrogen had been applied to fill the remaining ullage space as is required for RID. It was understood that SMGS Appendix II does not require additional nitrogen when a water layer has been applied. Therefore the Group did not feel that an increased height of the water layer plays a key role as long as the tank remains under nitrogen pressure. Additionally, several experts pointed out that an increased water layer height would mean an increased amount of waste water per transport operation.

23. From a technical perspective, the only reason to increase the amount of water could be to increase the thermal buffering effect of the water. Additionally, the Group considered the addition of a requirement on antifreeze for transport in areas with temperatures below 0°C. For the moment however, the Group was content to give this feedback to Ukraine for further consideration. In conclusion, option 1 was not endorsed by the Group and option 2 was felt to be unnecessary as a transport which changes from an RID to an SMGS regime would have to fulfil the minimum requirements of both regimes and there was no identified contradiction.

24. The proposal to modify TU16 was mainly aimed at ensuring sufficient braking when an empty, uncleaned tank is filled with water. Feedback from several experts indicated that the current systems (either the manual braking system with a switchpoint between “empty” and “full” or the automatic braking system) were adequate. Ultimately, the Group decided that the question to include or not an additional mention in the transport document was a general issue for the rail mode and that it could be deferred to the RID standing working group.

Item 7: ECE/TRANS/WP.15/AC.1/2014/24 (Spain) – Carriage of liquefied natural gas (UN 1972) in non-vacuum insulated vessels

25. The Working Group considered this document in the follow-up of the discussion at the September session of the Tanks Working Group. After considerable discussion, the Group agreed that:

- The current reference to EN 14398-2:2003 (except table 1) is not correct in the table of standards listed in chapter 6.8 and should be replaced with a reference to the “new” standard, dated 2008. As such, also the reference to exclude table 1 is no longer applicable, as the 2008 amendment to the standard deleted the original table 1, which contained provisions for minimum wall thickness not in conformity with the provisions of ADR. The Standards Working Group is invited to take account of this issue and amend the reference to the standard accordingly, as well as verify the coherence in scope between the different parts of the standard.
- A clarification of the non-applicability of the standard EN 14398-2:2003 + A2:2008 to LNG (UN 1972) is desirable and the Standards Working Group is asked to take this into consideration.
- The first proposal under paragraph 37 of 2014/24 was not supported by the Group.
- The Group agreed that it should be communicated to all concerned parties that any current construction of non-vacuum insulated tanks for the transport of LNG should be stopped within the ADR framework.
- There is already a transitional measure in place for foam insulated tanks for LNG, constructed and approved before 1 January 2009.

26. Additionally, several other issues were raised, for which there was no consensus:

- There is a difference in the use of non-vacuum insulated tanks for typical substances such as CO2 (at -20°C) and substances such as LNG (-162°C). However, there was no consensus on the relative safety level of both types tanks for this transport: vacuum insulated or foam insulated.
- Some expressed the view that there was sufficient cause to misinterpret the scope of applicability of the EN 14398 standard in the way it is referenced currently.
- Opinions were divided on the opportunity to adopt the second proposal in 2014/24 for the ADR 2015 version, which is to insert a transitional measure in 1.6.3 to allow for the continued use of non-vacuum insulated tanks for UN 1972 (or possibly UN 3161) constructed and approved before 30 September 2013 but after 1 January 2009, when the standards became mandatory. An initial analysis showed that at least around 40 tanks were affected in 3 member states.
- However, several experts considered it more appropriate to allow their continued use via a multilateral agreement or through a national derogation.

Ultimately, the group agreed that there were not only technical arguments upon which the final decision will be made and that it had exhausted its role as expert body. Hence, the final decision should be discussed in the Joint Meeting and ultimately be taken by the WP.15, as only ADR is affected.

Item 8: ECE/TRANS/WP.15/AC.1/2014/30 (AEGPL) – Periodic inspection of LPG tank-vehicles, alternatives to the hydraulic test

26. The Working Group considered the document presented by AEGPL and went through it in great detail. The intent of the paper was to only replace the hydraulic test during the periodic inspection. The Group reconfirmed several points previously discussed and received answers for the outstanding points previously listed:

- The scope of the proposed TT11 should initially be limited to only LPG carbon steel road tanks.
- It should be possible to apply a combination of NDT's during the inspection.
- Acoustic emission was not deemed a very practicable NDT method for road tankers (too many discontinuities in the mounting of the tank, flexible joints,…) and is not included in the proposed list of methods.
- The competence of the person applying the NDT should be adequately covered either via a standard or similar to TT8.

