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Subject: Harmonisation of RID and Annex 2 to SMGS

Transmitted by the Committee of the Organisation for the Cooperation of Railways (OSJD)

- 1. In a discussion at the round table on the "Transport of dangerous goods: Global and regional dimensions", held on 1 March 2011 as part of the seventy-third session of the UNECE Inland Transport Committee, harmonisation of annex 2 to the Agreement on International Goods Transport by Rail (SMGS) with RID to facilitate transport between Europe and Asia was seen as a very desirable goal. The UNECE working party on the transport of dangerous goods (WP.15), OSJD and OTIF were asked to consider joint procedures or activities, or to strengthen existing mechanisms to accelerate the updating of annex II of SMGS and resolve remaining differences between RID and SMGS, annex II as deemed appropriate.
- The Secretariat of OTIF received the attached synoptic table from the Committee of the Organisation for the Cooperation of Railways (OSJD). Taking the 2011 editions of the regulations as a basis, the table sets out the rules of annex 2 to SMGS and RID which differ.
- 3. Column 2 of the following table contains the text of annex 2 to SMGS and column 3 contains the corresponding RID text. In column 4 (nature of differences and need to introduce changes to annex 2 to SMGS) the SMGS working group examines each of the differences. Column 5 (Note (comments on differences)) also contains explanations on the differences that have been found.
- 4. The note included in various places in column 4 ("will be considered additionally") means that the issue should be discussed again. The comment "no changes required" in this column means that at the moment, no amendments are planned by OSJD.

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List of differences in kind between Appendix 2 to SMGS and RID, version 2011

Para- graph	Text of Annex 2 to SMGS	Text of RID (English)	Nature of differences and need to introduce changes to Annex 2 to SMGS (SMGS Working Group's position)	Note (comments on differences)
1.1,2.2	(reserved)	For the international carriage of dangerous goods in trains other than freight trains in accordance with Article 5 § 1 a) of Appendix C, the provisions of Chapter 7.6 shall apply.	Differences in kind. No changes required.	Carriage of dangerous goods in passenger trains is regulated by SMPS (Agreement on International Passenger Railway Traffic). Under this Agreement carriage of such goods is prohibited.
1.1.2.3	(reserved)	For the international carriage of dangerous goods as hand luggage, registered luggage or in or on board vehicles in accordance with Article 5 § 1 b) of Appendix C, only the provisions of 1.1.3.8 in conjunction with Chapter 7.7 shall apply.	Differences in kind. No changes required.	Carriage of dangerous goods in passenger trains is regulated by SMPS. Under this Agreement carriage of such goods is prohibited.
1.1.3.1	a) (reserved)	(a) the carriage of dangerous goods by private individuals where the goods in question are packaged for retail sale and are intended for their personal or domestic use or for their leisure or sporting activities, provided that measures have been taken to prevent any leakage of contents in normal conditions of carriage. When these goods are flammable liquids carried in refillable receptacles filled by, or for, a private individual, the total quantity shall not exceed 60 litres per receptacle. Dangerous goods in IBCs, large packagings or tanks are not considered to be packaged for retail	Differences in kind. No changes required.	Carriage of dangerous goods in passenger trains is regulated by SMPS. Under this Agreement carriage of such goods is prohibited.

		sale;		
1.1.3.1	c) (reserved)	(c) the carriage undertaken by enterprises which is ancillary to their main activity, such as deliveries to or returns from building or civil engineering sites, or in relation to surveying, repairs and maintenance, in quantities of not more than 450 litres per packaging and within the maximum quantities specified in 1.1.3.6. Measures shall be taken to prevent any leakage of contents in normal conditions of carriage. These exemptions do not apply to Class 7. Carriage undertaken by such enterprises for their supply or external or internal distribution does not fall within the scope of this exemption;	Difference in kind. Will be considered additionally. Consider additionally expedience of including subparagraph (c).	Annex 2 to SMGS does not regulate carriage undertaken by enterprises which is ancillary to their main activity.
1.1.3.6	Quantity of packaged goods per wagon or large container subject to certain requirements and exemptions of Appendix 2 to SMGS. Note 1: This paragraph shall apply only in cases when it is referred to in other Chapters of Annex 2 to SMGS (for example, Chapters 1.8 and 1.10) Note 2: Transport category is a category assigned to certain goods based on degree of danger.	Total maximum permissible quantity per wagon or large container	Differences in kind. Consider additionally. Consider possibility of correcting paragraph 1.1.3.6 (Total maximum permissible quantity per wagon or large container)	Annex 2 to SMGS does not regulate carriage undertaken by enterprises which is ancillary to their main activity.
1.1.3.8	(reserved)	Application of exemptions in carriage of dangerous goods as hand luggage, registered luggage or in or on board vehicles For the carriage of dangerous goods as hand luggage, registered luggage or in or on board vehicles, the exemptions in accordance with 1.1.3.1 (a) to (e), 1.1.3.2 (b), (d) to (h), 1.1.3.3, 1.1.3.4.1, 1.1.3.5 and 1.1.3.7 (b), as set out in Chapter 7.7, shall apply.	Differences in kind. No changes required.	Carriage of dangerous goods in passenger trains is regulated by SMPS. Under this Agreement carriage of such goods is prohibited.
1.3.1	Scope and applicability Persons employed in connection with the carriage	Scope and applicability Persons employed by the participants referred to in	Difference in kind regarding foot-	Chapter 1.3 of SMGS does not contain significant

	of dangerous goods shall be trained in the requirements governing the carriage of such goods appropriate to their responsibilities and duties. Employees shall be trained in accordance with 1.3.2 before assuming responsibilities and shall only perform functions for which required training has not yet been provided, under the direct supervision of a trained person. Specific training requirements in Chapter 1.10 shall also be addressed. Note 1: In all cases, the training of employees participating in carriage shall be performed in accordance with the requirements of domestic law and regulations. Note 2: With regard to the training for the safety adviser, see 1.8.3. Note 3 For training with regard to Class 7, see also 1.7.2.5. Note 4: The training shall be carried out before taking on responsibilities and duties concerning the carriage of dangerous goods.	Chapter 1.4, whose duties concern the carriage of dangerous goods, shall be trained in the requirements governing the carriage of such goods appropriate to their responsibilities and duties. Employees shall be trained in accordance with 1.3.2 before assuming responsibilities and shall only perform functions, for which required training has not yet been provided, under the direct supervision of a trained person. Training requirements specific to security of dangerous goods in Chapter 1.10 shall also be addressed. NOTE 1: With regard to the training for the safety adviser, see 1.8.3. 2: (Reserved) 3: For training with regard to Class 7, see also 1.7.2.5. 4: The training shall be carried out before taking on responsibilities concerning the carriage of dangerous goods.	note to the first paragraph. Consider additionally.	differences and is adapted to the legal system of the CIS countries. Difference in kind in the footnote to the first paragraph. "*Provisions of Chapter 1.10 shall apply only if it is provided for in the domestic legislation."
1.4.1.3	Safety measures provided for in domestic legislation and regulations shall be applied when receiving dangerous goods for carriage, loading and unloading as well as when composing trains and inspecting wagons and containers. In all other instances, the carriage of dangerous goods shall be governed by the provisions of SMGS.	RID may specify certain of the obligations falling to the various participants. If an RID Contracting State considers that no lessening of safety is involved, it may in its domestic legislation transfer the obligations falling to a specific participant to one or several other participants, provided that the obligations of 1.4.2 and 1.4.3 are met. These derogations shall be communicated by the RID Contracting State to the Secretariat of OTIF which will bring them to the attention of the other RID Contracting States. The requirements of 1.2.1, 1.4.2 and 1.4.3 concerning the definitions of participants and their respective obligations shall not affect the provi-	Difference in kind. Consider inclusion of text of paragraph 2 of RID.	No differences in purpose, however, reference only to domestic legislation. Certain countries consider only the consignor, the carrier, and the consignee.

1.4.2.1.1	The consignor of dangerous goods is required to hand over for carriage only consignments which conform to the requirements of Annex 2 to SMGS. In the context of compliance with general safety measures he shall: (a) ascertain that the dangerous goods are classified and authorized for carriage in accordance with Annex 2 to SMGS; (b) comply with requirements for packages and mixed packing conditions; (c) comply with requirements concerning marking and labelling with danger markings and labels; (d) for every dispatch of dangerous goods, furnish the place of dispatch (carrier) with the consignment note filled out in accordance with requirements defined by SMGS as well as with accompanying documents (authorisations, approvals, notifications, certificates, etc.); (e) use packagings, large packagings, intermediate bulk containers (IBCs) and tanks (tank-wagons, demountable tanks, battery-wagons, MEGCs, portable tanks and tank-containers) approved for and suited to the carriage of the substances concerned and bearing the markings prescribed by Annex 2 to SMGS; (f) comply with the requirements on the means of dispatch and on forwarding restrictions;	sions of domestic law concerning the legal consequences (criminal nature, liability, etc.) stemming from the fact that the participant in question is e.g. a legal entity, a self-employed worker, an employer or an employee. The consignor of dangerous goods is required to hand over for carriage only consignments which conform to the requirements of RID. In the context of 1.4.1, he shall in particular: (a) ascertain that the dangerous goods are classified and authorized for carriage in accordance with RID; (b) furnish the carrier with information and data and, if necessary, the required transport documents and accompanying documents (authorizations, approvals, notifications, certificates, etc.), taking into account in particular the requirements of Chapter 5.4 and of the tables in Part 3; (c) use only packagings, large packagings, intermediate bulk containers (IBCs) and tanks (tank-wagons, demountable tanks, battery-wagons, MEGCs, portable tanks and tank-containers) approved for and suited to the carriage of the substances concerned and bearing the markings prescribed by RID; (d) comply with the requirements on the means of dispatch and on forwarding restrictions; (e) ensure that even empty uncleaned and not degassed tanks (tank-wagons, demountable tanks, battery-wagons, MEGCs, portable tanks and tank-containers) or empty uncleaned wagons and large and small bulk containers are appropriately marked and labelled and that empty uncleaned	Difference in kind. Consider additionally: - review conformity of 1.4.2 with the requirements in 1.4.3; - correct subparagraph (l): observe the maximum and minimum permissible degree	The duties of the consignor are supplemented with the duties of other participants in accordance with 1.4.3. Some countries consider only the consignor, the carrier and the consignee.
	(f) comply with the requirements on the means of	and small bulk containers are appropriately		

when cleaning remove (cover) danger markings and labels as well as orange-coloured plates from the tank shells;	
(h) when loading dangerous goods with different names together into the same wagon or container, comply with the prohibitions on mixed loading as indicated in Chapter 7.5.2 as well as requirements concerning the separation of foodstuffs, other articles of consumption or animal feedstuffs as indicated in Chapter 7.5.4;	
(i) define the technical and commercial suitability of tanks for carriage of the goods in question and prepare private or rented tanks for loading at his own expense;	
(j) ascertain that the periodic test for tank-wagons, demountable tanks, battery-wagons, portable tanks, tank-containers and MEGC has not expired;	
(k) fill the tank-wagons, demountable tanks, battery-wagons, portable tanks and tank-containers with dangerous goods authorised for carriage in those tanks, and when necessary comply with the requirements concerning dangerous goods in adjoining compartments;	
(l) observe the maximum and minimum permissible degree of filling for tank-wagons, demountable tanks, battery-wagons, portable tanks and tank-containers;	
(m) after filling the tank check the leakproofness of the closing devices of tank-wagons, demountable tanks, battery-wagons, portable tanks and tank-containers;	
(n) ensure that no residue of the filling substance adheres to the outside of the tanks;	
(o) affix danger markings and labels and the orange-coloured plates to the wagons, tank-wagons,	

	demountable tanks, battery-wagons, portable tanks and containers in accordance with the requirements of Chapter 5.3; (p) when loading dangerous goods in a wagon or container comply with technical requirements for loading and securing goods; (q) ensure (including in agreement with the consignee) compliance with requirements of additional special provisions with the codes starting with letters "CW" prescribed in Chapter 7.5.11, if during the journey the goods must be transhipped from wagons with gauge width 1435mm to wagons with gauge width 1520mm.			
1.4.2.1.2	If the consignor uses the services of other participants (packer, loader, filler, etc.), he shall take appropriate measures to ensure that these participants comply with the requirements of Annex 2 to SMGS.	If the consignor uses the services of other participants (packer, loader, filler, etc.), he shall take appropriate measures to ensure that the consignment meets the requirements of RID. He may, however, in the case of 1.4.2.1.1 (a), (b), (c) and (e), rely on the information and data made available to him by other participants.	Difference in kind. Consider additionally: - review conformity of 1.4.2 with the requirements in 1.4.3.	The duties of the consignor are supplemented with the duties of other participants in accordance with 1.4.3. Some countries consider only the consignor, the carrier and the consignee.
1.4.2.2.4	If, during the journey, an infringement which could jeopardize the safety of the operation is observed, the consignment shall be halted. In this case the carrier shall handle the goods in accordance with the requirements of SMGS and the domestic legislation.	If, during the journey, an infringement which could jeopardize the safety of the operation is observed, the consignment shall be halted as soon as possible bearing in mind the requirements of traffic safety, of the safe immobilisation of the consignment, and of public safety. The transport operation may only be continued once the consignment complies with applicable regulations. The competent authority(ies) concerned by the rest of the journey may grant an authorization to pursue the transport operation. In case the required compliance cannot be achieved and no authorization is granted for the rest of the journey, the competent authority(ies) shall provide the carrier with the necessary admin-	Differences in kind. No changes required.	Annex 2, SMGS does not contain a single procedure for halting the transportation in the case where an infringement is observed and for continuation of the transportation once the infringement is removed.

		istrative assistance. The same shall apply in case the carrier informs this/these competent authority(ies) that the dangerous nature of the goods carried was not communicated to him by the consignor and that he wishes, by virtue of the law applicable in particular to the contract of carriage, to unload, destroy or render the goods harmless.		
1.4.2.3.4	If, during the journey, the goods must be transhipped from wagons with gauge width 1435mm to wagons with gauge width 1520mm, the consignee shall ensure (including in agreement with the consignor) compliance with requirements of additional special provisions CW46-CW58 and CW60-CW69 prescribed in Chapter 7.5.11.	No text	Difference in kind. No changes to the text required.	Additional requirement with consideration of carriage by rail with gauge widths 1520 mm and 1435 mm.
1.4.3	Note: Requirements of 1.4.3.1-1.4.3.3, 1.4.3.6 and 1.4.3.7 shall apply in the Republic of Hungary, Republic of Latvia, Republic of Lithuania, Republic of Poland, Slovak Republic, and Republic of Estonia.	No text	Difference in kind. Consider additionally the need to review conformity of 1.4.2 with the requirements in 1.4.3.	The duties of the consignor are supplemented with the duties of other participants in accordance with 1.4.3. Countries not indicated in this note consider only the consignor, the carrier and the consignee.
1.5.1.1	As opposed to requirements prescribed by Annex 2 to SMGS, contracting parties may agree directly among themselves to authorize certain transport operations of dangerous goods by temporary derogation from the requirements of Annex 2 to SMGS, provided that safety is not compromised thereby. The consignor shall solicit the carrier of the forwarding country for a special arrangement and shall provide the necessary data. The carrier of the forwarding country shall notify the carriers of the countries participating in the shipment of the data on the conclusion of the spe-	The competent authorities of the RID Contracting States may agree directly among themselves to authorize certain transport operations in their territories by temporary derogation from the requirements of RID, provided that safety is not compromised thereby. The authority which has taken the initiative with respect to the temporary derogation shall notify such derogations to the Secretariat of OTIF which shall bring them to the attention of the RID Contracting States	Difference in kind. Consider additionally.	Temporary derogation procedure in Annex 2, SMGS, differs from RID and does not involve participation of the competent authorities.

	cial arrangement. The carriers of concerned countries shall notify their decision in the shortest possible time. The carriers shall also provide for the necessary arrangements with the competent authorities of their countries. The carrier of the forwarding country who has been asked for a special arrangement notifies the consignor of the approval of such consignment and conveys to him the registration number of the special arrangement (for example, RZD I/2005). The consignor shall indicate in the consignment note in the column "Shipping Name" "Approved by SMGS, Annex 2 RZD I/2005" in addition to the data prescribed in 5.4.1.1.			
1.6. All para- graphs	For example: 1.6.1.1 Unless otherwise provided, the substances and articles of Annex 2 to SMGS may be carried until 31 December 2011 in accordance with the requirements of Annex 2 to SMGS applicable up to 1 July 2011.	For example: 1.6.1.1. Unless otherwise provided, the substances and articles of RID may be carried until 30 June 2011 in accordance with the requirements of RID applicable up to 31 December 2010.	Difference in kind. No changes required.	The date of entry into force of the new version is 6 months later in Annex 2, SMGS than this date in RID due to the decisionmaking procedure in OSJD (Organization for Cooperation of Railways).
1.6.1.3 – 1.6.1.5	(reserved)	1.6.1.3. Substances and articles of Class 1, belonging to the armed forces of an RID Contracting State, that were packaged prior to 1 January 1990 in accordance with the requirements of RID in effect at that time may be carried after 31 December 1989 provided the packagings maintain their integrity and are declared in the transport document as military goods packaged prior to 1 January 1990. The other requirements applicable as from 1 January 1990 for this class shall be complied with. 1.6.1.4 Substances and articles of Class 1 that were packaged between 1 January 1990 and	Difference in kind. No changes required.	Annex 2, SMGS does not contain certain transitional provisions which had not been harmonized with the equivalent provisions of RID.

