



## ORGANISATION INTERGOUVERNEMENTALE POUR LES TRANSPORTS INTERNATIONAUX FERROVIAIRES

# ZWISCHENSTAATLICHE ORGANISATION FÜR DEN INTERNATIONALEN EISENBAHNVERKEHR

INTERGOVERNMENTAL ORGANISATION FOR INTERNATIONAL CARRIAGE BY RAIL

OTIF/RID/CE/GT/2010/4

3 May 2010

Original: German

RID: 11<sup>th</sup> Meeting of the working group on tank and vehicle technology

(Berne, 18 and 19 May 2010)

Subject: Adaptation of the transitional provisions in RID 1.6.3 – tank-wagons and bat-

tery-wagons

**Proposal transmitted by Germany** 

#### Introduction

- 1. At the 47<sup>th</sup> session of the RID Committee of Experts (Sofia, 16 20 November 2009), the RID Committee of Experts' working group on tank and vehicle technology was mandated to check the transitional provisions relating to tank-wagons (see also final report of the 47<sup>th</sup> session of the RID Committee of Experts (Sofia, 16 20 November 2009) (Document OTIF/RID/CE/2009-A, paragraphs 22 to 24).
- 2. The Joint Meeting's tank working group was also asked to check the common transitional provisions, particularly those in 1.6.3.5, 1.6.3.6 and 1.6.3.22.

#### **Proposal**

- 3. Together with the chairman of the RID Committee of Experts' working group on tank and vehicle technology (Mr Kogelheide), Germany has reviewed all the transitional provisions in RID 1.6.3 relating specifically to tank-wagons.
- 4. In the annex, the result of the analysis has been presented in the form of a table. This table can be used as the basis for further discussions in the working group on tank and vehicle technology, the RID Committee of Experts and the Joint Meeting's tank working group.

For reasons of cost, only a limited number of copies of this document have been made. Delegates are asked to bring their own copies of documents to meetings. OTIF only has a small number of copies available.

- 5. As the proposals may have consequences for fixed tanks (tank-vehicles), demountable tanks, battery-vehicles and tank-containers, aspects affecting all transport modes must subsequently be discussed in the Joint Meeting's tank working group.
- 6. When looking at the transitional provisions, it was assumed that all tanks must meet the provisions of RID applicable in each case. Exceptions to this are dealt with in transitional provisions. New provisions included in RID later also apply to tanks that are subject to these transitional provisions, provided this is not qualified by special transitional provisions. This approach has already been taken into account in decisions taken by the RID Committee of Experts in recent years.

### **Transitional provisions in RID 1.6.3**

Explanations on the following table:

Column 1: Source in RID

Column 2: Column two contains the currently applicable transitional provisions (RID 2009) for tank-wagons and battery-wagons. To make it easier to

understand the individual transitional provisions, the paragraphs in RID referred to in the transitional provisions are also shown.

**Column 3:** For each transitional provision, column three contains proposals on how to deal with them in future.

	RID 2009	Proposal
1.6.3	Tank-wagons and battery-wagons	
1.6.3.1	Tank-wagons built before the entry into force of the requirements applicable as from 1 October 1978 may be kept in service if the equipment of the shell meets the requirements of Chapter 6.8. The thickness of the shell wall, except in the case of shells intended for the carriage of refrigerated liquefied gases of Class 2, shall be appropriate to a calculation pressure of not less than 0.4 MPa (4 bar) (gauge pressure) in the case of mild steel or of not less than 200 kPa (2 bar) (gauge pressure) in the case of aluminium and aluminium alloys.	Report OTIF/RID/CE/2009-A paragraph 23: check by RID CE WG tank and vehicle technology. Delete transitional provision.  Justification: The transitional provision in 1.6.3.3 limits application of this transitional provision until 30 September 1998.  Consequence: Check whether this also applies to ADR.
1.6.3.2	The periodic tests for tank-wagons kept in service under these transitional requirements shall be conducted in accordance with the requirements of 6.8.2.4 and 6.8.3.4 and with the pertinent special requirements for the various classes. Unless the earlier requirements prescribed a higher test pressure, a test pressure of 200 kPa (2 bar) (gauge pressure) shall suffice for aluminium shells and aluminium alloy shells.	Delete transitional provision. <u>Justification</u> :  The transitional provision in 1.6.3.3 limits application of this transitional provision until 30 September 1998. From 1 October 1998, the provisions of Chapter 6.8 (formerly Appendix XI) must be met (see 1.6.3.3).