Ultimately, The Group agreed upon a revised proposal for the Joint Meeting (track changes with respect to document 2014/30):

Proposal

27. Add a TT11 code to column (13) of Table A of Chapter 3.2 of ADR for the following dangerous goods: UN 1011, UN 1075, UN 1965, UN 1969 and UN 1978.

28. Add a new special provision (TT11) to 6.8.4 (d) left hand side only as below:

> "For fixed and demountable tanks ***used exclusively for the carriage of LPG***, with carbon steel shells and service equipment, ~~[and with the agreement of the expert approved by the competent authority who is authorised to carry out the periodic inspection]~~ the hydraulic pressure test, at the time of the periodic inspection, may be replaced by the non-destructive testing (NDT) techniques listed below, either

singularly or in combination as deemed suitable by the ~~expert~~ ***competent authority, its delegate or inspection body (see TT9)***:

- **EN ISO 17640:2010 -** Non-destructive testing of welds – Ultrasonic testing – Techniques, testing levels and assessment
- **EN ISO 17638:2009 -** Non-destructive testing of welds – Magnetic particle testing, with defect acceptance in accordance with **EN ISO 23278:2009** (Magnetic particle testing of welds. Acceptance levels)
- **EN 1711:2000 -** Non-destructive testing of welds - Eddy current examination of welds by complex plane analysis.
- **EN 14127:2011 -** Non-destructive testing of welds - Ultrasonic thickness measurement

Personnel involved in NDT shall be qualified, certified and have the appropriate theoretical and practical knowledge of the non-destructive tests they perform, specify, supervise, monitor or evaluate in accordance with:

- **EN ISO 9712:2012 -** Non-Destructive Testing. Qualification and Certification of NDT Personnel

~~All nuts, bolts and studs used on pressure retaining joints shall be removed and visually examined for damage or corrosion. [Any that show damage or corrosion that will reduce their strength shall be replaced by suitable new nuts, bolts or studs in accordance with the original specification.]~~

After ~~any hot work (~~direct application of heat such as welding or cutting~~)~~ to the pressure containing elements of the tank a hydraulic test ~~must~~ ***shall*** be carried out in addition to any prescribed NDT.

~~The NDT does not replace the leakproofness test that is to be undertaken on the complete shell and equipment assembly.~~

NDT shall be performed on the areas of the shell and equipment listed in the table below.

Area of Shell and Equipment	**NDT**
Shell longitudinal butt welds	100 % NDT, using one or more of the following techniques: ultrasonic, magnetic particle or eddy current testing.
Shell circumferential butt welds	
Attachments, manway, nozzles and opening welds (internal) direct to the shell	
High stress areas of tank fastening attachment doubling plates (over the saddle horns plus 400 mm)	
Piping and other equipment welds	
Shell, areas that cannot be visually inspected from the outside	Ultrasonic thickness survey, from inside, on a 150 mm (maximum) spaced grid

Irrespective of the original design and construction standard or technical code used for the tank, the defect acceptance levels shall be in accordance with the requirements of the relevant parts of ***EN 14025:2013 (Tanks for the transport of dangerous goods – Metallic pressure tanks – Design and construction)***, **EN 12493:2013** (LPG equipment and accessories - Welded steel tanks for liquefied petroleum gas (LPG) Road tankers - design and manufacture), **EN ISO 23278:2009** (Non-destructive testing of welds. Magnetic particle testing of welds. Acceptance levels) or the acceptance standard referenced in the applicable NDT standard..

If an unacceptable defect is found in the tank by NDT methods it shall be repaired and retested. ***It*** is not ~~permissible~~ ***permitted*** to hydraulic test the tank without undertaking the required repairs~~)~~.

The results of the NDT shall be recorded and retained for the lifetime of the tank.".

Item 9: ECE/TRANS/WP.15/AC.1/2014/32 (EIGA) – Holding times for refrigerated liquefied gases in tank containers and demountable tanks + INF.9 (EIGA) + INF.24 (United Kingdom)

29. The Working Group supported the document presented by EIGA and agreed to use the redrafted text in INF.24 as the basis for the discussion. The Group agreed that the proposal should only cover tank wagons (RID) and tank containers (ADR/RID). Additionally it was decided to place the new provisions for determining the actual holding time in a new 4.3.3.5 instead of creating a new TU provision. A transitional measure is envisaged until the next inspection (e.g. intermediate or periodic), by which time the calculated reference holding time should be indicated on the tank plate.

30. The Group also welcomed and reviewed the referenced guidance material developed by EIGA and decided to ask the OTIF and UNECE secretariats to place a link to the EIGA document 184/14 on their respective websites.

31. Ultimately, the Group agreed upon a revised version of INF.24 as a proposal to the Joint Meeting (track changes with respect to INF.24).