		31 December 1996 in accordance with the requirements of RID in effect at that time may be carried after 31 December 1996, provided the packagings maintain their integrity and are declared in the transport document as goods of Class 1 packaged between 1 January 1990 and 31 December 1996. 1.6.1.5 IBCs built in accordance with the requirements of marg. 405 (5) and 555 (3) in force before 1 January 1999, but which do not meet the requirements of marg. 405 (5) and 555 (3) in force after 1 January 1999, may still be used.	D:CC	
1.6.3.1	Tank-wagons constructed before 1 January 2005 in accordance with the requirements of Annex 2 to SMGS in force up to 31 December 2004, but which do not, however, conform to the requirements applicable as from 1 January 2005, may still be used with due consideration of the transitional requirements of 1.6.3.4 – 1.6.3.7.	RID text not cited.	Difference in kind. No changes required.	Transitional requirements of Annex 2, SMGS regarding tank-wagons constructed before the introduction of changes to the rules of 1 July 2005.
1.6.3.2	The periodic tests for tank-wagons kept in service under these transitional requirements shall be conducted in accordance with the pertinent special requirements for the various consignments.	RID text not cited.	Difference in kind. No changes re- quired.	Transitional requirements of Annex 2, SMGS regarding tank-wagons constructed before the introduction of changes to the rules of 1 July 2005.
1.6.3.3	Tank-wagons constructed before 1 July 2005 in accordance with the requirements of Annex 2 to SMGS in force up to 1 July 2005, but which do not, however, conform to the requirements applicable as from 1 July 2005 may still be used after this date.	RID text not cited.	Difference in kind. No changes re- quired.	Transitional requirements of Annex 2, SMGS regarding tank-wagons constructed before the introduction of changes to the rules of 1 July 2005.
1.6.3.4	Tank-wagons with bottom discharge outlets for carriage of Class 3 liquid substances constructed before 1 January 2005 may have two serially fitted and mutually independent shut-off devices. They shall include: an internal (main) shutter and a liq-	RID text not cited.	Difference in kind. No changes re- quired.	Transitional requirements of Annex 2, SMGS regarding tank-wagons constructed before the introduction of changes to the

	uid tight closure at the end of the discharge pipe, under the condition that all elements of the dis- charge unit are safe for operation and environ- ment.			rules of 1 July 2005.
1.6.3.5	Tank-wagons with gauge width 1520 mm for petroleum products and alcohols constructed before 1 January 2005 may be used without plates up to 1 January 2011. The decision on carriage of such tank-wagons to Bulgaria, Hungary, Poland, Romania, and Slovakia within this timeframe shall be taken upon separate arrangement.	RID text not cited.	Difference in kind. No changes re- quired.	Transitional requirements of Annex 2, SMGS regarding tank-wagons constructed before the introduction of changes to the rules of 1 July 2005.
1.6.3.6	On tank-wagons with gauge width 1520mm constructed before 1 January 2005 the plate may be affixed to the butt end of the span bolster.	RID text not cited.	Difference in kind. No changes re- quired.	Transitional requirements of Annex 2, SMGS regarding tank-wagons constructed before the introduction of changes to the rules of 1 July 2005.
1.6.3.7	Tank-wagons in service may be used without stop-valves and shut-off devices prescribed in 6.8.3.2.3 and 6.8.3.2.4 until 1 January 2014 provided all necessary safety and environmental requirements are met.	RID text not cited.	Difference in kind. No changes re- quired.	Transitional requirements of Annex 2, SMGS regarding tank-wagons constructed before the introduction of changes to the rules of 1 July 2005.
1.6.3.18	Tank-wagons without an international classification code and appropriate markings may be used until 1 July 2011. Tank-wagons shall be marked with the relevant alphanumeric code as prescribed in special provision TC and TE in accordance with Chapter 6.8.4 when tank codes are assigned or during one of the tests in accordance with 6.8.2.4 after assignment of tank codes before 1 July 2011. Date of the next test of the tank inscribed in accordance with 6.8.2.5.2 need not be inscribed before the next inspection in accordance with 6.8.2.4	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. 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.	Difference in kind. No changes re- quired.	Last paragraph of Annex 2, SMGS contains an additional transitional requirement.

	after 1 January 2012.			
1.6.3.26	Tank-wagons constructed before 1 January 2008 in accordance with the requirements in force up to 1 July 2007, but which do not, however, conform to the requirements regarding the marking of the external design pressure in accordance with 6.8.2.5.1 in force as from 1 July 2007, may still be used. Tank-wagons constructed after 1 January 2008 and before 1 January 2009 may have stencilled markings of the external design pressure.	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.	Difference in kind. No changes required.	Last paragraph of Annex 2, SMGS contains an additional transitional requirement.
1.6.3.27	(a) Tank-wagons and battery-wagons for gases of Class 2 with classification codes T, TF, TC, TO, TFC or TOC, for substances of classes 3 to 8 carried in the liquid state and to which tank code L15CH, L15DH or L21DH is assigned in column (12) of Table A of Chapter 3.2, constructed before 1 July 2006 and which do not conform to the applicable requirements of special provision TE22 of 6.8.4 in force from 1 July 2006 may still be used. However, by no later than 1 January 2014 they shall be fitted with the devices capable of energy absorption in accordance with the requirements of the competent authority.	(a) Tank-wagons and battery-wagons for gases of Class 2 with classification codes containing the letter(s) T, TF, TC, TO, TFC or TOC, and for substances of classes 3 to 8 carried in the liquid state and to which tank code L15CH, L15DH or L21DH is assigned in column (12) of Table A of Chapter 3.2, constructed before 1 January 2005 and which do not conform to the applicable requirements of special provision TE22 of 6.8.4 in force 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.	Difference in kind. No changes required.	Difference regarding special provision TE 22.
1.6.3.31	(reserved)	Tank-wagons and tanks forming elements of bat- tery-wagons designed and constructed in accor- dance with a technical code which was recognized	Difference in kind. No changes re-	Annex 2, SMGS does not provide for mandatory standards.

		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.	quired.	
1.6.3.41	When the shell of a tank-container was already divided by partitions or surge plates into section of not more than 7 500 litres capacity before 1 July 2009, the capacity of the shell need not be supplemented with the symbol "S" in the particulars required by 6.8.2.5.1 until the next periodic inspection according to 6.8.2.4.2 is performed.	No text	Difference in kind. No changes required.	The requirements prescribed in 4.3.2.2.4 of Annex 2, SMGS also apply to tank-wagons.
1.6.3.42	Notwithstanding the provisions of 4.3.2.2.4, tank-wagons intended for the carriage of liquefied gases or refrigerated liquefied gases, which meet the applicable construction requirements of Annex 2 to SMGS but which were not divided, before 1 July 2009, by partitions or surge plates into sections of less than 7 500 litres capacity may still be filled to more than 20% and less than 80% of their capacity. Note: The requirements of this paragraph shall not apply to carriage on the territory of the Russian Federation.	No text	Difference in kind. No changes required.	The requirements prescribed in 4.3.2.2.4 of Annex 2, SMGS also cover tank-wagons.
1.6.3.50	Tank-wagons constructed before 1 July 2007 in accordance with the requirements in force up to 1 July 2007, but which do not conform to the requirements in 6.8.1.8 and 6.8.2.1.10 for ambient temperature ranges in force as from 1 July 2007, may still be used.	No text	Difference in kind. No changes re- quired.	Difference regarding ambient temperature ranges.
1.6.4.3 – 1.6.4.4, 1.6.4.7 - 1.6.4.11, 1.6.4.14	(reserved)	RID text not cited.	Difference in kind. Requires additional discussion.	No comparable provisions in Annex 2, SMGS before 1 July 2005.
1.6.4.12	(reserved)	Tank-containers and MEGCs constructed before 1 January 2003 in accordance with the require-	Difference in kind.	No transitional requirement in Annex 2, SMGS.

		ments applicable up to 30 June 2001, but which do not, however, conform to the requirements applicable as from 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.	Requires additional discussion.	
1.6.4.33	Notwithstanding the provisions of 4.3.2.2.4, tank-containers intended for the carriage of liquefied gases or refrigerated liquefied gases, which meet the applicable construction requirements of Annex 2 to SMGS but which were not divided, before 1 July 2009, by partitions or surge plates into sections of less than 7 500 litres capacity may still be filled to more than 20% and less than 80% of their capacity. Note: The requirements of this paragraph shall not apply to carriage on the territory of the Russian Federation.	Notwithstanding the provisions of 4.3.2.2.4, tank-containers intended for the carriage of liquefied gases or refrigerated liquefied gases, which meet the applicable construction requirements of RID but which were divided, before 1 July 2009, by partitions or surge plates into sections of more than 7 500 litres capacity may still be filled to more than 20% and less than 80% of their capacity.	Difference in kind. No changes required.	Additional note.
Chapter 1.8 foot- note	* The provisions of Chapter 1.8 shall apply only if this is provided for in the domestic legislation.	No footnote	Difference in kind. No changes required.	Additional footnote.
1.8.5.2	(reserved)	The RID Contracting State shall in turn, if necessary, make a report to the Secretariat of OTIF with a view to informing the other RID Contracting States.	Difference in kind. No changes required.	Stated procedure is not used on the agenda of the OSJD Committee.
1.9.3	(reserved)	Application of the additional provisions in accordance with 1.9.2 (a) and (b) presupposes that the competent authority provides evidence of the need for measures.	Difference in kind. No changes required.	Annex 2, SMGS does not contain this requirement.
1.9.4	(reserved)	The competent authority of the RID Contracting State applying on its territory any additional provisions within the scope of 1.9.2 (a) and (b) above shall notify the Secretariat of OTIF, in general in advance, of the additional provisions. The Secre-	Difference in kind. No changes required.	Stated procedure is not used on the agenda of the OSJD Committee.

		tariat of OTIF shall bring them to the attention of the RID Contracting States.		
Chapter 1.10 foot- note	* The provisions of Chapter 1.10 shall apply only if this is provided for in the domestic legislation.	No footnote	Difference in kind. No changes required.	Additional footnote.
3.2.1 Column (19), Ta- ble A	(reserved)	"Colis express (express parcels)" Contains alphanumeric codes beginning with the letters "CE" for the requirements applicable to forwarding as Colis Express (express parcels). These requirements are given in Chapter 7.6. When column 19 does not contain a code, forwarding as Colis Express (express parcels) is not permitted.	Difference in kind. No changes required.	Within OSJD carriage of parcels is performed in accordance with the Agreement on International Passenger Railway Traffic according to which carriage of dangerous goods in passenger trains is prohibited.
3.2.1 Column (21a)	Column (21a) "Emergency Card Number1" In this column numbers of emergency cards shall be indicated, which the consignor shall specify in column (11) "Shipping Name" of the consignment note. For the procedure for filling out the consignment note see 5.4.1. If column (21a) does not contain emergency card information, it indicates that an emergency card has not been devised for this consignment to date and that consignor/consignee shall devise such emergency card in good time and attach it to transport documents. For general provisions on emergency cards see 5.4.3.11 and 5.4.3.12. ¹ Requirements in explanations to columns (21a), (21b) and (21c) shall not apply when the forwarding country is the Republic of Hungary, Republic of Poland, and Slovak Republic or when the consignment note is reissued in these countries.	No text	Difference in kind. No changes required.	System to ensure timely containment in case of emergency en route, when loading or unloading the goods. Emergency card in accordance with the document "Emergency cards for dangerous goods carried by railway in the CIS, Republic of Latvia, Republic of Lithuania, Republic of Estonia" contains information on the properties of the consignment, individual protection gear and instructions for containment procedure in case of emergency.
3.2.1 Col-	Column (21b) "Minimum protective distance 1"	No text	Difference in	System to ensure safety in

umn	In this column the minimum protective distance is		kind.	accordance with 7.5.3
(21b)	indicated, which the consignor shall specify in		No changes re-	when adding wagons with
(210)	Column (11) of the consignment note, "Shipping		quired.	dangerous goods to the
	Name". For the procedure for filling out the con-		quir cu.	train.
	signment note see 5.4.1. If this column contains a			
	fraction, the numerator shall indicate minimum			
	protective distance for carriage of dangerous goods			
	in closed wagons and containers. The denominator			
	shall indicate minimum protective distance for			
	carriage of dangerous goods in tank-wagons. The			
	sign "-" (dash) in Column (21b) indicates that for			
	the carriage of the dangerous goods in question no			
	protective distance is required.			
	Absence of data in Column (21b) indicates that no			
	minimum protective distance rules have been de-			
	vised for the carriage of the dangerous goods in			
	question.			
	For protective distance rules see 7.5.3.2.			
	¹ Requirements in explanations to columns (21a),			
	(21b) and (21c) shall not apply when the forward-			
	ing country is the Republic of Hungary, Republic			
	of Poland, and Slovak Republic or when the con-			
	signment note is reissued in these countries.			
3.2.1 Col-	Column (21c) "Conditions for hump shunting ¹ "	No text	Difference in	System to ensure safety in
umn (21c)	This column contains reference designation of		kind.	accordance with 7.5.6
	safety measures for shunting and hump shunting as		No changes re-	during shunting and hump
	well as notes which the consignor shall indicate in		quired.	shunting.
	Column (11) of the consignment note "Shipping			
	Name". For these measures and notes in the con-			
	signment note see 7.5.6. For the procedure for			
	filling out the consignment note see 5.4.1.			
	If this column contains a fraction, the numerator			
	shall indicate conditions for hump shunting of			
	dangerous goods in closed wagons and containers.			
	The denominator shall indicate conditions for			

	hump shunting of dangerous goods in tank-wagons, tank-containers and portable tanks. The sign "-" (dash) in column (21b) indicates that the carriage of these dangerous goods does not have special conditions for hump shunting. Absence of data in column (21b) indicates that no conditions for hump shunting have been devised for the carriage of these dangerous goods.			
	Note: If column (5) indicates for certain substances labels for movement of wagons and shunting according to models Nos.13 and 15, and if these labels contradict the requirements prescribed in column (21c), the requirements of column (21c) shall be complied with in shunting.			
	¹ Requirements in explanations to columns (21a), (21b) and (21c) shall not apply when the forwarding country is the Republic of Hungary, Republic of Poland, and Slovak Republic or when the consignment note is reissued in these countries.			
Table A Chapter 3.2			Difference in kind. No changes required.	Specific positions containing differences are listed in explanations to special provisions and codes in Columns (21a), (21b), (21c).
3.3.1 SP274	The provisions of 3.1.2.8 apply.	The provisions of 3.1.2.8 apply.	Difference in kind. No changes required.	No differences in the text but special provision 274 is included additionally for UN Nos. 2985, 2986, 2988.
				shall also contain the technical name of the consignment for unspecified

3.3.1 SP800	For carriage of uncleaned empty tanks an additional inscription shall be made in the consignment note: "The tank is filled with* in accordance with special provision TU 16." *indicates the name of the protective agent. For liquids, the mass shall be indicated, for gases, the pressure shall be indicated.	No text	Difference in kind. No changes required.	or "not otherwise specified" substances for which Annex 2, SMGS has additional requirements based on the technical name. Special provision for phosphorus UN 1381 and 2447 in accordance with which the consignment note should indicate the name of the protective agent.
3.4	Note: When carrying in the territory of the CIS countries goods in wagonloads packed in accordance with the requirements of Chapter 3.4, with total weight of more than 8 tons the provisions of 5.3, 5.4 and part 7 shall apply as well as the corresponding columns in Table A, Chapter 3.2, Annex 2 to SMGS.	No text	Difference in kind. No changes required.	Additional requirements in the CIS countries, in accordance with which goods packed in accordance with the requirements of Chapter 3.4, with total weight of more than 8 tons shall be transported in one wagon by wagonloads as dangerous goods.
P002	Special provision for packing provided for only in Annex 2 to SMGS RR100 For UN numbers 1680 and 1689: when carrying to a destination in or through the territory of the Republic of Belarus, Republic of Kazakhstan, Russian Federation, and Ukraine single packagings shall have an additional leakproof liner and shall have a capacity of no more than 100 litres and a net mass of no more than (100 + 0.5) kg.	No text	Difference in kind. No changes required.	Special provision for UN numbers 1680 and 1689 according to which when carrying to a destination in or through the territory of the Republic of Belarus, Republic of Kazakhstan, Russian Federation, and Ukraine single packagings shall have an additional leakproof liner and shall have a capacity of no more than 100 litres and a net mass of no more than (100 + 0.5) kg.

P801a footnote to sub- para- graph (e)	Carriage in sheeted wagons and open sheeted containers to a destination in the Republic of Belarus, Republic of Kazakhstan, Russian Federation, Republic of Uzbekistan or in transit through the territory thereof is prohibited.	No text	Difference in kind. Requires additional consideration.	Relates to the footnote to paragraphs of Chapter 7.2.
IBC07	Special packing provision provided for only in Annex 2 to SMGS B100 For UN numbers 1680 and 1689: when carrying to a destination in or in transit through the territories of the Republic of Belarus, Republic of Kazakhstan, Russian Federation, and Ukraine, IBCs prescribed in this packing instruction shall not be used.	No text	Difference in kind. No changes required.	Special provision for UN 1680 and 1689 in accordance with which when carrying goods to a destination in or in transit through the territories of the Republic of Belarus, Republic of Kazakhstan, Russian Federation, and Ukraine, IBCs are not used.
TP60	Carriage in portable tanks to a destination in the Republic of Belarus, Republic of Kazakhstan, Russian Federation, and Ukraine or in transit through their territory shall be prohibited.	No text	Difference in kind. No changes required.	Special provision for UN numbers 1009, 2035, 3220 and 3252.
4.3.2.1.6	Foodstuffs shall not be carried in tanks used for dangerous substances unless the necessary steps have been taken to prevent any harm to human or animal health. ² When carrying foodstuffs to/from the Republic of Kazakhstan and Russian Federation tanks used for dangerous substances shall not be used.	Foodstuffs shall not be carried in tanks used for dangerous substances unless the necessary steps have been taken to prevent any harm to public health.	Difference in kind. Only in the footnote. No changes required.	Additional footnote (2).
4.3.2.2.4 Left side of the page	Shells intended for the carriage of substances in the liquid state or liquefied gases or refrigerated liquefied gases, which are not divided by partitions or surge plates into sections of not more than 7 500 litres capacity, shall be filled to not less than 80% or not more than 20% of their capacity. This provision shall not apply to: - liquids with a kinematic viscosity at 20°C of at	(Reserved)	Difference in kind. No changes required.	In RID this text is present only in the right-hand column and covers only tank-containers. In Annex 2 to SMGS these requirements cover tank-wagons as well.