	RID 2009	Proposal
		Consequence: Check whether this also applies to ADR.
1.6.3.3	Tank-wagons which meet the transitional requirements in 1.6.3.1 and 1.6.3.2 may be used until 30 September 1998 for the carriage of the dangerous goods for which they have been approved. This transitional period shall not apply to tank-wagons intended for the carriage of substances of Class 2, or to tank-wagons whose wall thickness and items of equipment meet the requirements of Chapter 6.8.	Report OTIF/RID/CE/2009-A paragraph 23: check by RID CE WG tank and vehicle technology.  New text:  "Tank-wagons constructed before the entry into force of the requirements applicable as from 1 October 1978 may still be used provided their wall thickness meets the requirements of RID in force from 1 January 1998."  Justification:  Tank-wagons could continue to be used if their wall thickness and items of equipment met the requirements of Appendix XI of RID 1998. The items of equipment of tanks might need to be adapted in line with the new requirements of RID, unless this is qualified by special transitional provisions (see also 1.6.3.1).  Consequence:  Check whether this also applies to ADR.
1.6.3.4	Tank-wagons constructed before 1 January 1988 in accordance with the requirements applicable up to 31 December 1987 and which do not conform to the requirements applicable from 1 January 1988 may still be used. This also applies to tank-wagons which do not bear the inscription of the shell materials in accordance with Appendix XI, 1.6.1, required from 1 January 1988.  Appendix XI, 1.6.1  Material of the shell and, where appropriate, the protective lining.	Report OTIF/RID/CE/2009-A paragraph 23: check by RID CE WG tank and vehicle technology.  New text:  "Tank-wagons constructed before 1 January 1988 in accordance with the requirements in force up to 31 December 1987 but which do not bear the inscription of the shell materials in accordance with Appendix XI, 1.6.1 (new: 6.8.2.5.1), required from 1 January 1988, may still be used."

	RID 2009	Proposal
	Taken over into 6.8.2.5.1  Material of the shell and reference to materials standards, if available and, where appropriate, the protective lining.	Justification:  Requirement was aligned with RID.
1.6.3.5	Tank-wagons, constructed before 1 January 1993 in accordance with the requirements in force up to 31 December 1992 but which do not conform to the requirements applicable as from 1 January 1993 may still be used.	Report OTIF/RID/CE/2009-A paragraphs 22 and 24: check by Joint Meeting's tank working group.  Not dealt with so far in Joint Meeting.  New text:  "Tank-wagons constructed before 1 January 1993 in accordance with the provider of the construction o
		dance with the requirements in force up to 31 December 1992 but which do not conform to the requirements applicable as from 1 January 1993 in accordance with Appendix XI, 1.2.8.2, (new: 6.8.2.1.17) may still be used."  Justification:
		In 1.2.8.2 (Calculation of wall thickness), the values for the permissible stress were amended, but this had no effect on tanks built previously.
1.6.3.6	Tank-wagons constructed before the entry into force of the requirements applicable from 1 January 1995 and which do not conform to those requirements, but were constructed according to the requirements of RID in force until that date may still be used.	Report OTIF/RID/CE/2009-A paragraphs 22 and 24: check by Joint Meeting's tank working group.  Not dealt with so far in Joint Meeting.
		Delete transitional provision.
		Justification:
		Appendix XI of RID 1995 does not contain any new requirements compared with Appendix XI of RID 1993.