Proposal

32. In 1.2.1, add:

""*Holding time*" means the time that will elapse from the establishment of the initial filling condition until the pressure has risen due to heat influx to the lowest set pressure of the pressure limiting devices (s) of tanks intended for the carriage of refrigerated liquefied gases.

NOTE: *For portable tanks, see 6.7.4.1."*

33. Create a new 4.3.3.5 which reads:

"The actual holding time shall be determined for each journey of a *tank (RID) / tank container (ADR)* carrying a refrigerated liquefied gas on the basis of the following:

(a) The reference holding time for the refrigerated liquefied gas to be carried

(see 6.8.3.4.10) as indicated on the plate referred to in 6.8.3.5.4;

(b) The actual filling density;

(c) The actual filling pressure;

(d) The lowest set pressure of pressure limiting device(s);

(e) The deterioration of the insulation[1].

NOTE: *ISO 21014:2006 'Cryogenic vessels – Cryogenic insulation performance' details methods of determining the insulation performance of cryogenic vessels and provides a method of calculating the holding time.*

The date (or time) by which the actual holding time will be exceeded shall be provided on the transport document (see 5.4.1.2.2. (d)).'

Tanks shall not be offered for carriage:

(a) In an ullage condition liable to produce an unacceptable hydraulic force due to surge within the shell;

(b) When leaking;

(c) When damaged to such an extent that the integrity of the tank or its lifting or securing arrangements may be affected;

(d) Unless the service equipment has been examined and found to be in good working order;

(e) Unless the actual holding time for the refrigerated liquefied gas being carried has been determined.

(f) Unless the duration of carriage, after taking into consideration any delays which might be encountered, does not exceed the actual holding time.

(g) Unless the pressure is steady and has been lowered to a level such that the actual holding time may be achieved[1].

[1]. "Guidance is provided in the European Industrial Gases Association (EIGA) document "Methods to prevent the premature activation of relief devices on tanks" available at www.eiga.eu <http://www.eiga.eu"."

NB: For RID this text would appear across the whole page (being applicable to tank wagons and tank containers) and for ADR the text would only appear on the right hand side of the page (being applicable only to tank containers).

34. Add 5.4.1.2.2(c) in ADR to read: (reserved)

35. Add 5.4.1.2.2(d) in ADR to read:

"In the case of tank containers carrying refrigerated liquefied gases the consignor shall enter in the transport document the date (or time) by which the actual holding time will be exceeded."

36. For RID only, amend 5.4.1.2.2. (d) to read:

"In the case of tank wagons and tank containers carrying refrigerated liquefied gases the consignor shall enter in the transport document the date (or time) by which the actual holding time will be exceeded."

37. Add the following to the end of 6.8.3.2 15:

For type testing of the effectiveness of the insulation system, see 6.8.3.4.11.

38. Insert new text for 6.8.3.4 which reads:

"Holding times for tanks carrying refrigerated liquefied gases

6.8.3.4.10 The reference holding time for tanks carrying refrigerated liquefied gases shall be determined on the basis of the following:

(a) The effectiveness of the insulation system, determined in accordance with 6.8.3.4.11;

(b) The lowest set pressure of the pressure limiting device(s);

(c) The initial filling conditions;

(d) An assumed ambient temperature of 30 °C;

(e) The physical properties of the individual refrigerated liquefied gas intended to be carried.

6.8.3.4.11 The effectiveness of the insulation system (heat influx in watts) shall be determined by type testing the tanks. This test shall consist of either:

(a) A constant pressure test (for example at atmospheric pressure) when the loss of refrigerated liquefied gas is measured over a period of time; or

(b) A closed system test when the rise in pressure in the shell is measured over a period of time.

When performing the constant pressure test, variations in atmospheric pressure shall be taken into account. When performing either tests corrections shall be made for any variation of the ambient temperature from the assumed ambient temperature reference value of 30 °C.

NOTE: *ISO 21014:2006 'Cryogenic vessels — Cryogenic insulation performance' details methods of determining the insulation performance of cryogenic vessels and provides a method of calculating the ~~reference~~ holding time.*

39. Renumber the existing paragraphs from 6.8.3.4.10 to 6.8.3.4.16

40. Add new text to 6.8.3.5.4, underlined:

6.8.3.5.4 On tanks intended for the carriage of refrigerated liquefied gases:

- the maximum working pressure allowed.
- reference holding time (in days or hours) *for each gas* [13]
- *the associated* initial pressures (in bar gauge or kPa gauge)[13]"

NB: As regards formatting, the introductory sentence to 6.8.3.5.4 should remain unchanged, but in relation to the two new indents and the text for 6.8.3.2.15, new 6.8.3.4.10 and 6.8.3.4.11, for RID the text would appear across the whole page (being applicable to tank wagons and tank containers) and for ADR the text would only appear on the right hand side of the page (being applicable only to tank containers). Footnote 13 should appear against both new indents (NB a different numbering system is used in RID).