4.3.2.3.3	least 2 680mm²/s; - molten substances with a kinematic viscosity at the temperature of filling of at least 2 680 mm²/s; - UN 1963 HELIUM, REFRIGERATED, LIQUID and UN 1966 HYDROGEN, REFRIGERATED, LIQUID. No text	This applies in particular to the upper part of the	Difference in	Not in Annex 2 to SMGS.
End of the text		dip tube.	kind. Consider additionally.	Thorac Thurs 2 to om ob.
4.3.2.3.6	Substances which may react dangerously with each other shall not be carried in compartments of the same tank except when: - these compartments are separated by a partition with a wall thickness equal to or greater than that of the tank shell itself; - there is an empty space or an empty compartment between loaded compartments. Note: For carriage in the Russian Federation, separation of loaded compartments with empty compartments is not permitted.	Substances which may react dangerously with each other shall not be carried in adjoining compartments of tanks. Substances which may react dangerously with each other may be carried in adjoining compartments of tanks, when these compartments are separated by a partition with a wall thickness equal to or greater than that of the tank itself. They may also be carried separated by an empty space or an empty compartment between loaded compartments.	Difference in kind (only in the note) No changes required.	Peculiarities of railway use in the Russian Federation.
4.3.2.3.7	Carriage by rail with gauge 1520 mm in large tank- containers intended for a longitudinal inertial force of 2 Rg shall be performed only upon special ar- rangement.	No text	Difference in kind. No changes required.	Additional requirement for tank-containers.
4.3.2.3.8	Shells intended for carriage to or through the territory of the Russian Federation or the Republic of Kazakhstan in the period from 1 November to 1 April shall be made of materials with design temperature range -50°C to 50°C. (see 6.8.2.1.8, 6.8.2.1.10).	No text	Difference in kind. No changes required.	Additional requirement.
4.3.3.4.1 Beginning of the text	The consignor shall:	No text	Difference in kind, in reference to the require-	The duties of the consignor are supplemented with the duties of other

4.3.3.4.3 End of the text	In Poland, Slovakia, Hungary, Romania, Latvia, Lithuania, and Estonia the control under this paragraph shall be performed by the filler, the loader or the consignor in accordance with the agreement between these parties.		ments in Chapters 1.4.2 and 1.4.3. No changes re- quired.	participants in accordance with 1.4.3. Some countries consider only the consignor, the carrier and the consignee.
4.3.3.5	Carriage by rail with gauge width 1520 mm in tank-wagons and tank-containers specified in 6.8.5 with shells with hard-soldered fittings may be performed upon special agreement (see 6.8.5.1.3 and 6.8.5.1.4).	No text	Difference in kind. No changes required.	Additional requirement.
4.3.4.1.2	Note: Part 1 of the tank hierarchy shall not be used for the railways of Kazakhstan, Russian Federation and Ukraine.	No text	Difference in kind. No changes required.	Additional requirement.
4.3.4.2.2	The flexible hoses for filling and discharge, with non-rigid coupling to the shell, shall be empty during carriage.	The connecting pipes between the shells of several independent but interconnected tank-wagons (complete train, for example) shall be empty during carriage.	Difference in kind. Consider additionally.	Inaccurate translation.
4.3.4.2.3	(reserved)	When shells approved for liquefied gases of Class 2 are also approved for liquids of other classes, the orange band in accordance with 5.3.5 shall be covered or made unrecognisable by other means so that it is not visible during the carriage of these liquids. During the carriage of these liquids, the particulars according to 6.8.3.5.6 (b) or (c) shall no longer be visible on the two sides of the tank-wagon or on the panels.	Difference in kind. With consideration of 5.3.5. Consider additionally.	Items considered in this requirement of RID are reflected in 5.3.5 of Annex 2, SMGS.
TU21	The substance shall, if water is used as a protective agent, be covered with a depth of not less than 12 cm of water; the degree of filling at a temperature of 60 °C shall not exceed 98%. For carriage by rail with gauge width 1520 mm the substance shall be covered with a depth of no less than 30 cm of water; when forwarding to areas	The substance shall, if water is used as a protective agent, be covered with a depth of not less than 12 cm of water at the time of filling; the degree of filling at a temperature of 60 °C shall not exceed 98%. If nitrogen is used as a protective agent, the degree of filling at a temperature of 60 °C shall not exceed 96%. The remaining space shall be	Difference in kind. No changes required.	Special provision for phosphorus UN 1381 and 2447.

	with ambient temperature above 40 °C the depth of water shall be no less than 60 cm. When forwarding on a route with ambient temperature below 0 °C, an anti-freeze solution shall be used instead of water (for example, solution of calcium chloride) with a depth of 30 cm. If nitrogen is used as a protective agent, the degree of filling at a temperature of 60 °C shall not exceed 96%. The remaining space shall be filled with nitrogen in such a way that, even after cooling, the pressure at no time falls below atmospheric pressure. The tank shall be closed in such a way that no leakage of gas occurs.	filled with nitrogen in such a way that, even after cooling, the pressure at no time falls below atmospheric pressure. The tank shall be closed in such a way that no leakage of gas occurs.		
TU50	Carriage to or through the Republic of Belarus, Republic of Kazakhstan, Russian Federation, and Ukraine is allowed only in battery-wagons or MEGCs which have receptacles in their construction.	No text	Difference in kind. No changes required.	Special provision for UN 1002, 1006, 1008 1009, 1016, 1022, 1023, 1026, 1035, 1046, 1048, 1049, 1050, 1053, 1056, 1065, 1066, 1070, 1071, 1072, 1080, 1612, 1749, 1859, 1860, 1952, 1953, 1954, 1955,1956, 1957, 1959, 1962, 1964, 1971, 1982, 1984, 2034, 2035, 2036, 2191, 2193, 2203, 2417, 2451, 2454, 2599, 3156, 3220, 3252, 3303, 3304, 3305, 3306.
TU51	Carriage on the territory of Ukraine and Russian Federation is allowed only in specialized tanks under a layer of inert gas.	No text	Difference in kind. Consider additionally.	Special provision for UN 1131 CARBON BISUL- PHIDE The carriage of UN 1131 on the territory of Ukraine and Russian Federation is allowed only in specialized tanks under a layer of inert

				gas.
5.1.2.1	The marking of the word "OVERPACK", which shall be readily visible and legible, shall be in an official language of the country of origin and also, if that language is not Russian or Chinese, in Russian or Chinese, unless any agreements concluded between the countries concerned in the transport operation provide otherwise.	The marking of the word "OVERPACK", which shall be readily visible and legible, shall be in an official language of the country of origin and also, if that language is not English, French or German, in English, French or German, unless any agreements concluded between the countries concerned in the transport operation provide otherwise.	Difference in kind. Consider additionally.	Difference in languages used.
5.1.3.2	Packagings, including IBCs, and tanks used for the carriage of radioactive material shall not be used for the storage or carriage of other goods.	Packagings, including IBCs, and tanks used for the carriage of radioactive material shall not be used for the storage or carriage of other goods unless decontaminated below the level of 0.4 Bq/cm² for beta and gamma emitters and low toxicity alpha emitters and 0.04 Bq/cm² for all other alpha emitters.	Difference in kind. Consider additionally.	In accordance with technical regulating documents in force in the CIS, packagings, including IBCs, and tanks used for the carriage of radioactive material shall not be used for storage or carriage of other goods.
5.2.1.5	For goods of Class 1, packages shall bear the UN number and the proper shipping name as determined in accordance with 3.1.2. The marking, which shall be clearly legible and indelible, shall be in an official language of the country of origin and it shall also be translated into Chinese or Russian in accordance with § 3, Article 9 SMGS unless any agreements concluded between the countries concerned in the transport operation provide otherwise.	For goods of Class 1, packages shall, in addition, bear the proper shipping name as determined in accordance with 3.1.2. The marking, which shall be clearly legible and indelible, shall be in an official language of the country of origin and also, if that language is not French, German, Italian or English, in French, German, Italian or English unless any agreements concluded between the countries concerned in the transport operation provide otherwise.	Difference in kind. Consider additionally.	Difference in languages used.
5.3.1.1.2 footnote	Wagons and containers carrying goods in accordance with 1.5.2, and which in conformity with 5.2.2.1.8 do not bear danger labels, shall, in the case of wagons, bear on both sides and, in the case of containers, bear on all four sides, the danger labels in accordance with column (5) of Table A of Chapter 3.2. * For communication between Russia, Ukraine, Belarus, and Kazakhstan an additional placard is	No footnote	Difference in kind. No changes required.	Additional requirement in the footnote.

	placed on the top.			
5.3.1.2 footnote	Placards shall be affixed on all four sides of the large container, MEGC, tank-container and portable container* * For communication between Russia, Ukraine, Belarus, and Kazakhstan an additional placard shall be placed on the top.	No footnote	Difference in kind. No changes required.	Additional requirement in the footnote.
5.3.1.7.1	(d) in accordance with 5.3.7 the number of the emergency card may be indicated between the class number and the danger symbol*. *Provision (d) need not be applied for the Republic of Hungary, Republic of Poland and Slovak Republic.	No text	Difference in kind. No changes required.	Additional requirement.
5.3.2.1.5	Note: This paragraph need not be applied to the marking with orange-coloured plates of closed and sheeted wagons carrying tanks with a maximum capacity of 3 000 litres, with the exception of wagonload consignments.	NOTE: This paragraph need not be applied to the marking with orange-coloured plates of closed and sheeted wagons, carrying tanks with a maximum capacity of 3 000 litres.	Difference in kind. No changes required.	Additional requirement.
5.3.2.1.8	Orange-coloured plates which do not relate to dangerous goods carried, or residues thereof, shall be removed or covered.	Orange-coloured plates which do not relate to dangerous goods carried, or residues thereof, shall be removed or covered. If plates are covered, the covering shall be total and remain effective after 15 minutes' engulfment in fire.	Difference in kind. Requires additional discussion. Consider possibility of adding the second sentence of the RID text.	No requirement for fire resistance of orange-coloured plates.
5.3.2.2.1 First two paragraphs	The orange-coloured plates may be reflectorized and shall be of 40 cm base and 30 cm high; they shall have a black border of 15 mm wide. The material used shall be weather-resistant and ensure durable marking in any weather conditions and ensure durability of the marking over a prolonged period of time but no less than the time of carriage. The plate shall remain affixed to its mount. The plates shall remain affixed irrespective of the orientation of the wagon (to include overturning of	The orange-coloured plates may be reflectorized and shall be of 40 cm base and 30 cm high; they shall have a black border of 15 mm wide. The material used shall be weather-resistant and ensure durable marking. The plate shall not become detached from its mount in the event of 15 minutes' engulfment in fire. It shall remain affixed irrespective of the orientation of the wagon. The plates prescribed in 5.3.2.1.2 and 5.3.2.1.5 may be replaced by a self-adhesive sheet, by paint	Difference in kind. Requires additional discussion. Consider possibility of adding the last sentence of the RID text.	No requirement for fire resistance of orange-coloured plates.

	the wagon). The plates prescribed in 5.3.2.1.2 and 5.3.2.1.5 may be replaced by a self-adhesive sheet, by paint or by any other equivalent marking.	or by any other equivalent process. This alternative marking shall conform to the specifications set out in this sub-section except for the provisions concerning resistance to fire mentioned in 5.3.2.2.1 and 5.3.2.2.2.		
5.3.2.2.2	The hazard identification number and the UN number shall consist of black digits 100 mm high and of 15 mm stroke thickness. The UN number shall be inscribed in the lower part of the plate, and the hazard-identification number in the upper part; they shall be separated by a horizontal black line, 15 mm in stroke width, extending from side to side of the plate at mid-height (see 5.3.2.2.3). Interchangeable numbers and letters on plates presenting the hazard identification number and the UN number shall remain in place during carriage and irrespective of the orientation of the wagon (to include overturning of the wagon).	The hazard identification number and the UN number shall consist of black digits 100 mm high and of 15 mm stroke thickness. The hazard-identification number shall be inscribed in the upper part of the plate and the UN number in the lower part; they shall be separated by a horizontal black line, 15 mm in stroke width, extending from side to side of the plate at mid-height (see 5.3.2.2.3). The hazard identification number and the UN number shall be indelible and shall remain legible after 15 minutes' engulfment in fire. Interchangeable numbers and letters on plates presenting the hazard identification number and the UN number shall remain in place during carriage and irrespective of the orientation of the wagon.	Difference in kind. Requires additional discussion. Consider possibility of adding the second paragraph of the RID text.	No requirement for fire resistance of orange-coloured plates.
5.3.5.1	Tank-wagons registered with railways with gauge width 1520 mm intended for the following lique-fied gases shall be marked with an unbroken band 300 mm wide: 1005 ammonia – yellow; 1017 chlorine – dark green; for flammable gases with classification codes: 2F, 3F, 4F – red. Tank-wagons registered with railways with gauge width 1435 mm intended for the carriage of lique-fied, refrigerated liquefied or dissolved gases shall be marked with an unbroken, orange, non-reflectorized band, about 30 cm wide, encircling the shell at the level of the longitudinal axis. When shells approved for liquefied gases of Class 2 are also approved for liquids of other classes, the orange band around the tank as well as the names	5.3.5 Orange band Tank wagons intended for the carriage of lique- fied, refrigerated liquefied or dissolved gases shall be marked with an unbroken, orange, non- reflectorized band, about 30 cm wide, encircling the shell at mid-height.	Difference in kind. No changes required at the moment.	Additional requirement for marking with bands of different colours.

	of lic	uefied gases on th	ne tanks shall	be fully cov-			
	ered.	•		5			
5.3.5.2	Tank-wagons registered with railways with gauge width 1520 mm intended for the following liquid goods shall be marked on both sides with a band 500 mm wide along the longitudinal axis. The colour of the band shall be as follows:			owing liquid with a band axis. The	No text	Difference in kind. No changes required.	Additional requirements and the different colour
	Un	Shipping name		Band Colour			
	No.	Proper Proper	Technical	Band Colour			
	1079	Sulphur dioxide	Sulphurous anhydride	Black			
	1092	Acrolin, stabilized	-	Black	1		
	1131	Carbon disulphide		Orange	1		
	1162	Dimethyldichlorosi- lane	-	Orange			
	1230	Methanol	-	Black	1		
	1250	Methyltrichlorosi- lane	-	Orange			
	1325	Flammable solid, organic, n.o.s.	Caprolactam	Red			
	1381	Phosphorus, yellow	-	Red]		
	1649	Motor fuel anti- knock mixture	Ethyl fluid	Green			
	2304	Naphthalene, molten	-	Red			
	2448	Sulphur, molten	-	Red			
	3082	Environmentally hazardous substance, liquid, n.o.s.	Paranthracene	Blue			
		Liquid inorganic acids with classifica- tion code: C1,C3,CF1,CW1,C O1,CT1	-	Yellow			
5.3.7		Inscription of the emergency card number on wagons and containers*.			No text	Difference in kind.	Additional requ
	* The provisions of this chapter need not be applied in the Republic of Hungary, Republic of Poland, and Slovak Republic.					Consider addi- tionally.	

5.3.7.1 The emergency card number shall be indicated:on the placard between the class number and the hazard symbol indicating the main or the only hazard of the dangerous goods, or

- on a separate white plate measuring 400x200 mm with black border 10 mm in stroke width. **5.3.7.2** The emergency card number shall be preceded by the letters "AK". The number of the emergency card and the letters "AK" shall

be no less than 70 mm in height.

5.3.7.3 The white plate with the number of the emergency card shall be placed next to the hazard label or beneath it. The material used shall be weather-resistant and ensure durable marking in any weather conditions, and ensure durability of the marking over a prolonged period of time but no less than the time of carriage. The plate shall remain affixed to its mount.

The plates may be replaced by a self-adhesive sheet, by paint or by any other equivalent marking.

5.3.7.4 Examples for placement of the emergency card number:



	AK 305			
5.4.1.1.1	(l) emergency card number (see 5.4.3.12) preceded by letters "AK" (AK) (Column (21a) of Table A of Chapter 3.2); if the emergency card number for a substance is not available in Column (21a), the consignor shall devise an emergency card for the consignment, attach it, and indicate in the consignment note: "Emergency card attached" ¹ The provisions prescribed in (l), (m), (n), (o) need not be applied when forwarding or transferring dangerous goods from the Republic of Hungary, Republic of Poland and Slovak Republic.	No text	Difference in kind. No changes required.	Additional entry in the consignment note.
5.4.1.1.1	(m) note on minimum protective distances (see Column (21b) of Table A of Chapter 3.2 and description of Column (21b) of Chapter 3.2.1) ¹ The provisions prescribed in (l), (m), (n), (o) need not be applied when forwarding or transferring dangerous goods from the Republic of Hungary, Republic of Poland and Slovak Republic.	No text	Difference in kind. No changes required.	Additional entry in the consignment note.
5.4.1.1.1	(n) note on train sorting and shunting (see Column (21c) of Table A of Chapter 3.2 and the description for Column (21c) of Chapter 3.2.1) ¹ ; If any entry of Column (21c) of Table A of Chapter 3.2 contains a code starting with letter "M" the following entry shall be made:	No text	Difference in kind. No changes required.	Additional entry in the consignment note.

	for code M 1: "Do not hump shunt" for code M 2: "Hump shunt with caution" for code M 3: "Hump shunt with caution" (only if the goods are in glass packaging)			
	¹ Provisions prescribed in (l), (m), (n), (o) need not be applied when forwarding or transferring dangerous goods from the Republic of Hungary, Republic of Poland and Slovak Republic.			
5.4.1.1.1	(o) hazard description (type of hazard) shall be indicated in the consignment note according to the number of the hazard label indicated in Column (5) of Table A of Chapter 3.2 (see Table 5.4.1.1); Table 5.4.1.1 Entry (seal) for hazard description (type of hazard).	No text	Difference in kind. No changes required.	Additional entry in the consignment note.