RID 2009	Proposal
Tank-wagons intended for the carriage of flammable liquids with a flash-point from 55 °C to 60 °C constructed before 1 January 1997 in accordance with the requirements of Appendix XI, paragraphs 1.2.7, 1.3.8 and 3.3.3 applicable up to 31 December 1996 which do not conform to the requirements of those paragraphs in force from 1 January 1997 may continue to be used.  Text of RID 1995; underlined text: amendments according to RID 1997:  Appendix XI, 1.2.7  All parts of tank-wagons intended for the carriage of liquids having a flash-point of not more than \$5 °C 61 °C and for the carriage of flammable gases shall be linked by equipotential connections and shall be capable of being electrically earthed. Any metal contact capable of causing electrochemical corrosion shall be avoided.  Taken over into 6.8.2.1.27.  Appendix XI, 1.3.8  No movable parts such as covers, closures devices, etc., which are liable to come into frictional or percussive contact with aluminium shells intended for the carriage of flammable liquids having a flash-point of not more than \$5 °C 61 °C or for the carriage of flammable gases, may be made of unprotected corrodible steel.  Taken over into 6.8.2.2.9.  Appendix XI, 3.3.3  If shells intended for the carriage of the substances referred to in 3.1.1, 3.1.2 or 3.1.3 except those of item 33 are fitted with safety valves, a bursting disc shall be placed before the valve. The arrangement of the bursting disc and safety valve shall be such as to satisfy the competent authority.  If shells intended for the carriage of the substances referred to in 3.1.4	Transitional provision is still needed.  Proposal:  After the references to Appendix XI, the relevant parts of Chapter 6.8 should be cross-referenced.  Example:  "Appendix XI, 1.2.7 (new: 6.8.2.1.27), 1.3.8 (new: 6.8.2.2.9) and 3.3.3 (new: xxxxx)".

	RID 2009	Proposal
	are equipped with safety valves or a venting system, these shall satisfy the requirements of 1.3.5 to 1.3.7. If shells intended for the carriage of substances of item 33 are fitted with safety valves, these shall satisfy the requirements of 1.3.6 and 1.3.7. Shells intended for the carriage of the substances referred to in 3.1.4 having a flash-point not exceeding 55° C 61°C and equipped with a venting system which cannot be closed shall have a flame-trap in the venting system or be resistant to the pressure generated by an explosion.  1st paragraph taken over into 6.8.2.2.10.	
1.6.3.8	Tank-wagons, battery-wagons and wagons with demountable tanks intended for the carriage of substances of Class 2, which were built prior to 1 January 1997, may carry markings conforming to the requirements applicable up to 31 December 1996, until the next periodic test.  When, because of amendments to RID, some proper shipping names of gases have been modified, it is not necessary to modify the names on the plate or on the shell itself (see 6.8.3.5.2 or 6.8.3.5.3), provided that	Transitional provision is still needed.
	the names of the gases on the tank-wagons, battery-wagons and wagons with demountable tanks or on the plates (see 6.8.3.5.6 (b) or (c)) are adapted at the first periodic test thereafter.	
	6.8.3.5.2 (Tank plate or shell wall)	
	Tanks intended for the carriage of only one substance	
	6.8.3.5.3 (Tank plate or shell wall)	
	Multipurpose tanks	
	6.8.3.5.6 (b) or (c) (plate or tank-wagon)	
	the proper shipping name of the gas and, in addition for gases classified under an n.o.s. entry, the technical name <sup>16</sup>	