41. For RID only, add new 1.6.3.xx to read:

"1.6.3.xx Tank wagons for refrigerated liquefied gases constructed before 1 July 2015 in accordance with the requirements in force up to 31 December 2014 but which do not however conform to the requirements of 6.8.3.2.10, 6.8.3.2.11 and 6.8.3.5.4 applicable from 1 January 2015 may continue to be used until the next ~~periodic~~ inspection after 1 July 2015. Until this time, to meet the requirements of ~~TU42 of 4.3.5~~ *4.3.3.5* and 5.4.1.2.2(*d*), the actual holding times may be estimated without recourse to the reference holding time."

42. For RID and ADR, add new 1.6.4. yy to read:

"1.6.4.yy Tank containers for refrigerated liquefied gases constructed before 1 July 2015 in accordance with the requirements in force up to 31 December 2014 but which do not however conform to the requirements of 6.8.3.4.10, 6.8.3.4.11 and 6.8.3.5.4 applicable from 1 January 2015 may continue to be used until the next ~~periodic~~ inspection after 1 July 2015. Until this time to meet the requirements of ~~TU42 of 4.3.5~~ *4.3.3.5* and 5.4.1.2.2(*d*), the actual holding times may be estimated without recourse to the reference holding time."

Item 10: INF.15 (OTIF Secretariat) – Clarification of the provisions of 6.8.3.2.6 and 6.8.3.2.13 and special provision TM3 of 6.8.4

43. The Working Group considered the questions raised by the OTIF secretariat in order and agreed on the following proposals:

Proposal

a) On 6.8.3.2.6 : The Group discussed that the background of the requirement for non-transparent gauges were probably to avoid having looking glasses in these tanks, which would mean an additional flange,… The majority of the Group was of the opinion not to change the current provisions as looking glasses were not desired for these tanks.

b) On 6.8.3.2.13: The Group agreed with the proposal from the OTIF secretariat in paragraph 9 of INF.15 to replace "demountable elements" with "demountable tanks" in order to be consistent in the terminology. This issue was only for RID.

c) On TM3: The Group considered the intent of the proposed changes but agreed that it would be more appropriate to modify TM3 to refer to each individual substance as TM3 is assigned to individual UN entries, typically for highly dangerous substances such as dichlorosilanes, anhydrous HF,…, which are not all necessarily carried in dedicated tanks:

"*TM3: Tanks shall also bear, on the plate prescribed in 6.8.2.5.1, the proper shipping name and the maximum permissible load mass in kg for this substance.*"

Item 11: INF.28 (UNECE Secretariat) – Transitional measures for tanks

44. The Working Group agreed with the proposed deletion of 1.6.4.31. The Group did not agree however with the deletion of 1.6.4.15 as under 6.8.3.4.6 it was possible to omit the intermediate inspection for tank containers, which would mean that the tank would not be seen until after 12 years.

Item 12: INF.30 (Sweden) – Interpretation of standards

45. The Working Group agreed with the representative of Sweden that the current table, with the inclusion of the new text as heading of the table in subsection 6.8.2.6.1, was not clear. It was stated that the scope of the standards should remain applicable as standards are written as a whole and may not be applicable or suitable outside their scope. For this reason the Working Group proposes the following consequential amendments:

Proposal

46. Delete the various subheadings in the table under 6.8.2.6.1 and delete the double entry for standard EN 13094.

Item 13: INF.33 (Germany) – Complement to special provision TC8 of ADR 6.8.4 for the carriage in tanks of UN 0331 Explosive, blasting, type B

47. The Working Group agreed in principle with the proposal since currently 6.8.2.1.7 allows for a lower external design pressure for packing group II and III substances and the problem arose from the fact that UN 0331 does not have an assigned packing group. Germany was invited to submit a proposal to the next WP.15 as a solution for 2015 was preferable and it concerned only ADR tanks.

Item 14: ECE/TRANS/WP.15/AC.1/2014/15 (CEN) – Understanding of the terms “in special cases” and “as a general rule” in the context of pressure testing of tanks

48. The problem originated from the revision of the testing standard EN 12972 in CEN/TC 296, where it was discussed to have a closed set of conditions under which alternative testing media could be used. The Working Group agreed to evaluate the issue further in the near future based on written proposals. It was however pointed out that the closed and detailed way in which standards are written differs from legislation, which can be more accommodating to special circumstances and leave more room for professional judgement.