	Number of hazard label specimen (Column 5 of Table A of Chapter 3.2)	Hazard description (type of hazard)			
	1, 1.4, 1.5, 1.6	Explosive			
	2.1	Flammable gas			
	2.2	Non-flammable, non-toxic gas			
	2.3	Toxic gas			
	3, 4.1	Flammable			
	4.2	liable to spontaneous combustion			
	4.3	in contact with water emits flammable gases			
	5.1	Oxidizing			
	5.2	Organic peroxide			
	6.1	Toxic			
	6.2	Infectious substance			
	7A, 7B, 7C	Radioactive material			
	7E	Fissile material			
	8	Corrosive			
	9	Miscellaneous dangerous substances and articles			
	need not be applied ring dangerous good	escribed in (l), (m), (n), (o) when forwarding or transfer- is from the Republic of Hun- pland and Slovak Republic.			
.1.1.1 ling	(m), (n), (o) shall be	l in (a), (b), (c), (d), (j), (l), indicated in Column (11) of "Shipping name" in addition	The location and order in which the elements of information required appear in the transport document is left optional, except that (a), (b), (c)	Difference in kind. No changes re-	No differences in the re resentation of the information with the exception

5.4.1.1.3 examples	to the data required by paragraph 8 of article 7 of SMGS The location and order in which the elements of information required appear in the consignment note is left optional, except that (a), (b), (c), (d) and (j) shall be shown in the following order: (j), (a), (b), (c), (d) (the hazard identification number shall be indicated before the UN number followed by a forward slash sign). Example: "663/UN1098 ALLYL ALCOHOL, 6.1 (3), I, AK 607 "Protective distance 3/1-1*-1-1" "TOXIC SUBSTANCE" "FLAMMABLE" "DO NOT HUMP SHUNT". "336/UN1230 METHANOL, 3(6.1), II, AK 319", "Protective distance 3/0-0-1-0" "FLAMMABLE" "TOXIC SUBSTANCE" "DO NOT HUMP SHUNT". 336/UN1230 WASTE METHANOL, 3 (6.1), II, AK 319, PROTECTIVE DISTANCE 3/0-0-1-0 "FLAMMABLE" "TOXIC SUBSTANCE" "DO NOT HUMP SHUNT" Or 33/UN1993 WASTE FLAMMABLE LIQUID, N.O.S. (toluene and ethyl alcohol), 3, II, AK 328 PROTECTIVE DISTANCE 3/0-0-1-0 "FLAM-MABLE""	and (d) shall be shown in the order listed above (i.e. (a), (b), (c), (d)) with no information interspersed, except as provided in RID. Examples of such permitted dangerous goods descriptions are: "UN 1098 ALLYL ALCOHOL, 6.1 (3), I" or "UN 1098 ALLYL ALCOHOL, 6.1 (3), PG I" When a marking in accordance with 5.3.2.1 is required, (a), (b), (c), (d), and (j) shall be shown in the sequence (j), (a), (b), (c), (d) with no information interspersed, except as provided in RID. Examples of such permitted dangerous goods descriptions taking account of the marking in accordance with 5.3.2.1 are: "663, UN 1098 ALLYL ALCOHOL, 6.1(3), I" or "663, UN 1098 ALLYL ALCOHOL, 6.1(3), PG I". — "UN 1230 WASTE METHANOL, 3 (6.1), II" or — "UN 1230 WASTE METHANOL, 3 (6.1), II" or — "UN 1993 WASTE FLAMMABLE LIQUID, N.O.S. (toluene and ethyl alcohol), 3, II" or — "UN 1993 WASTE FLAMMABLE LIQUID, N.O.S. (toluene and ethyl alcohol), 3, PG II".	Difference in kind. No changes required.	No differences in the representation of the information with the exception of the requirement for additional information.
5.4.1.1.6.2	MABLE" "EMPTY TANK-WAGON, LAST LOAD: 663/UN1098 ALLYL ALCOHOL, 6.1(3), I, AK 607, "Protective distance 3/1-1*-1-1" "TOXIC	"EMPTY TANK-WAGON, LAST LOAD: 663 UN 1098 ALLYL ALCOHOL, 6.1 (3), I" or "EMPTY TANK-WAGON, LAST LOAD: 663	Difference in kind. No changes re-	No differences in the representation of the information with the exception of
5.4.1.2.1	SUBSTANCE" "FLAMMABLE" "DO NOT HUMP SHUNT". (c) For the carriage of substances and articles assigned to an n.o.s. entry or the entry "0190	(c) For the carriage of substances and articles assigned to an n.o.s. entry or the entry "0190 SAM-	quired. Difference in kind.	the requirement for additional information. Difference in languages used.
	SAMPLES, EXPLOSIVE" or packed conforming to packing instruction P101 of 4.1.4.1, a copy of	PLES, EXPLOSIVE" or packed conforming to packing instruction P101 of 4.1.4.1, a copy of the	Consider addi- tionally.	

5.4.1.2.1	the competent authority approval with the conditions of carriage shall be attached to the consignment note. It shall be drafted in an official language of the forwarding country and also, if that language is not Russian, in Russian, unless any agreements concluded between the countries concerned in the transport operation provide otherwise; (d) If packages containing substances and articles	competent authority approval with the conditions of carriage shall be attached to the transport document. It shall be drafted in an official language of the forwarding country and also, if that language is not English, French, German or Italian, in English, French, German or Italian, unless any agreements concluded between the countries concerned in the transport operation provide otherwise; (d) If packages containing substances and articles	Difference in	Difference in languages
3.7.1.2.1	of compatibility groups B and D are loaded together in the same wagon in accordance with the requirements of 7.5.2.2, a copy of the competent authority approval of the protective compartment or containment system in accordance with 7.5.2.2, footnote (a) under the table, shall be attached to the transport document. It shall be drafted in an official language of the forwarding country and also, if that language is not Russian, in Russian unless any agreements concluded between the countries concerned in the transport operation provide otherwise;	of compatibility groups B and D are loaded together in the same wagon in accordance with the requirements of 7.5.2.2, a copy of the competent authority approval of the protective compartment or containment system in accordance with 7.5.2.2, footnote (a) under the table, shall be attached to the transport document. It shall be drafted in an official language of the forwarding country and also, if that language is not English, French, German or Italian, in English, French, German or Italian unless any agreements concluded between the countries concerned in the transport operation provide otherwise	kind. Consider additionally.	used.
5.4.1.2.2	(e) For the carriage of empty tank-wagons in which liquefied gases have been carried with classification codes 2A, 2O, 2F, 2TF, 2TC, 2TO, 2TFC, 2TOC, the residual pressure in the shell shall be indicated in the consignment note (in MPa or bar).	No text	Difference in kind. No changes re- quired.	Additional requirement.
5.4.1.2.3.3	A copy of the competent authority approval with the conditions of carriage shall be attached to the consignment note. It shall be drafted in an offi- cial language of the forwarding country and also, if that language is not Russian, in Russian unless any agreements concluded between the countries concerned in the transport operation provide oth-	A copy of the competent authority approval with the conditions of carriage shall be attached to the transport document. It shall be drafted in an official language of the forwarding country and also, if that language is not English, French, German or Italian, in English, French, German or Italian unless any agreements concluded between the	Difference in kind. Consider additionally.	Difference in languages used.

	erwise.	countries concerned in the transport operation provide otherwise.		
5.4.1.4.1	The consignment note shall be filled out in accordance with the requirements of paragraph 2 of article 7 of SMGS.	The transport document shall be filled out in one or more languages, one of which shall be English, French or German, unless any agreements concluded between the countries concerned in the transport operation provide otherwise.	Difference in kind. Consider additionally.	Difference in languages used.
5.4.3	INSTRUCTIONS IN WRITING AND EMERGENCY CARDS Instructions in writing* * Requirements concerning instructions in writing shall be applied only when this is provided for in domestic legislation.	Instructions in writing No footnote.	Difference in kind. No changes required.	In Annex 2, SMGS, instructions in writing are used only if this is provided for in domestic legislation. Instructions in writing are adapted to the system in use in the OSJD membercountries.
5.4.3.11	* Requirements for emergency cards need not be applied in the Republic of Hungary, Republic of Poland, and Slovak Republic. 5.4.3.11. To ensure timely containment in case of emergency during carriage, loading or unloading, the information in the emergency card indicated in the consignment note (see 5.4.1.1) shall be used. The emergency card contains information on the nature of the goods, individual protection gear and instructions in the case of emergency. 5.4.3.12. Emergency cards can be found in the document "Emergency Cards for Dangerous Goods Transported by Rail in the CIS, Republic of Latvia, Republic of Lithuania, and Republic of Estonia" of 2009. The search may be performed based on the corresponding UN number or the name of the consignment (in alphabetical order). If an emergency card does not exist for a consignment, the consignor shall develop an emergency	No text	Difference in kind. No changes required.	System to ensure timely containment in case of emergency en route, when loading or unloading the goods. Emergency card in accordance with the document "Emergency cards for dangerous goods carried by railway in the CIS, Republic of Latvia, Republic of Lithuania, Republic of Estonia" contains information on the properties of the consignment, individual protection gear and instructions for containment procedure in case of emergency.

5.5.2.4.1 Introduction	card for this consignment in accordance with the approved procedure and shall attach it to the consignment. Note: Emergency cards may be published in accordance with the domestic legislation. Column (11) "Shipping name" shall include the following information for the carriage of cargo transport units that have been fumigated and have not been completely ventilated before carriage: - "UN 3359 fumigated cargo transport unit, 9", or "UN 3359 fumigated cargo transport unit, Class 9"; - The date and time of fumigation; and - The type and amount of the fumigant used	Documents associated with the carriage of cargo transport units that have been fumigated and have not been completely ventilated before carriage shall include the following information: - "UN 3359 fumigated cargo transport unit, 9", or "UN 3359 fumigated cargo transport unit, Class 9"; - The date and time of fumigation; and - The type and amount of the fumigant used. These particulars shall be drafted in an official language of the forwarding country and also, if the language is not English, French, German or Italian, in English, French, German or Italian, unless agreements, if any, concluded between the countries concerned in the transport operation provide otherwise.	Difference in kind No changes re- quired.	Difference in languages used.
5.5.2.4.2	The entries in the consignment note regarding this information shall be easy to identify, legible and durable.	The documents may be in any form, provided they contain the information required in 5.5.2.4.1. This information shall be easy to identify, legible and durable.	Difference in kind No changes re- quired.	RID allows the use of documents in any form whereas Annex 2, SMGS allows the use of the SMGS consignment note only.
6.1.5.3.2	The temperature of the test sample and its contents shall be reduced to -18°C or lower for the following packagings¹¹ For carriage to the Republic of Kazakhstan, Russian Federation or in transit through the territory thereof in the period 1 November to 1 April minimum temperature of the test sample and its contents shall be -50°C.	No footnote	Difference in kind. No changes required.	Difference in the ambient temperature range.
6.2.3.1.3	For welded pressure receptacles, only metals of	No footnote	Difference in	Difference in the ambient

footnote	weldable quality whose adequate impact strength at an ambient temperature of - 20°C can be guaranteed shall be used*.		kind. No changes re- quired.	temperature range.
	* For carriage to the Russian Federation or in transit through the territory thereof in the period 1 November to 1 April minimum temperature of the test sample and its contents shall be -50 °C.			
6.2.4.1	In order to comply with the requirements of Chapter 6.2 standards may be used. Relevant requirements are deemed to be met, if based on the specific case standards referenced in the Table below in Column (2) are applied. The requirements of Chapter 6.2 referred to in column (3) shall prevail in all cases. The standards referenced in the table below shall be applied for the issue of type approvals as indicated in column (4) to meet the requirements of Chapter 6.2 referred to in column (3). Column (5) gives the latest date when existing type approvals shall be withdrawn according to 1.8.7.2.4; if no date is shown the type approval remains valid until it expires.	The standards referenced in the table below shall be applied for the issue of type approvals as indicated in column (4) to meet the requirements of Chapter 6.2 referred to in column (3). The requirements of Chapter 6.2 referred to in column (3) shall prevail in all cases. Column (5) gives the latest date when existing type approvals shall be withdrawn according to 1.8.7.2.4; if no date is shown the type approval remains valid until it expires.	Difference in kind. No changes required.	The use of the standards is mandatory for the EU countries and voluntary for other countries.
6.2.4.1	Since 1 January 2009 in the Republic of Hungary, Republic of Latvia, Republic of Lithuania, Republic of Poland, Slovak Republic and Republic of Estonia the use of the referenced standards has been mandatory. Exceptions are dealt with in 6.2.5.	Since 1 January 2009 the use of the referenced standards has been mandatory. Exceptions are dealt with in 6.2.5.	Difference in kind. No changes required.	The use of the standards is mandatory for the EU countries and voluntary for other countries.
6.2.4.2	The use of a referenced standard in the Republic of Hungary, Republic of Latvia, Republic of Lithuania, Republic of Poland, Slovak Republic and Republic of Estonia is mandatory. When a pressure receptacle is constructed in accordance with the provisions of 6.2.5 the procedure for periodic inspection if specified in the type	The use of a referenced standard is mandatory When a pressure receptacle is constructed in accordance with the provisions of 6.2.5 the procedure for periodic inspection if specified in the type approval shall be followed.	Difference in kind. No changes required.	The use of the standards is mandatory for the EU countries and voluntary for other countries.

	approval shall be followed.			
6.2.5 First para- graph	Receptacles not designed, constructed and tested according to standards referenced in the tables of 6.2.2 or 6.2.4 shall be designed, constructed and tested with the use of a technical code providing the same level of safety as recognized by the competent authority. (This provision need not be applied in the Republic of Hungary, Republic of Latvia, Republic of Lithuania, Poland, Slovak Republic and Republic of Estonia.)	No text	Difference in kind. No changes re- quired.	The use of the standards is mandatory for the EU countries and voluntary for other countries.
6.2.5 Last paragraph	Non-UN pressure receptacles not designed, constructed and tested according to the standards shall however meet the requirements of 6.2.1, 6.2.3 and the following requirements.	The requirements of 6.2.1, 6.2.3 and the following requirements however shall be met.	Difference in kind. No changes required.	The use of the standards is mandatory for the EU countries and voluntary for other countries.
6.2.5.3	Pressure receptacles and their closures shall be made of suitable materials which shall be resistant to brittle fracture and to stress corrosion cracking between -20 °C and +50 °C*. * For carriage to the Russian Federation or through the territory thereof from 1 November to 1 April ambient temperature shall be -5 0°C.	Pressure receptacles and their closures shall be made of suitable materials which shall be resistant to brittle fracture and to stress corrosion cracking between -20 °C and +50 °C. No footnote.	Difference in kind. No changes re- quired.	Differences in the ambient temperature range.
6.4.7.5	The design of the package shall take into account temperatures ranging from –40 °C to +70 °C for the components of the packaging. Attention shall be given to freezing temperatures for liquids and to the potential degradation of packaging materials within the given temperature range. ¹ For carriage to the Republic of Kazakhstan, Russian Federation or through the territory thereof from 1 November to 1 April the bottom limit of the design temperature range shall be -50 °C.	The design of the package shall take into account temperatures ranging from -40 °C to +70 °C for the components of the packaging. Attention shall be given to freezing temperatures for liquids and to the potential degradation of packaging materials within the given temperature range. No footnote.	Difference in kind. No changes required.	Differences in the ambient temperature range.
6.4.8.15	A package shall be designed for an ambient temperature range from –40 °C to +38 °C. ¹ For carriage to the Republic of Kazakhstan, Russian Federation or through the territory thereof	A package shall be designed for an ambient temperature range from –40 °C to +38 °C. No footnote.	Difference in kind. No changes re- quired.	Differences in the ambient temperature range.

	from 1 November to 1 April the bottom limit of the design temperature range shall be -50 °C.			
6.4.11.6	The packaging should be designed with the consideration of the ambient temperature range of -40 °C to 38 °C unless otherwise specified in the certificate of approval issued for the packaging design by the competent authority. To carriage to the Republic of Kazakhstan, Russian Federation or through the territory thereof from 1 November to 1 April the bottom limit of the design temperature range shall be -50 °C.	The package shall be designed for an ambient temperature range of –40 °C to +38 °C unless the competent authority specifies otherwise in the certificate of approval for the package design. No footnote.	Difference in kind. No changes required.	Differences in the ambient temperature range.
6.5.1.1.3	The construction, equipment, testing, marking and operation of IBCs shall be subject to acceptance by the competent authority of the country in which the IBCs are approved. ¹ If the country in which the acceptance was obtained is not a member of SMGS, the acceptance shall be obtained from an SMGS member-country which is the first on the carriage route.	The construction, equipment, testing, marking and operation of IBCs shall be subject to acceptance by the competent authority of the country in which the IBCs are approved. No footnote.	Difference in kind. Additional consideration required.	Additional requirement.
6.7.2.1	The design temperature range for the shell shall be -40 °C to 50 °C for substances carried under ambient conditions. For the other substances handled under elevated temperature conditions the design temperature shall be not less than the maximum temperature of the substance during filling, discharge or carriage. More severe design temperatures shall be considered for portable tanks subjected to severe climatic conditions ¹ ; ¹ For carriage to the Republic of Kazakhstan, Russian Federation or through the territory thereof from 1 November to 1 April the design temperature range shall be 50 °C to -50 °C.	Design temperature range for the shell shall be -40 °C to 50 °C for substances carried under ambient conditions. For the other substances handled under elevated temperature conditions the design temperature shall be not less than the maximum temperature of the substance during filling, discharge or carriage. More severe design temperatures shall be considered for portable tanks subjected to severe climatic conditions; No footnote.	Difference in kind. No changes required.	Differences in the ambient temperature range.
6.7.2.2.2	(c) lined with corrosion-resistant material	(c)Lined with corrosion-resistant material directly bonded to the shell or attached by equivalent	Difference in kind.	