	RID 2009	Proposal
1.6.3.9	(Reserved)	
1.6.3.10	(Reserved)	
1.6.3.11	Tank-wagons constructed before 1 January 1997 in accordance with the requirements in force up to 31 December 1996 but which do not, however, conform to the requirements of Appendix XI, 3.3.3 and 3.3.4 applicable as from 1 January 1997, may still be used.  Text of RID 1995; underlined text: amendments according to RID 1997:  Appendix XI, 3.3.3  If shells intended for the carriage of the substances referred to in 3.1.1, 3.1.2 or 3.1.3 except those of item 33 are fitted with safety valves, a bursting disc shall be placed before the valve. The arrangement of the bursting disc and safety valve shall be such as to satisfy the competent authority.  If shells intended for the carriage of the substances referred to in 3.1.4 are equipped with safety valves or a venting system, these shall satisfy the requirements of 1.3.5 to 1.3.7. If shells intended for the carriage of substances of item 33 are fitted with safety valves, these shall satisfy the requirements of 1.3.6 and 1.3.7. Shells intended for the carriage of the substances referred to in 3.1.4 having a flash-point not exceeding 55°C 61°C and equipped with a venting system which cannot be closed shall have a flame-trap in the venting system or be resistant to the pressure generated by an explosion.  Appendix XI, 3.3.4  If the shells are fitted with non-metallic protective linings (inner layers), these shall be so designed that no danger of ignition from electrostatic	Transitional provision is still needed.  Proposal:  After the references to Appendix XI, the relevant parts of Chapter 6.8 should be cross-referenced (see also 1.6.3.7).

	RID 2009	Proposal
	<ul> <li>charges can occur.</li> <li>Appendix XI, 3.1</li> <li>3.1 Use  The following substances of marg. 301 may be carried in tank wagons:</li> <li>3.1.1 Propyleneimine, inhibited, of item 12.</li> <li>3.1.2 Substances classified under (a) of items 11, 14 to 22, 26, 27 and 41.</li> <li>3.1.3 Substances classified under (b) of items 11, 14 to 27, 41 and substances classified under items 32 und 33.</li> <li>3.1.4 Substances classified under items 1 to 5, 31, 34 and 61 with the exception of isopropyl nitrate, n-propyl nitrate and nitromethane of item 3(b).</li> <li>Substances having a flash-point not exceeding 23 °C, toxic or corrosive or toxic and corrosive</li> <li>Substances having a flash-point between 23 °C and 61 °C inclusive which might be slightly toxic or corrosive</li> </ul>	
	<ul> <li>Substances having a flash-point above 61 °C which are carried or handed over for carriage at or above their flash-point</li> </ul>	
1.6.3.12	Tank-wagons intended for the carriage of UN No. 2401 piperidine constructed before 1 January 1999 in accordance with the requirements of Appendix XI, 3.2.3 in force up to 31 December 1998, but which do not, however, conform to the requirements applicable as from 1 January 1999, may continue to be used until 31 December 2009.	Report OTIF/RID/CE/2009-A paragraph 20. Dispensed with in RID 2011.

	RID 2009	Proposal
1.6.3.13	(Deleted)	
1.6.3.14	Tank-wagons constructed before 1 January 1999 in accordance with the requirements of Appendix XI, 5.3.6.3 and which do not conform to the requirements of Appendix XI, 5.3.6.3 in force from 1 January 1999, may still be used.  Text of RID 1995; underlined Text: amendments according to RID 1997:  Appendix XI, 5.3.6.3  The emergency pressure-relief devices of shells for the carriage of substances referred to in 5.1.2 may be of the spring-loaded or bursting disc type designed to vent all the decomposition products and vapours evolved during a period of not less than one hour of fire engulfment as calculated by the following formula: $q = 70961 \cdot F \cdot A^{0.82}$ $\frac{q}{\text{where:}}$ $q = \text{heat absorption (W)}$ $A = \text{wetted area } [\text{m}^2]$ $F = \text{insulation factor } [-]$ $F = 1 \text{ for non-insulated vessels, or}$ $\frac{F}{\text{47032}} = \frac{U(923 - T_{PO})}{\text{47032}} \frac{\text{for insulated vessels}}{\text{where:}}$ $\frac{\text{where:}}{\text{k = heat conductivity of insulation layer } [\text{Wm}^{-1}\text{K}^{-1}]}$ $\frac{L}{both the substant of the production of the$	Transitional provision is still needed.  Proposal:  After the references to Appendix XI, the relevant parts of Chapter 6.8 should be cross-referenced (see also 1.6.3.7).

RID 2009	Proposal
$U = K/L = heat transfer coefficient of the insulation$ $[Wm^{-2}K^{-1}]$	
T <sub>PO</sub> = temperature of peroxide at relieving conditions [K].	
The start-to-discharge pressure of the <u>emergency pressure-relief</u> devices shall be higher than that specified in 5.3.6.2 and based on the results of the tests referred to in 5.4.2. The dimensions of the <u>emergency pressure-relief</u> devices shall be such that the maximum pressure in the tank never exceeds the test pressure of the shell.	
Note: An example of a method to determine the size of emergency pressure-relief devices is given in Appendix 5 of the Manual of Tests and Criteria.	
Taken over into special provision TE 12, 5 <sup>th</sup> and 6 <sup>th</sup> paras.	
Special provision TE 12 applies to:	
UN 3109 ORGANIC PEROXIDE TYPE F, LIQUID	
UN 3110 ORGANIC PEROXIDE TYPE F, SOLID	
Appendix XI, 5.1.2	
Substances of marg. 551, items 9(b) and 10(b), may be carried in tank wagons under conditions laid down by the competent authority of the country of origin, if on the basis of tests (see 5.4.2), the competent authority is satisfied that such a transport operation can be carried out safely.	
Appendix XI, 5.3.6.2	
Shells intended for the carriage of the substances referred to in 5.1.2 shall be fitted with spring-loaded safety valves to prevent significant pressure build-up within the shell of the decomposition products and vapours released at a temperature of 50 °C. The capacity and start-to-discharge pressure of the safety valves shall be based on the results of	

	RID 2009	Proposal
	the tests specified in 5.4.2. The start-to-discharge pressure shall however in no case be such that liquid could escape from the valve(s) if the shell were overturned.	
	Taken over into special provision TE 12, 4 <sup>th</sup> para.	
	Appendix XI, 5.4.2	
	For the type approval of shells intended for the carriage of substances referred to in 5.1.2, tests shall be undertaken:	
	<ul> <li>to prove the compatibility of all materials normally in contact with the substance during carriage;</li> </ul>	
	<ul> <li>to provide data to facilitate the design of the emergency pressure- relief devices and safety valves taking into account the design charac- teristics of the tank wagon; and</li> </ul>	
	<ul> <li>to establish any special requirements necessary for the safe carriage of the substance.</li> </ul>	
	The test results shall be included in the report for the type approval of the shell.	
1.6.3.15	Tank-wagons constructed before 1 July 2007 in accordance with the requirements in force up to 31 December 2006 but which do not, however, conform to the requirements of 6.8.2.2.3 applicable as from 1 January 2007 may continue to be used until the next periodic inspection.	Transitional provision can be dispensed with in 2015, possibly with 2 year transitional period.
	6.8.2.2.3	
	Tanks that are not hermetically closed may be fitted with vacuum valves to avoid an unacceptable negative internal pressure.	

	RID 2009	Proposal
1.6.3.16	For tank-wagons and battery-wagons constructed before 1 January 2007 which do not conform to the requirements of 4.3.2, 6.8.2.3, 6.8.2.4 and 6.8.3.4 concerning the tank record, the retention of files for the tank record shall start at the latest at the next periodic inspection.	Transitional provision is still needed.
	4.3.2	
	Provisions applicable to all classes	
	6.8.2.3	
	Type approval	
	6.8.2.4	
	Inspections and tests	
	6.8.3.4	
	Inspections and tests	
1.6.3.17	Tank-wagons intended for the carriage of substances of Class 3, packing group I having a vapour pressure of not more than 175 kPa (1.75 bar) (absolute) at 50 °C, constructed before 1 July 2007 in accordance with the requirements applicable up to 31 December 2006, to which tank code L1.5BN had been assigned in accordance with the requirements applicable up to 31 December 2006, may continue to be used for the carriage of the substances mentioned above, until 31 December 2022.	Transitional provision can be dispensed with in 2022, possibly with 2 year transitional period.
1.6.3.18	Tank-wagons and battery-wagons constructed before 1 January 2003 in accordance with the requirements in force up to 30 June 2001, but which do not, however, conform to the requirements applicable as from 1 July 2001, may still be used.	The transitional provision according to the decision of the last Joint Meeting can be deleted. <u>Justification:</u>
	Assignment to the tank code in the design type approvals and the rele-	With regard to the construction and equipment provisions for tank-wagons, RID 2001 did not have any additional require-