		means	Additional discus- sion required.	
6.7.3.1	The design temperature range for the shell shall be -40 °C to 50 °C for non-refrigerated liquefied gases carried under ambient conditions. More severe design temperatures shall be considered for portable tanks subjected to severe climatic conditions ¹ . ¹ For carriage to the Republic of Kazakhstan, Russian Federation or through the territory thereof from 1 November to 1 April the design temperature range shall be 50 °C to -50 °C.	Design temperature range for the shell shall be – 40 °C to 50 °C for non-refrigerated liquefied gases carried under ambient conditions. More severe design temperatures shall be considered for portable tanks subjected to severe climatic conditions. No footnote.	Difference in kind. No changes required.	Differences in the ambient temperature range.
6.7.4.2.8.1	(d) of an assumed ambient temperature;	(d) An assumed ambient temperature of 30 °C;	Difference in kind. Additional discussion required.	
6.8.2.1.2 left col- umn	Tank-wagons and their equipment shall be constructed so as to be capable of withstanding steady-state and dynamic forces as prescribed in Appendix 14 of Instructions O + P 516 "Freight wagons with service between railroads with gauge width 1435 mm and 1520 mm. Technical specification for freight wagon access."* * These requirements shall be deemed to be met if the competent body has carried out this assessment in the framework of the procedures as prescribed in domestic and international regulations, example: technical specification for interoperability (TSI) relating to the subsystem "rolling stock – freight wagons" of the trans-European conventional rail system (Commission decision 2006/861/EC of 28 July 2006, published in the Official Journal of the European Union L 344, 8 December 2006).	Tank-wagons shall be constructed so as to be capable of withstanding, under the maximum permissible load, the stresses which occur during carriage by rail. As regards these stresses, reference should be made to the tests prescribed by the competent authority ¹ These requirements shall be deemed to be met if the competent body in accordance with the technical specification for interoperability (TSI) relating to the subsystem "rolling stock – freight wagons" of the trans-European conventional rail system (Commission decision 2006/861/EC of 28 July 2006, published in the Official Journal of the European Union L 344, 8 December 2006) has carried out this assessment in the framework of the EC conformity assessment of the wagon.	Difference in kind. No changes required.	Difference in the technical guidelines used.
6.8.2.1.2 right col-	Tank-containers (including the tank, shell, lifting equipment and fastenings) shall be capable of	Tank-containers and their fastenings shall, under the maximum permissible load be capable of ab-	Difference in kind.	Additional requirement.

umn	absorbing own inertial forces (individually) occurring when the wagon is in motion and during loading and unloading, equal to: - in the direction of travel (lengthwise) – 2 Rg; - horizontally at right angles to the direction of travel (transverse direction) – 1 Rg; - vertically – 2 Rg; Where R is the maximum net mass of the container; g = 9.81m/s² - gravitational acceleration. Where the direction of travel is not clearly determined, 2Rg in each horizontal direction. Large tank-containers in service with railways with gauge width 1520 mm shall be capable of absorbing the longitudinal inertial force of 4 Rg (see 4.3.2.3.7).	sorbing the forces equal to those exerted by: in the direction of travel: twice the total mass; horizontally at right angles to the direction of travel: the total mass; (where the direction of travel is not clearly determined, twice the total mass in each direction); vertically upwards: the total mass; vertically downwards: twice the total mass.	No changes required.	
6.8.2.1.8 left col- umn	Welded shells shall be made of suitable materials, which shall ensure dependable performance in ambient temperature range -50 °C to 50 °C. Other ambient temperature ranges may be adopted if approved by the competent authority.	Shells shall be made of suitable metallic materials which, unless other temperature ranges are prescribed in the various classes, shall be resistant to brittle fracture and to stress corrosion cracking between –20 °C and +50 °C.	Difference in kind. No changes required.	Differences in the ambient temperature range.
6.8.2.1.8 right col- umn	Tank-containers shall be made of suitable materials resistant to ambient temperature -40 °C to 50 °C. Tank-containers intended for use with railways with gauge width 1435 mm shall have minimum ambient design temperature -20 °C (see 4.3.2.3.8) without operation on railways with gauge width 1520 mm with the exception of the Republic of Latvia, Republic of Lithuania, Republic of Estonia. Other ambient temperature ranges may be adopted if approved by the competent authority. The owner/operator of the containers shall be re-	Shells shall be made of suitable metallic materials which, unless other temperature ranges are prescribed in the various classes, shall be resistant to brittle fracture and to stress corrosion cracking between –20 °C and +50 °C.	Difference in kind. Consider additionally for tank-containers.	Differences in the ambient temperature range.

	sponsible for the use	e of tank-containers.			
6.8.2.1.10	For welded shells only materials of faultless weldability whose adequate impact strength at an ambient temperature of -55 °C can be guaranteed, particularly in the weld seams and the zones adjacent thereto, shall be used.	For welded shells only materials of faultless weldability whose adequate impact strength at an ambient temperature of -40 °C can be guaranteed, particularly in the weld seams and the zones adjacent thereto, shall be used. For tank-containers for railways with gauge width 1435mm minimum design ambient temperature shall be -20 °C (see 4.3.2.3.8), if they are not intended for operation on railways with gauge width 1520 mm with the exception of the Republic of Latvia, Republic of Lithuania, and Republic of Estonia.	For welded shells only materials of faultless weldability whose adequate impact strength at an ambient temperature of -20 °C can be guaranteed, particularly in the weld seams and the zones adjacent thereto, shall be used. Water-quenched steel may not be used for welded steel shells. If fine-grained steel is used, the guaranteed value of the yield strength Re shall not exceed 460 N/mm² and the guaranteed value of the upper limit of tensile strength Rm shall not exceed 725 N/mm², in accordance with the specifications of the material.	Difference in kind. Consider additionally for tankcontainers.	Differences in the ambient temperature range.
	Other design ambient temperature ranges may be accepted, if approved by the competent authority. If fine-grained steel is used, the guaranteed value of the yield strength Re shall not exceed 460MPa and the guaranteed value of the upper limit of tensile strength Rm shall not exceed 725 MPa, in accordance with the specifications of the material.				
6.8.2.1.15 left col- umn	In all cases design pr 1.3 times the workin	ressure shall not be less than: g pressure (unless otherwise rovisions for certain hazard	At the test pressure, the stress σ at the most severely stressed point of the shell shall not exceed the material-dependent limits prescribed below. Allowance shall be made for any weakening due	Difference in kind. No changes required.	Calculation requirements for tank design in accor- dance with the strength standards approved for the

	the sum of water or gas vapour excess pressure at the highest working temperature and the water-hammer pressure at impact interaction of the tankwagon with adjacent wagons. Water-hammer pressure is calculated as follows: $p_H = N \cdot \frac{m_s}{m_n} \cdot \frac{1}{F}, \text{[MPa]},$	to the welds.		CIS countries.
	m_n F where: N – impact force at coupling, taken to be N = 3.0 MN;			
	m_s - mass of the substance in the tank based on the full load-carrying ability of the tank [kg], m_n - net weight of the tank-wagon [kg], F - area of the internal cross section of the tank, [m ²].			
6.8.2.1.15 right col- umn	In all cases design pressure shall not be less than: 1.3 times the working pressure (unless otherwise required in special provisions for certain hazard classes); For large containers (net weight not less than 10 t):	At the test pressure, the stress σ at the most severely stressed point of the shell shall not exceed the material-dependent limits prescribed below. Allowance shall be made for any weakening due to the welds.	Difference in kind. No changes required.	Calculation requirements for tank design in accordance with the strength standards approved for the CIS countries.
	1.3 working pressure (unless otherwise required in special provisions for certain hazard classes);			
	the sum of water or gas vapour excess pressure at the highest working temperature and the water-hammer pressure at impact interaction of the wagon with loaded containers with adjacent wagons.			
	Water-hammer pressure is calculated as follows:			

	$P_h = \frac{m_z \cdot a_l}{F} \cdot 10^{-6} \big[MPa \big],$ Where m_z – mass of the substance based on full load-carrying ability of the container, [kg], a_l – longitudinal acceleration of the wagon is taken to be $a_l = 4g \ (g = 9.81 \ \text{m/s}^2 - \text{gravitational acceleration}), [\text{m/s}^2],$ F – area of the internal cross section of the tank, [m²].			
6.8.2.1.16	Permissible stresses shall be: - when calculating minimum shell thickness with calculation pressure indicated in 6.8.2.1.14 lower of the two values: [σ] = 0.75 Re [MPa] or [σ] = 0.5 Rm [MPa], - for hydraulic test in accordance with 6.8.2.1.15: [σ] = 0.9 Re [MPa], where: Re – minimum standardized tensile yield stress or conventional yield strength with relative residual elongation 0.2%. When austenitic steels are used Re shall be taken to be with relative residual elongation 1%. For tanks with regular working temperature of no less than 50 °C permissible stresses shall be reduced in accordance with the guidance of the competent authority. Permissible stress with calculation pressure for line shell thickness with calculation pressure for line shell the shell thickness with the calculation pressure for line shell the shell thickness with the calculation pressure for line shell the shell thickness with the calculation pressure for line shell the shell thickness with the calculation pressure for line shell the shell thickness with the calculation pressure for line shell the shell thickness with the shell thickness with the shell the shell the shell thickness with the shell thickness with the shell thickness with the shell the shell thickness with the shell	For all metals and alloys, the stress σ at the test pressure shall be lower than the smaller of the values given by the following formulae: $\sigma \leq 0.75~\text{Re}$ or $\sigma \leq 0.5~\text{Rm}$ where Re = apparent yield strength for steels having a clearly-defined yield point or 0.2% - proof strength for steels with no clearly defined yield point (1% for austenitic steels) Rm = tensile strength. The values of Re and Rm to be used shall be specified minimum values according to material standards. If no material standard exists for the metal or alloy in question, the values of Re and Rm used shall be approved by the competent authority or by a body designated by that authority. When austenitic steels are used, the specified minimum values according to the material standards may be exceeded by up to 15% if these higher values are attested in the inspection certificate. The minimum values shall, however, not be exceeded when the formula given in 6.8.2.1.18 is applied.	Difference in kind. No changes required.	Calculation requirements for tank design in accordance with the strength standards approved for the CIS countries.

	the shells of frameless tank-wagons shall be taken to be 0.95 of the permissible stresses indicated.	containers for inertial forces in accordance with 6.8.2.1.2 $[\sigma] = \frac{\text{Re}}{1,5} \cong 0,67 \text{ Re}$ [MPa],			
6.8.2.1.21	Nominal shell thickness <i>e</i> the sum of the effective min prescribed in 6.8.2.1.17, 6.8 lowing additives: - negative tolerance for the fastness of elongation and corrosion and abrasive we the substance during the lift consideration of the durability coats.	nimum thickness as 8.2.1.18, and the fol- thickness of the plate; a pressing; ear from the carriage of e time of the tank with	(Reserved)	Difference in kind. No changes required.	Calculation requirements for tank design in accordance with the strength standards approved for the CIS countries.
6.8.2.1.23 additional paragraph 2	If stainless austenitic steels anticorrosion coat of austen welded tanks, weld beads a to stress corrosion cracking	itic steel are used for re tested for resistance	No text	Difference in kind. No changes required.	Calculation requirements for tank design in accordance with the strength standards approved for the CIS countries.
6.8.2.1.29	(Reserved)		The minimum distance between the headstock plane and the most protruding point at the shell extremity on tank-wagons shall be 300 mm. Alternatively for tank-wagons for substances other than those for which the requirements of special provision TE 25 of 6.8.4 (b) apply, buffer override protection of a design approved by the competent authority shall be provided. This alternative is only applicable to tank-wagons used solely on railway infrastructure requiring a freight vehicle gauge smaller than G1 ¹ . The G1 gauge is referenced in the technical	Difference in kind. No changes required.	No requirements due to differences in the wagon design.

6.8.2.2.3 First sen-	Tanks that are not hermetically closed shall be fitted with vacuum (inlet) valves.	specification for interoperability (TSI) relating to the subsystem "rolling stock – freight wagons" of the trans-European conventional rail system (Commission decision 2006/861/EC of 28 July 2006, published in the Official Journal of the European Union L 344, 8 December 2006). Tanks that are not hermetically closed may be fitted with vacuum valves or with self-operating	Difference in kind.	
tence		ventilation valves to avoid an unacceptable negative internal pressure.	Additional discus- sion required.	
6.8.2.2.7	Tanks intended for the carriage of liquids having a vapour pressure of more than 110 kPa (1.1 bar) at 50 °C and a boiling point of more than 35 °C shall have a safety valve in accordance with the requirements of the competent authority.	Tanks intended for the carriage of liquids having a vapour pressure of more than 110 kPa (1.1 bar) at 50 °C and a boiling point of more than 35 °C shall have a safety valve set at not less than 150 kPa (1.5 bar) (gauge pressure) and which shall be fully open at a pressure not exceeding the test pressure; otherwise they shall conform to 6.8.2.2.8.	Difference in kind. Additional discussion required.	In Annex 2, SMGS the requirements are defined by the competent authority.
6.8.2.2.8	Tanks intended for the carriage of liquids having a boiling point of not more than 35 °C shall have a safety valve in accordance with the requirements of the competent authority.	Tanks intended for the carriage of liquids having a boiling point of not more than 35 °C shall have a safety valve set at not less than 300 kPa (3 bar) gauge pressure and which shall be fully open at a pressure not exceeding the test pressure; otherwise they shall be hermetically closed.	Difference in kind. Additional discussion required.	In Annex 2, SMGS the requirements are defined by the competent authority.
6.8.2.4.1	Shells and their equipment shall either together or separately undergo an initial inspection before being put into service. This inspection shall include: - a check of conformity to the approved type; - a check of the design characteristics, - an examination of the internal and external conditions; - a hydraulic pressure test at the test pressure indicated on the plate prescribed in 6.8.2.5.1; and - a leakproofness test and a check of satisfactory operation of the equipment.	Shells and their equipment shall either together or separately undergo an initial inspection before being put into service. This inspection shall include: - a check of conformity to the approved type; - a check of the design characteristics, - an examination of the internal and external conditions; - a hydraulic pressure test at the test pressure indicated on the plate prescribed in 6.8.2.5.1; and - a leakproofness test and a check of satisfactory operation of the equipment.	Difference in kind. No additional discussion required.	Annex 2, SMGS, contains an additional requirement for test pressure and for impact tests for tankcontainers.

Additional tests of static and dynamic strength may be conducted. The necessity of these tests, their scope, the number of tank-containers in the lot to undergo the test and the size of the lot shall be defined by the competent authority.

Except in the case of Class 2, tanks shall undergo initial and periodic pressure tests, the test pressure depends on the calculation pressure and shall be at least equal to the pressure indicated below:

Calculation pressure (bar)	Test pressure (bar)
G	G^9
1.5	1.5
2.65	2.65
4	4
10	4
15	4
21	10 (4)

The test pressures for Class 2 are given in the table of gases and gas mixtures in 4.3.3.2.5.

In all cases the test pressure shall be no less than 1.25 times the design pressure according to 6.8.2.1.15.

The hydraulic pressure test shall be carried out before the installation of a thermal insulation as may be necessary.

If the shells and their equipment are tested separately, they shall be jointly subjected to a leak-proofness test after assembly in accordance with

Except in the case of Class 2, the test pressure for the hydraulic pressure test depends on the calculation pressure and shall be at least equal to the pressure indicated below:

"Table as in SMGS"

The minimum test pressures for Class 2 are given in the table of gases and gas mixtures in 4.3.3.2.5. The hydraulic pressure test shall be carried out on the shell as a whole and separately on each compartment of compartmented shells.

The hydraulic pressure test shall be carried out before the installation of a thermal insulation as may be necessary.

If the shells and their equipment are tested separately, they shall be jointly subjected to a leak-proofness test after assembly in accordance with 6.8.2.4.3.

The leakproofness test shall be carried out separately on each compartment of compartmented shells.