	RID 2009	Proposal
	vant markings shall be carried out prior to 1 January 2011.  The marking of the alphanumeric codes of special provisions TC, TE and TA in accordance with 6.8.4 shall be carried out when the tank codes are assigned or at one of the tests in accordance with 6.8.2.4 subsequent to the assignment, but by 31 December 2010 at the latest.  Decision of the last Joint Meeting:  Tank-wagons and battery-wagons constructed before 1 January 2003 in accordance with the requirements in force up to 30 June 2001, but which do not, however, conform to the requirements applicable as from	ments compared with RID 1999. Only the markings were aligned with RID 2001. The transitional period allowed for this expires on 31 December 2010.  Therefore the transitional provision is no longer necessary.
	1 July 2001, may still be used.  However, they shall be marked with the relevant tank code and if applicable the relevant alphanumeric codes of special provisions TC and TE in accordance with 6.8.4.	
1.6.3.19	(Reserved)	
1.6.3.20	Tank-wagons constructed before 1 July 2003 in accordance with the requirements in force up to 31 December 2002 but which do not, however, conform to the requirements of 6.8.2.1.7 applicable as from 1 January 2003 and special provision TE 15 of 6.8.4 (b) applicable from 1 January 2003 to 31 December 2006 may still be used.	Transitional provision is still needed.
	6.8.2.1.7	
	Measures shall be taken to protect shells against the risk of deformation as a result of a negative internal pressure.	
	Shells, other than shells according to 6.8.2.2.6, designed to be equipped with vacuum valves shall be able to withstand, without permanent deformation, an external pressure of not less than 21 kPa (0.21 bar) above	

	RID 2009	Proposal
	the internal pressure. Shells used for the carriage of solid substances (powdery or granular) of packing groups II or III only, which do not liquefy during carriage, may be designed for a lower external pressure but not less than 5 kPa (0.05 bar). The vacuum valves shall be set to relieve at a vacuum setting not greater than the tank's design vacuum pressure. Shells, which are not designed to be equipped with a vacuum valve shall be able to withstand, without permanent deformation an external pressure of not less than 40 kPa (0.4 bar) above the internal pressure.	
1.6.3.21	Tank-wagons constructed before 1 January 2003 in accordance with the requirements applicable up to 30 June 2001, which conform to the requirements of 6.8.2.2.10 but are not equipped with a pressure gauge or another suitable indicator, shall nevertheless be considered as being hermetically closed until the next periodic inspection according to 6.8.2.4.2 but not later than 31 December 2010.	Report OTIF/RID/CE/2009-A paragraph 20.
		Dispensed with in RID 2011.
	6.8.2.2.10	
	If tanks required to be hermetically closed are equipped with safety valves, these shall be preceded by a bursting disc, and the following conditions shall be observed:	
	The arrangement of the bursting disc and the safety valve shall be such as to satisfy the competent authority.	
	A pressure gauge or another suitable indicator shall be provided in the space between the bursting disc and the safety valve, to enable detection of any rupture, perforation or leakage of the disc which may disrupt the action of the safety valve.	
1.6.3.22	Tank-wagons whose shells are made of aluminium alloys, constructed before 1 January 2003 in accordance with the requirements in force until 31 December 2002 and which do not comply with the requirements in	Report OTIF/RID/CE/2009-A paragraph 22: check by Joint Meeting's tank working group

	RID 2009	Proposal
	force from 1 January 2003, may still be used.	New text:  "Tank-wagons whose shells are made of aluminium alloys, constructed before 1 January 2003 in accordance with the requirements in force until 31 December 2002 and which do not comply with the requirements in force from 1 January 2003 concerning the aluminium alloys, may still be used."  The transitional period only refers to shells with aluminium alloys.
1.6.3.23	(Deleted)	
1.6.3.24	Tank-wagons intended for the carriage of gases of UN Nos. 1052, 1790 and 2073, constructed before 1 January 2003 in accordance with the requirements in force until 31 December 2002 and which do not comply with the requirements of 6.8.5.1.1 (b) in force from 1 January 2003, may still be used.	Transitional provision is still needed.
	6.8.5.1.1 (b)	
	Shells constructed of fine-grained steels for the carriage of:	
	<ul> <li>corrosive gases of Class 2 and UN No. 2073 ammonia solution; and</li> </ul>	
	<ul> <li>UN No. 1052 hydrogen fluoride, anhydrous and UN No.1790 hydro fluoric acid with more than 85% hydrogen fluoride of Class 8</li> </ul>	
	shall be heat-treated for thermal stress relief.	
	Thermal stress relief shall not be required if:	
	there is no risk of corrosion due to stress cracking; and	
	2. the mean notch bar impact value in the welding metal, the trasition (sic) area and the base material, determined in each case by means	

	RID 2009	Proposal
	of three samples, is an average of 45 J. ISO-V shall be used as a sample. For the base material, the sample shall be tested "crosswise". For the welding material and the transition area, notch position S in the middle of the welding metal or the middle of the transitional area shall be selected. Testing shall be carried out at the lowest operating temperature.	
1.6.3.25	The date of the leakproofness test required by 6.8.2.4.3 need not be added to the tank plate required by 6.8.2.5.1 until the first leakproofness test after 1 January 2005 is performed.	Report OTIF/RID/CE/2009-A paragraph 20. First paragraph dispensed with in RID 2011.
	The type of the test ("P" or "L") required by 6.8.2.5.1 need not be added to the tank plate until the first test after 1 January 2007 is performed.	
	The letter "L" required by 6.8.2.5.2 need not be added until the first inspection after 1 January 2009 is performed.	
1.6.3.26	Tank-wagons constructed before 1 January 2007 in accordance with the requirements in force up to 31 December 2006 but which do not, however, conform to the requirements applicable as from 1 January 2007 regarding the marking of the external design pressure in accordance with 6.8.2.5.1, may still be used.	Transitional provision is still needed.
1.6.3.27	(a) Tank-wagons and battery-wagons	Transitional provision is still needed.
	<ul> <li>for gases of Class 2 with classification codes containing the letter(s) T, TF, TC, TO, TFC or TOC, and</li> </ul>	
	<ul> <li>for substances of classes 3 to 8 carried in the liquid state and to which tank code L15CH, L15DH or L21DH is assigned in col- umn (12) of Table A of Chapter 3.2,</li> </ul>	
	constructed before 1 January 2005 and which do not conform to the applicable requirements of special provision TE 22 of 6.8.4 in force	