	6.8.2.4.3. The leakproofness test shall be carried out separately on each compartment of compartmented shells.			
6.8.2.4.2	Shells and their equipment shall undergo periodic inspections no later than every 8 years 5 years These periodic inspections shall include: - An external and internal examination; - A leakproofness test in accordance with 6.8.2.4.3 of the shell with its equipment and check of the satisfactory operation of all the equipment; - As a general rule, a hydraulic pressure test (for the test pressure for the shells and compartments if applicable, see 6.8.2.4.1). Text, left column only - tanks intended for the carriage of petroleum products which were constructed before 1985 shall undergo hydraulic test no later than every 8 years, tanks intended for the carriage of petroleum products which were constructed in or after 1985 shall undergo hydraulic test no later than every 13 years, tanks intended for carriage of alcohols no later than every 10 years. Tanks carrying liquid substances or gases with destination in Hungary, Poland, Romania, Slovakia or in transit through the territory thereof shall have the date of the last hydraulic test inscribed on a plate, the date shall not exceed 8 years. The decision on granting the permission for the transit of tanks with gauge width 1520 mm intended for carriage of petroleum products and	Shells and their equipment shall undergo periodic inspections no later than every eight years - five years. These periodic inspections shall include: An external and internal examination; A leakproofness test in accordance with 6.8.2.4.3 of the shell with its equipment and check of the satisfactory operation of all the equipment; As a general rule, a hydraulic pressure test (for the test pressure for the shells and compartments if applicable, see 6.8.2.4.1). Sheathing for thermal or other insulation shall be removed only to the extent required for reliable appraisal of the characteristics of the shell. In the case of tanks intended for the carriage of powdery or granular substances, and with the agreement of the expert approved by the competent authority, the periodic hydraulic pressure tests may be omitted and replaced by leakproofness tests in accordance with 6.8.2.4.3, at an effective internal pressure at least equal to the maximum working pressure.	Difference in kind. No changes required.	Annex 2, SMGS sets different times for periodic inspections for certain types of tank-wagons.

	alcohol which were built after 1985 with the date of hydraulic tests exceeding 8 years through the territory of their countries shall be made by the competent authorities of Belarus, Hungary, Iran, Kazakhstan, Poland, Russia, Romania, Slovakia, Uzbekistan, and Ukraine under separate agreements. Sheathing for thermal or other insulation shall be removed only to the extent required for reliable appraisal of the characteristics of the shell. In the case of tanks intended for the carriage of powdery or granular substances, and with the agreement of the expert approved by the competent authority, the periodic hydraulic pressure tests may be omitted and replaced by leakproofness tests in accordance with 6.8.2.4.3, at an effective internal pressure at least equal to the maximum working pressure.			
6.8.2.4.6	Experts for performing tests on the tank-wagon Note: These provisions shall be applied only when provided for in the domestic legislation.	Expert for performing tests and inspections on the tanks of tank-wagons No footnote.	Difference in kind. No changes required.	Additional note.
6.8.2.5.1	"- in the case of multiple-compartment shells, the capacity of each compartment ¹¹ –, followed by the symbol "S" when the shells or the compartments of more than 7 500 litres are divided by surge plates into sections of not more than 7 500 litres capacity" <i>page width</i>	- capacity of the shell – in the case of multiple-compartment shells, the capacity of each compartment –, page width followed by the symbol "S" when the shells or the compartments of more than 7 500 litres are divided by surge plates into sections of not more than 7 500 litres capacity; - only right column	Difference in kind. No changes required.	Requirements of 4.3.2.2.4 of Annex 2, SMGS also cover tank-wagons.
6.8.2.5.2 left col- umn	- the proper shipping name of the substance(s)	 for the substances according to 4.3.4.1.3, the proper shipping name of the substance(s) accepted for carriage; 	Difference in kind. Requires additional discussion. Consider possibility of adding the RID text.	Additional requirement in RID.

6.8.2.5.3 left col- umn	Inscriptions prescribed in 6.8.2.5.1 and 6.8.2.5.2 on tank-wagons intended for use on railways with gauge width 1520 mm shall be in Russian. The owner country may duplicate the inscription in its official language.		or use on railways with Il be in Russian. The	No text.	Difference in kind. No changes required.	Annex 2, SMGS has an explanation on the use of languages in markings on tank-wagons.
6.8.2.6	Requirement structed and dards. Note: Personal having resonal Annex 2 of Provisions considered	ents for tanks what tested according to bodies ide ponsibilities, conf SMGS shall profess of the following	entified in standards as accurrent requirements in evail in all cases. It paragraphs shall be ded the tanks meet the ing standards: Name of the Document Tank intended for carriage of dangerous goods — tests, inspection and marking of metal tanks.	Requirements for tanks which are designed, constructed and tested according to referenced standards NOTE: Persons or bodies identified in standards as having responsibilities in accordance with RID shall meet the requirements of RID. 6.8.2.6.1 Design and construction The standards referenced in the table below shall be applied for the issue of type approvals as indicated in column (4) to meet the requirements of Chapter 6.8 referred to in column (3). The requirements of Chapter 6.8 referred to in column (5) gives the latest date when existing type approvals shall be withdrawn according to 1.8.7.2.4 or 6.8.2.3.3; if no date is shown the type approval remains valid until it expires. Since 1 January 2009 the use of the referenced standards has been mandatory. Exceptions are dealt with in 6.8.2.7 and 6.8.3.7. If more than one standard is referenced for the application of the same requirements, only one of them shall be applied, but in full unless otherwise specified in the table below.	Difference in kind. No changes required.	Annex 2, SMGS, does not contain the requirement for mandatory compliance with the standards. Standard EN 12972:2007 may be used on a voluntary basis.
6.8.2.7	constructe standards	ed and tested acc	ich are not designed, ording to referenced	Etc. Table of standards Requirements for tanks which are not designed, constructed and tested according to referenced standards To reflect scientific and technical progress or	Difference in kind. No changes required.	Annex 2, SMGS, does not contain the requirement for mandatory compliance with the standards.
			ned, constructed and rds referenced in 6.8.2.6	where no standard is referenced in 6.8.2.6 or to deal with specific aspects not addressed in a stan-		

6.8.3.1.3	shall be designed, constructed and tested in accordance with the technical code approved by the competent authority providing for the same level of safety. Tanks shall, however, comply with the minimum requirements of 6.8.2. For testing, inspection and marking, the applicable standard as referenced in 6.8.2.6 may also be used. For double-walled shells, the wall thickness of the inner receptacle shall be calculated in accordance with 6.8.2.1.17-6.8.2.1.21. The outer shell made of structural steel shall have a minimum wall thickness of 6 mm. If the outer shell is separated from the inner shell by a vacuum space (vacuum insulation), the protective outer shell shall be designed for the outer pressure of no less than 100 kPa (1 bar). The calculations may consider outer and inner reinforcement elements.	dard referenced in 6.8.2.6, the competent authority may recognize the use of a technical code providing the same level of safety. Tanks shall, however, comply with the minimum requirements of 6.8.2. The competent authority shall transmit to the secretariat of OTIF a list of the technical codes that it recognises. The list should include the following details: name and date of the code, purpose of the code and details of where it may be obtained. The secretariat shall make this information publicly available on its website. A standard which has been adopted for reference in a future edition of the RID may be approved by the competent authority for use without notifying the OTIF secretariat. For testing, inspection and marking, the applicable standard as referenced in 6.8.2.6 may also be used. For double-walled shells, the wall thickness of the inner receptacle may, notwithstanding the requirements of 6.8.2.1.18, be 3 mm if a metal is used which has good low-temperature performance corresponding to a minimum tensile strength Rm = 490 N/mm² and a minimum coefficient of elongation A = 30%. If other metals are used, an equivalent minimum wall thickness shall be maintained; this thickness is to be calculated according to the formula in footnote 5 to 6.8.2.1.18, where $Rm_0 = 490 N/mm^2$ and $A_0 = 30\%$. The outer shell shall in this case have a minimum wall thickness of 6 mm where mild steel is concerned. If other materials are used, an equivalent minimum wall thickness of 6 mm where mild steel is concerned. If other materials are used, an equivalent minimum wall thickness of 6 mm where mild steel is concerned. If other materials are used, an equivalent minimum wall thickness shall be maintained, which shall be calculated according to the formula given in 6.8.2.1.18.	Difference in kind. No changes required.	Calculation requirements for tank design in accordance with the strength standards approved for the CIS countries.
0.8.3.2.9	liquefied gases or dissolved gases, may be fitted	liquefied gases or dissolved gases, may be fitted	kind.	the competent authorities

	with spring-loaded safety valves. These valves shall be capable of opening automatically under a pressure between 0.9 and 1.0 times the test pressure of the tank to which they are fitted unless prescribed otherwise by the competent authority. They shall be of such a type as to resist dynamic stresses, including liquid surge. The use of dead weight or counter weight valves is prohibited. The required capacity of the safety valves shall be calculated in accordance with the formula contained in 6.7.3.8.1.1.	with spring-loaded safety valves. These valves shall be capable of opening automatically under a pressure between 0.9 and 1.0 times the test pressure of the tank to which they are fitted. They shall be of such a type as to resist dynamic stresses, including liquid surge. The use of dead weight or counter weight valves is prohibited. The required capacity of the safety valves shall be calculated in accordance with the formula contained in 6.7.3.8.1.1.	Additional discussion required.	to set the requirements.
6.8.3.2.20 First sentence	The manifold shall be designed for service in a temperature range of -50 °C to + 50 °C* * For wagons in service on gauge width 1435 mm the temperature range shall be -20 °C to +50 °C.	The manifold shall be designed for service in a temperature range of -20 °C to +50 °C.	Difference in kind. No changes required.	Differences in the ambient temperature range.
6.8.3.4.2	The basic requirements for the test pressure are given in 4.3.3.2.1 to 4.3.3.2.4 and in the table in 4.3.3.2.5. In all cases the test pressure shall be no less than 1.25 times the design pressure in accordance with 6.8.2.1.15.	The basic requirements for the test pressure are given in 4.3.3.2.1 to 4.3.3.2.4 and the minimum test pressures are given in the table of gases and gas mixtures in 4.3.3.2.5.	Difference in kind. No changes required.	Additional requirement for test pressure.
6.8.3.7	Requirements for battery-wagons and MEGCs which are not designed, constructed and tested according to referenced standards Battery-tanks and MEGCs which are not designed, constructed and tested according to standards referenced in 6.8.3.6 shall be designed, constructed and tested in accordance with the technical code approved by the competent authority providing for the same level of safety. They shall, however, comply with the requirements of 6.8.3.	Requirements for battery-wagons and MEGCs which are not designed, constructed and tested according to referenced standards To reflect scientific and technical progress or where no standard is referenced in 6.8.3.6 or to deal with specific aspects not addressed in a standard referenced in 6.8.3.6, the competent authority may recognize the use of a technical code providing the same level of safety. Battery-wagons and MEGCs shall, however, comply with the minimum requirements of 6.8.3. In the type approval the issuing body shall specify the procedure for periodic inspections if the standards referenced in 6.2.2, 6.2.4 or 6.8.2.6 are not	Difference in kind. No changes required.	Annex 2, SMGS does not contain the requirement for mandatory use of the standards.

6.8.4 TC2	Shells, and their items of equipment, shall be made of aluminium not less than 99.5 % pure or of suitable steel not liable to cause hydrogen peroxide to decompose. The wall thickness shall be calculated in accordance with 6.8.2.1.17 to 6.8.2.1.21.	applicable or shall not be applied. The competent authority shall transmit to the secretariat of OTIF a list of the technical codes that it recognises. The list should include the following details: name and date of the code, purpose of the code and details of where it may be obtained. The secretariat shall make this information publicly available on its website. A standard which has been adopted for reference in a future edition of the RID may be approved by the competent authority for use without notifying the OTIF secretariat. Shells, and their items of equipment, shall be made of aluminium not less than 99.5% pure or of suitable steel not liable to cause hydrogen peroxide to decompose. Where shells are made of aluminium not less than 99.5% pure, the wall thickness need not exceed 15 mm, even where calculation in accordance with 6.8.2.1.17 gives a higher value.	Difference in kind. No changes required.	Calculation requirements for tank design in accor- dance with the strength standards approved for the CIS countries.
6.8.4 TC6	Where the use of aluminium is necessary for tanks, such tanks shall be made of aluminium not less than 99.5 % pure. The wall thickness shall be calculated in accordance with 6.8.2.1.17 to 6.8.2.1.21.	Where the use of aluminium is necessary for tanks, such tanks shall be made of aluminium not less than 99.5 % pure; the wall thickness need not exceed 15 mm even where calculation in accordance with 6.8.2.1.17 gives a higher value.	Difference in kind. No changes required.	Calculation requirements for tank design in accor- dance with the strength standards approved for the CIS countries.
6.8.4 TE 22	Each end of tank-wagons for substances carried in the liquid state and gases or battery-wagons shall be capable of withstanding the emerging dynamic stress and of absorbing the energy by means of elastic or plastic deformation of structural parts of the tank-wagon (e.g. with the use of crash elements). The energy absorption shall be determined in relation to a collision on a straight track. Energy absorption by means of plastic deformation shall only occur in conditions other than those encountered during normal conditions of rail	In order to reduce the extent of damage in the event of a collision shock or accident, each end of tank-wagons for substances carried in the liquid state and gases or battery-wagons shall be capable of absorbing at least 800 kJ of energy by means of elastic or plastic deformation of defined components of the subframe or by means of a similar procedure (e.g. crash elements). The energy absorption shall be determined in relation to a collision on a straight track. Energy absorption by means of plastic deforma-	Difference in kind. No changes required.	Annex 2, SMGS, says that the evaluation criteria and testing procedures are defined by the requirements of the competent authority.

	transport (impact speed higher than 12 km/h or individual buffer force greater than 1500 kN). Energy absorption at each end of the wagon shall not lead to transfer of energy to the shell which could cause plastic deformation of the shell. The requirements of this special provision are deemed to be met if crashworthy buffers (energy absorption elements) that conform to clause 7 of standard EN 15551:2009 (Railway applications – Freight wagons – Buffers) are used and if the wagon body satisfies clause 6.3 and sub clause 8.2.5.3 of standard EN 12663-2:2010 (Railway applications – Structural requirements of railway vehicle bodies – Part 2: Freight wagons). Note 1: Evaluation criteria for the design and testing methods shall be set forth in the requirements of the competent authority.	tion shall only occur in conditions other than those encountered during normal conditions of rail transport (impact speed higher than 12 km/h or individual buffer force greater than 1500 kN). Energy absorption of not more than 800 kJ at each end of the wagon shall not lead to transfer of energy to the shell which could cause visible, permanent deformation of the shell. The requirements of this special provision are deemed to be met if crashworthy buffers (energy absorption elements) that conform to clause 7 of standard EN 15551:2009 (Railway applications – Freight wagons – Buffers) are used and if the wagon body satisfies clause 6.3 and sub clause 8.2.5.3 of standard EN 12663-2:2010 (Railway applications – Structural requirements of railway vehicle bodies – Part 2: Freight wagons).		
6.8.4 TE 25 Additional paragraph (e)	(e) Protective shields for the floors of tanks fitted with automatic couplers. If a protective shield is used for the tank floors, the following requirements shall be met: - the protective shields shall cover the floor of the tank up to the height of 1100 mm (measuring from the top edge of the front beam), the coupler head shall be fitted with anticreep devices to prevent unintentional uncoupling. The protective shield shall be no less than 1200 mm wide along the aforementioned height; - the protective shield shall have a minimum wall thickness of 12 mm; The protective shields and areas of fastening of the shields shall be designed in such a way as to minimize the potential for damage of the tank floor with the protective shield.	No text	Difference in kind. No changes required.	Annex 2, SMGS, adapts provision TE25 for tank-wagons fitted with an automatic coupling device as well.
6.8.4 TT8	Tanks approved for carriage of UN 1005 AM-MONIA, ANHYDROUS and constructed of fine-	Tanks on which the proper shipping name required for the entry UN 1005 AMMONIA, ANHY-	Difference in kind.	Annex 2, SMGS, does not contain certain require-

	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	DDOTIG: 1 1: 1 :4 < 0.0 5.1 :	37 7	1
	grained steel with a yield strength of more than	DROUS is marked in accordance with 6.8.3.5.1 to	No changes re-	ments.
	400 MPa in accordance with the material standard,	6.8.3.5.3 and constructed of fine-grained steel with	quired.	
	shall be subjected at each periodic test according	a yield strength of more than 400 N/mm ² in accor-		
	to 6.8.2.4.2, to magnetic particle inspections to	dance with the material standard, shall be sub-		
	detect surface cracking.	jected at each periodic test according to 6.8.2.4.2,		
		to magnetic particle inspections to detect surface		
	For the lower part of each shell at least 20 % of	cracking.		
	the length of each circumferential and longitudinal	For the lower part of each shell at least 20% of the		
	weld shall, together with all nozzle welds and any	length of each circumferential and longitudinal		
	repair or ground areas, be inspected.	weld shall, together with all nozzle welds and any		
		repair or ground areas, be inspected.		
		If the marking of the substance on the tank or tank		
		plate is removed, a magnetic particle inspection		
		shall be carried out and these actions recorded in		
		the inspection certificate attached to the tank re-		
		cord.		
6.8.4	NOTE: These particulars shall be in an official	NOTE: These particulars shall be in an official	Difference in	Difference in languages
TM	language of the country of approval, and also, if	language of the country of approval, and also, if	kind.	used.
	that language is not Russian, in Russian, unless	that language is not English, French, German or	No changes re-	
	any agreements concluded between the countries	Italian, in English, French, German or Italian,	quired.	
	concerned in the transport operation provide oth-	unless any agreements concluded between the	7	
	erwise.	countries concerned in the transport operation		
	of wise.	provide otherwise.		
6.8.5.1.1	b) (Reserved)	(b) Shells constructed of fine-grained steels for	Difference in	Annex 2, SGMS does not
(b)		the carriage of:	kind.	contain the requirements
		- corrosive gases of Class 2 and UN No. 2073	Requires addi-	of RID.
		ammonia solution; and	tional discussion.	
		– UN No. 1052 hydrogen fluoride, anhydrous		
		and UN No.1790 hydrofluoric acid with more than		
		85% hydrogen fluoride of Class 8		
		shall be heat-treated for thermal stress relief.		
		Thermal stress relief shall not be required if:		
		1. there is no risk of corrosion due to stress crack-		
		ing; and		
		2. the mean notch bar impact value in the welding		
		metal, the transition area and the base material,		
		determined in each case by means of three sam-		
		determined in each case by means of three sam-	1	

6.8.5.2.1	The materials used for the manufacture of shells	ples, 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. The materials used for the manufacture of shells	Difference in	Difference in ambient tem-
beginning	and the weld beads shall, at their lowest working temperature in accordance with 6.8.2.1.8, 6.8.2.1.10 meet the following requirements as to impact strength: - The tests shall be carried out with test-pieces having a V-shaped notch (KCV); or according to the requirements of the competent authority, the impact strength may be defined with test-pieces having a U-shaped notch (KCU) following the procedures adopted by the competent authority;	and the weld beads shall, at their lowest working temperature, but at least at -20 °C, meet at least the following requirements as to impact strength: – The tests shall be carried out with test-pieces having a V-shaped notch;	kind. No changes re- quired.	perature range.
6.9.1.2	For the design and testing of FRP tank-containers including tank swap bodies, the provisions of 6.8.2.1.1, 6.8.2.1.7, 6.8.2.1.13, 6.8.2.1.14 (a) and (b) 6.8.2.1.15, 6.8.2.1.25, 6.8.2.1.27 and 6.8.2.2.3 shall also apply.	For the design and testing of FRP tank-containers including tank swap bodies, the provisions of 6.8.2.1.1, 6.8.2.1.7, 6.8.2.1.13, 6.8.2.1.14 (a) and (b), 6.8.2.1.25, 6.8.2.1.27 and 6.8.2.2.3 shall also apply.	Difference in kind. No changes required.	Calculation requirements for tank design in accor- dance with the strength standards approved for the CIS countries.
6.9.2.8	At the specified test pressure, which shall not be less than the relevant calculation pressure as specified in 6.8.2.1.14 (a) and (b), and 6.8.2.1.15 the maximum strain in the shell shall not be greater than the elongation at fracture of the resin.	At the specified test pressure, which shall not be less than the relevant calculation pressure as specified in 6.8.2.1.14 (a) and (b) the maximum strain in the shell shall not be greater than the elongation at fracture of the resin.	Difference in kind. No changes required.	Calculation requirements for tank design in accordance with the strength standards approved for the CIS countries.
7.2.1	Unless otherwise provided in 7.2.2 to 7.2.4, packages of dangerous goods may be loaded: (a) into closed wagons or into closed containers; or (b) into sheeted wagons or into sheeted containers ¹ ; or (c) into open wagons (unsheeted) or into open containers (unsheeted) ¹ .	Unless otherwise provided in 7.2.2 to 7.2.4, packages may be loaded: (a) into closed wagons or into closed containers; or (b) into sheeted wagons or into sheeted containers; or (c) into open wagons (unsheeted) or into open containers (unsheeted).	Difference in kind. No changes re- quired.	In Annex 2, SMGS, carriage in open wagons and containers, in sheeted wagons and containers with a destination in or in transit through the territory of the Republic of Belarus, Republic of Kazakhstan,

	¹ For carriage in open wagons and containers, in sheeted wagons and containers to the Republic of Belarus, Republic of Kazakhstan, Russian Federation and Ukraine and through the territory thereof agreement shall be required.	No footnote.		Russian Federation and Ukraine is performed in accordance with an agreement.
7.2.2 and 7.2.4 W1, W10, W11	Footnote 1 of Chapter 7.2.1 has also been made for these provisions.	No footnote.	Difference in kind. No changes required.	In Annex 2, SMGS, carriage in open wagons and containers, in sheeted wagons and containers with a destination in or in transit through the territory of the Republic of Belarus, Republic of Kazakhstan, Russian Federation and Ukraine is performed in accordance with an agreement.
7.2.4 W2	W 2 Substances and articles of Class 1 shall be loaded into closed wagons or closed containers. Articles which, because of their dimensions or their mass, cannot be loaded into closed wagons or closed containers may equally be carried in open wagons or open containers. They shall be covered by sheets. Only wagons fitted with regulation sheet steel spark-guards shall be used for the carriage of substances and articles of divisions 1.1, 1.2, 1.3, 1.5 and 1.6, even when these substances and articles are loaded into large containers. For wagons fitted with a combustible floor, the sheet steel spark-guards shall not be fixed directly to the floor of the wagon. Military consignments of substances and articles of Class 1 which form part of military equipment and of the structure of military material, may also be loaded into open wagons under the following	W 2 Substances and articles of Class 1 shall be loaded into closed wagons or closed containers. Articles which, because of their dimensions or their mass, cannot be loaded into closed wagons or closed containers may equally be carried in open wagons or open containers. They shall be covered by sheets. Only wagons fitted with regulation sheet steel spark-guards shall be used for the carriage of substances and articles of divisions 1.1, 1.2, 1.3, 1.5 and 1.6, even when these substances and articles are loaded into large containers. For wagons fitted with a combustible floor, the sheet steel spark-guards shall not be fixed directly to the floor of the wagon. Military consignments of substances and articles of Class 1 which form part of military equipment and of the structure of military material, may also be loaded into open wagons under the following	Difference in kind. No changes required.	In Annex 2, SMGS, the carriage of substances and articles of Class 1 in containers covered by the definition "intermediate containers", in accordance with Annex 8, SMGS, is prohibited.

	conditions: - consignments shall be accompanied by the military guards or by militarized guards - means of initiation not having at least two effective protective devices shall be removed, unless the substances and articles are placed in locked military vehicles. In accordance with Annex 8 SMGS, substances and articles of Class 1 shall not be carried in containers covered by the definition of Intermediate Container.	conditions: - consignments shall be accompanied by the competent military authority or, by order of this authority, - means of initiation not having at least two effective protective devices shall be removed, unless the substances and articles are placed in locked military vehicles.		
7.2.4 W8	For the carriage of packages bearing an additional label in accordance with Model No. 1, only wagons fitted with regulation sheet steel spark-guards shall be used, even when these substances are loaded in large containers.	W 8 For the carriage of packages bearing an additional label in accordance with Model No. 1, only wagons fitted with regulation sheet steel sparkguards shall be used, even when these substances are loaded in large containers. For wagons fitted with a combustible floor, the sheet steel sparkguards shall not be fixed directly to the floor of the wagon.	Difference in kind. Requires additional discussion. Consider possibility of including the second sentence of the RID text.	Annex 2, SMGS does not contain the requirements stated in the second sentence of the RID text.
7.3.3 VW1, VW2, VW3, VW4, VW7, VW9, VW10, VW15	Only VW1 cited. Carriage in bulk in closed wagons, movable roof wagons, sheeted wagons, closed containers or in sheeted large containers is permitted ¹² . ¹ Carriage in open wagons and containers and in sheeted wagons or containers to a destination in the Russian Federation, Republic of Belarus, Ukraine or through the territory thereof shall be performed in accordance with an agreement. ² .Carriage in bulk to/from the Republic of Belarus, Russian Federation, Ukraine in closed wagons and containers shall be carried out only in private or rented [wagons or containers] with the exception of specialized wagons and containers for carriage of the goods in question.	Carriage in bulk in closed wagons, movable-roof wagons, sheeted wagons, closed containers or in sheeted large containers is permitted. No footnote.	Difference in kind. No changes required.	In Annex 2, SMGS, carriage in open wagons and containers, in sheeted wagons and containers with a destination in or in transit through the territory of the Russian Federation, Republic of Belarus, and Ukraine is performed in accordance with an agreement. Carriage in bulk to/from the Republic of Belarus, Russian Federation, and Ukraine in closed wagons and containers shall be carried out only in

7.3.3 VW2, VW3, VW4, VW7, VW8, VW9, VW10, VW15	Footnote 1 of these provision		upter	7.3.3	3 has	also	been	mać	le for	No	footi	note.								Difference in kind. No changes required.	private or rented containers with the exception of specialized wagons and containers for carriage of the goods in question. In Annex 2, SMGS, carriage in open wagons and containers, in sheeted wagons and containers with a destination in or in transit through the territory of the Russian Federation, Republic of Belarus, and Ukraine is performed in accordance with an agree-
7.5.2.1	Annex 2, SMGS Packages bearing different danger labels shall not be loaded together in the same wagon or container unless mixed loading is permitted according to the Table 7.5.2.1 based on the danger labels or the combination of the danger labels 4.1+1 and 5.2+1 they bear. Table for mixed loading of dangerous goods in one wagon or container 7.5.2.1.															Difference in kind. No changes required.	ment. Requirements for mixed loading of packaged dangerous goods in the same wagon or container in Annex 2, SMGS are stricter.				
	Danger label No.	1	1. 4	1.	1.			4.1	4.1 + 1	4.2						6.2	7A 7B 7C	8	9		
	1.5	See	. 7.5	5.2.2	8	a)	a)	a)		a)	a)		a)		a)	a)	a)	a)	a), b),c)		
	1.6 2.1, 2.2, 2.3 3		a) a)			+	+	+			+				+	+	+	+	b) + +		
	4.1 4.1 + 1 4.2		a) a)				+	+	+	+	+				+	+	+	+	+		
	4.3 5.1 5.2 5.2 +1		a) a)			+	+	+		+	+	+	+	+	+	+	+	+	+		

			1 10			-	-	-	-	1			-		-	-			-	
	6.1			1)		+	+	+		+	+				+	+	+	Н	- +	-
	6.2			,		+	+	+		+	+				+	+	+	+	-	-
	7A, 7B,	7C	إ	1)			+	+		+	+				+	+	+	+	- +	-
	8		b) a	') i) h) b)	+	+	+		+	+				+	+	+	+	- +	-
	9		,	o),) 5)	+	+	+		+	+				+	+	+	+	•	-
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	Legend.		1.		1															
	+ Mixed	d Ioa	ding p	ermi	tted.		. ~													
	(a) Mixe																			
	Note: m		loadii	ıg wi	ith 1.4	4S sul	stan	ces a	nd ar	ticles	is no	ot pei	mitte	d for	the t	errito	ry of	the I	Russi	an
	Federai																			
	(b) Mixe	d loa	ding p	ermi	itted ł	etwe	en ge	oods	of Cla	ass 1	and 1	ife-sa	ving	appli	ance	s of C	Class !	9		
	(UN No																			
	(c) Mixe	d loa	ding p	ermi	itted b	etwe	en ai	r bag	infla	tors,	or air	bag	modu	iles, c	or sea	t-belt	prete	ensic	ners	of
	Division	n 1.4	, comp	atib	ility g	roup	G, (I	UN N	o. 05	03) a	nd ai	r bag	infla	tors c	r air	bag n	nodul	les o	seat	-belt
	pretensi	ioner	s of C	lass 9	9 (UN	l No.	3268	3).												
7.5.2.1	RID							,												
	Package	es bea	aring o	liffe	rent d	anger	labe	els sha	all no	t be 1	oade	d tog	ether	in the	e sam	e was	gon o	r cor	ntaine	er
	unless r																			
	bear.	шлсс	1 10uu	1115 11	, perm	intica	acce	عادات	, to th	101	IO W II	15 14	010 0	uscu (J11 t11v	dan	501 10	10015	tiley	
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	containe				• . •												C			
	NOTE:												ents sl	nall b	e dra	wn uj	p for	cons	ıgnm	ents
	that can	not b	e loac	led to	ogeth	er in t	he sa	ame v	vagon	or c	ontai	ner.								
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	La-	1	1.4	1.5	1.6	2.1	3	4.1	4.1	4.2	4.3	5.1	5.2		6.1	6.2	7A	8	9	
	bels					,			+ 1					+ 1			,			
	Nos.					2.2											7B			
						,											,			
						2.3											7C			
	1											(d)							(b)	
	1.4					(a)	(a)	(a)		(a)	(a)	(a)	(a)		(a)	(a)	(a)	(a)	(a),(b))
	***	See	7.5.2	2															,(c)	
	1.5		71.5.2																(b)	
		-											1						(b)	
	1.6																		\-\'	

2.1,		(a)			X	X	X		X	X	X	X		X	X	X	X	X
2.2, 2.3																		
3		(a)			X	X	X		X	X	X	X		X	X	X	X	X
4.1		(a)			X	X	X		X	X	X	X		X	X	X	X	X
4.1 +								X										
1		(0)																
4.2		(a)			X	X	X		X	X	X	X		X	X	X	X	X
4.3		(a)			X	X	X		X	X	X	X		X	X	X	X	X
5.1	(d)	(a)			X	X	X		X	X	X	X		X	X	X	X	X
5.2		(a)			X	X	X		X	X	X	X	X	X	X	X	X	X
5.2 + 1												X	X					
6.1		(a)			X	X	X		X	X	X	X		X	X	X	X	X
6.2		(a)			X	X	X		X	X	X	X		X	X	X	X	X
7A, 7B, 7C		(a)			X	X	X		X	X	X	X		X	X	X	X	X
8		(a)			X	X	X		X	X	X	X		X	X	X	X	X
9	(b)	(a),(b) ,(c)	(b)	(b)	X	X	X		X	X	X	X		X	X	X	X	X

- x Mixed loading permitted.
- (a) Mixed loading permitted with 1.4S substances and articles.
- (b) Mixed loading permitted between goods of Class 1 and life-saving appliances of Class 9 (UN Nos. 2990, 3072 and 3268).
- (c) Mixed loading permitted between air bag inflators, or air bag modules, or seat-belt pretensioners of Division 1.4, compatibility group G, (UN No. 0503) and air bag inflators or air bag modules or seat-belt pretensioners of Class 9 (UN No. 3268).
- Mixed loading permitted between blasting explosives (except UN No. 0083 explosive, blasting, type C) and ammonium nitrate (UN Nos. 1942 and 2067) and alkali metal nitrates and alkaline earth metal nitrates provided the aggregate is treated as blasting explosives under Class 1 for the purposes of placarding, segregation, stowage and maximum permissible load. Alkali metal nitrates include caesium nitrate (UN 1451), lithium nitrate (UN 2722), potassium nitrate (UN 1486), rubidium nitrate (UN 1477) and sodium nitrate (UN 1498). Alkaline earth metal nitrates include barium nitrate (UN 1446), beryllium nitrate (UN 2464), calcium nitrate (UN 1454), magnesium nitrate (UN 1474) and strontium nitrate (UN 1507).

7.3.3 VW30	Carriage in bulk may be performed in specialized closed bunker wagons for carriage of mineral fertilizers (hopper wagons).	No text	Difference in kind. No changes required.	Additional provision for UN 2067.
7.5.3	7.5.3. PROTECTIVE DISTANCE AND CONDITIONS FOR LOADING LARGE CONTAINERS ON THE WAGON 7.5.3.1. Every wagon, including wagons loaded with large containers containing substances or articles of Class 1 and bearing a label conforming to models Nos. 1, 1.5 or 1.6, shall be separated on the same train from wagons or large containers bearing a label conforming to models Nos. 2.1, 3, 4.1, 4.2, 4.3, 5.1 or 5.2 by a protective distance. The requirement for this protective distance is met if the space between the walls of containers is: (a) at least 18 m, or (b) occupied by two 2-axle wagons or a wagon with 4 or more axles. 7.5.3.2. When sorting trains and shunting wagons with dangerous goods, the protective distance standards of Column (21b) of Table A of Chapter 3.2 shall be met*. * The requirements need not be met when forwarding from the Republic of Hungary, Republic of Poland and Slovak Republic or when in transit through the territory thereof. 7.5.3.2.1. If this column contains a fraction, the numerator shall indicate minimum protective distance for the carriage of dangerous goods in open wagons and containers. The denominator shall indicate minimum protective distance for carriage of dangerous goods in tank-wagons, tank-	7.5.3. Protective distance Every wagon or large container containing substances or articles of Class 1 and bearing a label conforming to models Nos. 1, 1.5 or 1.6, shall be separated on the same train from wagons or large containers bearing a label conforming to models Nos. 2.1, 3, 4.1, 4.2, 4.3, 5.1 or 5.2 by a protective distance. The requirement for this protective distance is met if the space between the buffer head of a wagon or the end wall of a large container and the buffer head of another wagon or the end wall of another large container is: (a) at least 18 m, or (b) occupied by two 2-axle wagons or a wagon with 4 or more axles.	Difference in kind. No changes required.	Annex 2, SMGS applies the requirement of RID and, additionally, standards for protective distance indicated in Column (21b) of Table A of Chapter 3.2 (see 7.5.3.2.2).

	containers and portable containers. The sign "-" (dash) in Column (21b) shall indicate that no pro-			
	tective distance is required for carriage of the relevant dangerous goods. No information in Column (21b) indicates that no standards for protective distance have been devised for the carriage of the dangerous goods in question. If no standards for protective distance have been devised for the carriage of the dangerous goods in question, such standards shall be set in accordance with the domestic guidelines.			
	7.5.3.2.2. Protective distance is the minimum number of physical wagons (empty or loaded with non-dangerous goods) separating the wagons loaded with dangerous goods from the locomotives or wagons carrying passengers:			
	- first digit – from the main locomotive (in fractions: numerator – from solid-fuel steam locomotive, denominator –from electric locomotive, diesel locomotive or petroleum-fuel steam locomotive);			
	- second digit – from solid-fuel banking engine, with "*" sign – from all bank engines;			
	- third digit - from wagons carrying passengers;			
	-fourth digit – from solid-fuel locomotive when shunting;			
	"0" sign shall indicate that no protective distance is required.			
7.5.6	SAFETY MEASURES FOR SHUNTING AND HUMP SHUNTING*. * The requirements need not be med in the Republic of Hungary, Republic of Poland, and the Slovak Republic. If any entry in Column (21c) of Table A of Chap-	(Reserved)	Difference in kind. No changes re- quired.	Annex 2, SMGS contains additional requirements for humping and shunting.

ter 3.2 contains a code starting with the letter "M", the following provisions shall be applied:

M 1 – «Do not hump shunt»

In accordance with 5.4.1.1.1 (n) the consignor shall indicate in the consignment note "Do not hump shunt". Shunting shall be performed by backing or with the use of a locomotive in the hump yard in compliance with the requirements for protective distance, with utmost caution, without jolts or sudden stops. The impact speed of wagons with dangerous goods during coupling with other wagons or the locomotive shall not exceed 3 km/h. These wagons shall pass through the hump yard only with a locomotive.