	RID 2009	Proposal
	from 1 January 2005 may still be used. However, by no later than 31 December 2010, they shall be fitted with the devices defined in special provision TE 22, which shall however be capable of absorbing at least 500 kJ of energy at each end of the wagon.	
	However, for tank-wagons and battery-wagons to be submitted to a periodic inspection in accordance with 6.8.2.4.2 or 6.8.3.4.6 between 1 January 2011 and 31 December 2012 this retrofitting may be carried out not later than 31 December 2012.	
	(b) Tank-wagons and battery-wagons	
	<ul> <li>for gases of Class 2 with classification codes containing only the letter F, and</li> </ul>	
	<ul> <li>for substances of classes 3 to 8 carried in the liquid state and to which tank code L10BH, L10CH or L10DH is assigned in column (12) of Table A of Chapter 3.2, constructed before 1 January 2007 and which do not conform to the applicable requirements of special provision TE 22 of 6.8.4 in force from 1 January 2007, may still be used.</li> </ul>	
1.6.3.28	Tank-wagons constructed before 1 January 2005 in accordance with the requirements applicable up to 31 December 2004 and which do not conform to the requirements of the second paragraph of 6.8.2.2.1, shall be refitted at the latest at the time of the next refurbishment or the next repair, where this is practicable and where the work carried out requires the attachments to be dismantled.	Transitional provision is still needed.
	<u>6.8.2.2.1</u>	
	Suitable non-metallic materials may be used to manufacture service and structural equipment.	
	The attachments of equipment which is welded on shall be made in such a way that the shell is prevented from being ruptured as a result of	

	RID 2009	Proposal
	stresses caused by an accident. These requirements shall be deemed to be met if point 1.1.10 of UIC leaflet 573 <sup>5</sup> (Technical conditions for the construction of tank-wagons) is applied.	
1.6.3.29	Tank-wagons constructed before 1 January 2005 and which do not conform to the requirements of 6.8.2.2.4 in force from 1 January 2005, may still be used.	Transitional provision is still needed.
	<u>6.8.2.2.4</u>	
	The shell or each of its compartments shall be provided with an opening large enough to permit inspection.	
	These openings shall be provided with closures designed for a test pressure of at least 0.4 MPa (4 bar). Hinged dome covers for tanks with a test pressure of more than 0.6 MPa (6 bar) shall not be permitted.	
1.6.3.30	(Reserved)	
1.6.3.31	Tank-wagons and tanks forming elements of battery-wagons designed and constructed in accordance with a technical code which was recognized at the time of their construction according to the provisions of 6.8.2.7 which were applicable at that time may still be used.	Transitional provision is still needed.
1.6.3.32	Tank-wagons	Transitional provision is still needed.
	<ul> <li>for gases of Class 2 with classification codes containing the letter(s)</li> <li>T, TF, TC, TO, TFC or TOC, and</li> </ul>	
	<ul> <li>for liquids of classes 3 to 8 to which tank code L15CH, L15DH or L21DH is assigned in column (12) of Table A of Chapter 3.2,</li> </ul>	
	constructed before 1 January 2007 and which do not conform to the	

	RID 2009	Proposal
	applicable requirements of special provision TE 25 of 6.8.4 (b) in force from 1 January 2007 may still be used.	
	Tank-wagons for the carriage of gases UN 1017 chlorine, UN 1749 chlorine trifluoride, UN 2189 dichlorosilane, UN 2901 bromine chloride and UN 3057 trifluoroacetyl chloride, whose wall thickness of the ends does not meet the requirements of special provision TE 25 (b), shall however be fitted with devices in accordance with special provision TE 25 (a), (c) or (d) by no later than 31 December 2014.	
1.6.3.33	Tank-wagons and battery-wagons for gases of Class 2 constructed before 1 January 1986 in accordance with the requirements applicable up to 31 December 1985 and which do not conform to the requirements of 6.8.3.1.6 concerning the buffers, may still be used.	Transitional provision is still needed.
	<u>6.8.3.1.6</u>	
	Tank-wagons and battery-wagons shall be fitted with buffers with a minimum energy absorption capacity of 70 kJ. This provision does not apply to tank-wagons and battery-wagons fitted with energy absorption elements in accordance with the definition in 6.8.4, special provision TE 22.	
1.6.3.34	(Reserved)	
1.6.3.35	Member States need not apply the requirements of 1.8.6, 1.8.7 and 6.8.4 TA 4 and TT 9 before 1 July 2011.	Can be deleted in RID 2013. <u>Justification</u> :  It is vital that this be applied from 1 July 2011.

\_\_\_\_