M 2 - «Hump shunt with caution»

In accordance with 5.4.1.1.1 (n) the consignor shall indicate "Hump shunt with caution" in the consignment note. Wagons with dangerous goods may be rolled down the hump only if any impact of these wagons with the wagons already on the sorting tracks as well as with wagons (or blocks of wagons) following it, can be excluded.

M 3 – Carriage of goods in glass packaging "Hump shunt with caution"

In accordance with 5.4.1.1.1 (n) for goods in glass packaging the consignor shall indicate "Hump shunt with caution" in the consignment note. Wagons with dangerous goods in glass packaging may be rolled down the hump only if any impact of these wagons with the wagons already on the sorting tracks as well as with wagons (or blocks of wagons) following it, can be excluded.

No information in Column (21c) indicates that no

	standards for hump shunting have been devised for the carriage of the dangerous goods in question. If no standards for hump shunting have been devised for the carriage of the dangerous goods in ques- tion, such standards shall be set in accordance with the domestic guidelines.			
7.5.8.	7.5.8. CLEANING AFTER UNLOADING 7.5.8.1. Cleaning the wagons after unloading of packaged goods 7.5.8.1.1. If, when a wagon or container, with the exception of private containers or wagons or those rented from the railway, which has contained packaged dangerous goods is unloaded, some of the contents are found to have escaped, the wagon or container shall be cleaned, rinsed and neutralized with the means necessary at the expense of the consignee. 7.5.8.1.2. After unloading a wagon or a container, with the exception of private wagons or containers or wagons or containers rented from the railway, which has contained dangerous goods bearing a label conforming to models Nos. 6.1, 6.2, 8, as well as packaged goods of UN 3245 "genetically modified microorganisms" the consignee shall provide the railway authorities with written confirmation that during unloading of the wagon or container no contents have escaped; if the contents were found to have escaped, the wagon or container has been cleaned of the residue of the carried goods (rinsed, neutralized with environmentally safe methods depending on the nature of the goods) as well as on the suitability of the wagon or container for further use. If required by the domestic guidelines the written confirmation shall be certified by the representative of the sanitation authority or other competent authority as pre-	7.5.8 Cleaning after unloading 7.5.8.1 If, when a wagon or container which has contained packaged dangerous goods is unloaded, some of the contents are found to have escaped, the wagon or container shall be cleaned as soon as possible and in any case before reloading. If it is not possible to do the cleaning locally, the wagon or container shall be carried, with due regard to adequate safety, to the nearest suitable place where cleaning can be carried out. Carriage is adequately safe if suitable measures have been taken to prevent the uncontrolled release of the dangerous goods that have escaped. 7.5.8.2 Wagons or containers which have been loaded with dangerous goods in bulk shall be properly cleaned before reloading unless the new load consists of the same dangerous goods as the preceding load.	Difference in kind. Requires additional discussion.	Annex 2, SMGS has an additional requirement for cleaning the wagons.

	scribed by the domestic legislation. The consignee shall be responsible for the validity of the information stated in the written confirmation. 7.5.8.1.3 After unloading dangerous goods from wagons or containers bearing a danger label in accordance with model No.7, the consignee shall ensure neutralization of the wagon or container, if necessary, and shall provide the carrier with the certificate of absence of "removable contamination" on the wagon or container. 7.5.8.1.4 If the cleaning and treatment of the wagon or container has not been performed at the place of unloading in accordance with 7.5.8.1.1, this wagon or container shall be carried under the same conditions that applied during the carriage of the dangerous goods in it. 7.5.8.1.5 When transhipping goods to wagons with a different gauge width, if some goods are found to have escaped, the procedure for cleaning, neutralization and return of the wagons may be defined in			
	separate bilateral agreements between neighbouring railways. In this case 7.5.8.1.2 shall not apply. 7.5.8.2 Wagons or containers which have been loaded with dangerous goods in bulk shall be properly cleaned before reloading unless the new load consists of the same dangerous goods as the preceding load.			
7.5.9	Carriage of dangerous goods accompanied by an expert team or the attendants of the consignor (consignee) If a position in the Column (18) of Table A of Chapter 3.2 has a special provision CW47, CW55, CW64, CW66, CW67, CW68 or CW69, the carriage of these goods shall be accompanied by attendants or a team of experts of the consignor (consignee) in accordance with the requirements	(Reserved)	Difference in kind. No changes required.	In accordance with Annex 2, SMGS, if certain positions in Column (18) of Table A of Chapter 3.2 have a special provision CW47, CW55, CW64, CW66, CW67, CW68 or CW69 the carriage of these goods shall be accompa-

	of the relevant CW special provision. Attendants or expert teams accompanying dangerous goods shall know the written policy regarding the escort of the dangerous goods in question, developed and approved by the consignor, as well as the dangerous properties of the goods, first aid procedures, and safety measures in case of emergency. They shall ensure compliance with the safety measures and conditions set for these dangerous good for the journey. The consignor shall provide the attendants or the expert team with the necessary individual protective gear and special gear, first aid kit, set of tools, primary fire-extinguishing and decontamination devices as well as necessary additional materials. Aside from these provisions during the carriage of dangerous goods accompanied by the attendants or the expert team of the consignor (consignee), the provisions of Annex 3, SMGS (Guidelines for carriage of goods accompanied by attendants of the consignor or the consignor or the consignee) shall apply.			nied by attendants or an expert team of the consignor (consignee) in accordance with the requirements stated in the specific CW special provision.
7.5.11 CW46	These packaged goods are carried by rail with gauge width 1520 mm only in private closed wagons or private containers covered by the definition "Large Container" in accordance with Annex 8, SMGS, including cases in which the goods are received from the railways with gauge width 1435 mm. Note: The requirements of this special provision need not be met when using wagons and containers registered in the Republic of Hungary, Republic of Lithuania, Republic of Latvia, Republic of Poland, Slovak Republic, and the Republic of Estonia.	No text	Difference in kind. No changes required.	Additional requirement for UN 1163, 1565, 1575, 1587, 1589, 1620, 1624, 1626, 1636, 1642, 1670, 1672, 1680, 1684, 1689, 1692, 1694, 1713, 1790, 1831, 1889, 1935, 2015, 2029, 2032, 2814, 2900.

7.5.11 CW47	These goods packaged in wagonloads shall be admitted to carriage by rail with gauge width 1520 mm, including when they are received from railways with gauge width 1435 mm, only if accompanied by an expert team or attendants of the consignor (consignee) (see 7.5.9). Note: The requirements of this special provision need not be applied for the Republic of Hungary, Republic of Poland and the Slovak Republic.	No text	Difference in kind. No changes required.	Additional requirement for UN 1051, 1067, 1076, 1163, 1222, 1442, 1561, 1565, 1575, 1587, 1589, 1613, 1614, 1620, 1624, 1636, 1642, 1649, 1680, 1684, 1689, 1692, 1695, 1713, 1935, 1975, 2015, 2029, 2032, 2407, 2438, 3101, 3102, 3103, 3104, 3105, 3106, 3107, 3108, 3109, 3110, 3294, 3315, 3413, 3414, 3483.
7.5.11 CW48	These goods are allowed for carriage by rail with gauge width 1520 mm in packagings only in private closed wagons and private containers covered by the definition "Large Container" in accordance with Annex 8, SMGS as well as in closed wagons and containers rented out by the railways, including when they are received from the railways with gauge width 1435 mm. Note: The requirements of this special provision need not be met when using wagons and containers registered in the Republic of Hungary, Republic of Lithuania, Republic of Latvia, Republic of Poland, Slovak Republic, and the Republic of Estonia.	No text	Difference in kind. No changes required.	Additional requirement for UN 1093, 1098, 1131, 1135, 1162, 1181, 1183, 1185, 1196, 1222, 1230, 1238, 1239, 1242, 1244, 1250, 1251, 1295, 1298, 1305, 1361, 1381, 1442, 1504, 1510, 1541, 1553, 1560, 1561, 1570, 1580, 1583, 1595, 1605, 1649, 1695, 1724, 1747, 1767, 1994, 2026, 2295, 2334, 2363, 2380, 2401, 2407, 2438, 2534, 2588, 2606, 2757, 2758, 2759, 2760, 2761, 2762, 2763, 2764, 2777, 2778, 2779, 2780, 2781, 2782, 2783, 2784, 2786, 2787, 2992, 2903, 2991, 2992, 2993, 2994, 2995, 2996, 2997, 2998, 3005, 3006, 3009, 3010, 3011, 3012, 3013, 3014,

				3015, 3016, 3017, 3018, 3019, 3020, 3021, 3024, 3025, 3026, 3027, 3048, 3345, 3346, 3347, 3348, 3349, 3350, 3351, 3352, 3361, 3362, 3483.
7.5.11 CW49	For railways with gauge width 1520 mm: before loading these goods, the floor of the closed wagon shall be covered with a layer of dry sand, 100 mm in height. Inside the wagon a wooden plank 150 mm high shall be firmly nailed or otherwise affixed along the perimeter of the wagon. Note: The requirements of this special provision need not be applied for the Republic of Hungary, Republic of Poland and the Slovak Republic.	No text	Difference in kind. No changes re- quired.	Additional requirement for UN 1230.
7.5.11 CW54	Beginning cited only Fire prevention for wagons and containers for carriage of the indicated dangerous goods as well as goods which are related to the substances not indicated directly with UN 1325 with the following technical names: hackled hemp, cotton lint, raw cotton shall be performed in accordance with the procedure below.	No text	Difference in kind. No changes required.	Additional requirement for UN 1325, 1327, 1363, 1364, 1365, 3360.
	This special provision also covers goods under UN 1327: hay, chaff, straw, as well as goods under UN 3360: cotton wool, cotton fibre, teetah pat, hackled flax, dry bast fibre, cotton waste, tow fibre which are not covered by other provisions of Annex 2, SMGS.			
	Note: The requirements of this special provision need not be applied for the Republic of Hungary, Republic of Poland and the Slovak Republic.			
7.5.11 CW55	Carriage of these goods in tanks (including tank- wagons, tank-containers, fixed tanks, portable tanks, elements of battery-wagons or MEGCs) on	No text	Difference in kind. No changes re-	Additional requirement for UN 1017, 1038, 1067, 1076, 1092, 1098, 1143,

	railways with gauge width 1520 mm, including when they are received from railways with gauge width 1435 mm, may be performed only when accompanied (see 7.5.9) by an expert team or attendants of the consignor (consignee). Note 1: This special provision shall not be applied for the return of empty uncleaned tanks. Note 2: The requirements of this special provision need not be applied for the Republic of Hungary, Republic of Poland and the Slovak Republic.		quired.	1163, 1182, 1185, 1230, 1238, 1239, 1244, 1251, 1259, 1649, 1695, 1935, 1994, 2015, 2032, 2189, 2334, 2382, 2438, 2480, 2482, 2484, 2485, 2606, 2740, 2743, 2744, 3073, 3279, 3294, 3381, 3382, 3383, 3384, 3385, 3386, 3387, 3388, 3389, 3390, 3413, 3414, 3483.
7.5.11 CW56	On railways with gauge width 1520 mm, including when received from railways with gauge width 1435 mm, these goods shall be carried as part of a special technological unit (a group of wagons) comprising: - A tank with thermal insulation with water, no less than one tank with water for every three tanks with goods;	No text	Difference in kind. No changes required.	Additional requirement for UN 2015.
	One closed wagon for the accompanying team, technical equipment, and property;Loaded tank and an identical empty tank intended for carriage of goods under pressure.			
	In this group tanks filled with water and the empty tank are used for the protective distance of the tank loaded with goods from the wagon with attendants for the goods.			
	The technological units shall be made up by the consignor. Wagons which do not relate to the unit shall not be included in the unit. The transport documents shall have a seal (stamp) with the inscription "Unit. Do not uncouple."			
	Note: The requirements of this provision need not be applied in the Republic of Hungary, Republic			

	of Poland and Republic of Slovakia.			
7.5.11 CW57	On railways with gauge width 1520 mm, this consignment, including those received from railways with gauge width 1435 mm, may be carried when packaged only in private closed refrigerated wagons and private refrigerated containers. Note: The requirements of this provision need not be applied in the Republic of Hungary, Republic of Poland and Republic of Slovakia.	No text	Difference in kind. No changes re- quired.	Additional requirement for UN 3101, 3102, 3103, 3104, 3105, 3106, 3107, 3108, 3109, 3110.
7.5.11 CW58	These packaged goods shall be carried on railways with gauge width 1520 mm only in private closed wagons, including when received from railways with gauge width of 1435 mm. Note: The requirements of this special provision need not be met when using wagons registered in the Republic of Hungary, Republic of Lithuania, Republic of Latvia, Republic of Poland, Slovak Republic, and the Republic of Estonia.	No text	Difference in kind. No changes required.	Additional requirement for UN 1076, 1613, 1614, 1722, 3221, 3222, 3223, 3224, 3225, 3226, 3227, 3228, 3229, 3230.
7.5.11 CW59	These goods, packed in limited quantities in accordance with the requirements of Chapter 3.4, shall be carried on the territory of the Russian Federation in accordance with the provisions of Chapters 5.3, 5.4, section 7 as well as the corresponding columns of Table A of Chapter 3.2, Annex 2, SMGS.	No text	Difference in kind. No changes re- quired.	Additional requirement for UN 1230.
7.5.11 CW60	Goods classified under n.o.s. (not otherwise specified) entries with the following technical names shall be carried by rail with gauge width 1520 mm only in private closed wagons and private containers covered by the definition of "Large Container" in accordance with Annex 8, SMGS, including when received from railways with gauge width 1435 mm.	No text	Difference in kind. No changes required.	Additional requirement for UN 1544, 1588, 1992, 1993, 2810, 2927, 3140.

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	Un No.	Technical name				
	1544	Anabasine sulphate, solid				
	1588	Cadmium cyanide				
	1992	[Diran-A]				
	1993	Product T-185				
	2810	[Pronite]				
	2810	[Enite]				
	2927	[Aquanite]				
	3140	Anabasine sulphate, solution				
	need not be mers registered lic of Lithuan Poland, Slova Estonia.	quirements of this special provinct when using wagons and con in the Republic of Hungary, Raia, Republic of Latvia, Republic of Republic o	tain- epub- c of f			
7.5.11 CW61	fied) entries v shall be carrie only in privat	ried under n.o.s. (not otherwise with the following technical named by rail with gauge width 152 e closed wagons, including what railways with gauge width 142	nes 0 mm en	No text	Difference in kind. No changes required.	Additional requirement for UN 1544, 1588, 1953, 2025, 3286.

	Un No	Technical name				
	1544	Cinchonine				
	1588	Black cyanide				
	1953	Gas mixtures of monosilane with				
		argon				
	1953	Gas mixtures of monosilane with				
		hydrogen	Not			
	2025	Mercury (II) sulphide	e:			
	3286	Heptyl	The			
	3286	Luminal A	re- quir			
	when us Hungary via, Rep Republi	of this special provision need not be sing wagons registered in the Republic, Republic of Lithuania, Republic of bublic of Poland, Slovak Republic, arc of Estonia.	ic of Lat- id the			
7.5.11 CW63	fied) en shall be 1520 m ons, inc	classified under n.o.s. (not otherwise tries with the following technical nar carried by railway with gauge width m only in private closed refrigerator luding when received from railways width 1435 mm.	nes wag-	No text	Difference in kind. No changes required.	Additional requirement for UN 2813.
	Un No. 2813	Technical name [CN] Catalyst				
	need no the Rep Republi	he requirements of this special provist be met when using wagons register ublic of Hungary, Republic of Lithuac of Latvia, Republic of Poland, Slove, and the Republic of Estonia.	ed in inia,			
7.5.11 CW64	n.o.s. (n	ed goods classified under unspecified out otherwise specified) entries with the technical names shall be carried in	he	No text	Difference in kind. No changes re-	Additional requirement for UN 1544, 1588, 1992, 1993, 2025, 2810, 2813,

	1520 mm, in with gauge an expert te	ments by railway with gauge width acluding when received from railways width 1435 mm, only accompanied by am or attendants of the consignor (see 7.5.9):		quired.	2927, 3286.
	Un No.	Technical name			
	1544	Cinchonine			
	1588	Cadmium cyanide			
	1588	Black cyanide			
	1992	[Diran-A]			
	1992	Solvent ["Deciline"]			
	1992	[Samine]			
	1992	Synthin			
	1993	[Product T-185]			
	2025	Mercury (II) sulphide			
	2810	[Pronite]			
	2810	[Enite]			
	2813	[CN] Catalyst			
	2927	[Aquanite]			
	3286	Heptyl			
	3286	Luminal A			
	need not be Republic of	equirements of this special provision applied for the Republic of Hungary, Poland and the Slovak Republic.			
7.5.11 CW65	n.o.s. (not o following te railway with closed wage under the de	cods classified under unspecified or therwise specified) entries with the echnical names shall be carried by a gauge width 1520 mm only in private ons and private containers covered efinition of "Large Container" in ac- ith Annex 8, SMGS, as well as in	No text	Difference in kind. No changes required.	Additional requirement for UN 1992, 1993, 2922, 2923, 2924, 2985, 2988

	railways, incl	is and containers rented from the uding when received from railwidth 1435 mm.	
	Un No.	Technical name	
	1992	[Samine]	
	1992	Synthin	
	1993	Dimethyldichlorosilane hydrolyzate	
	1993	Ethoxysilane composition "Product 119-269T"	
	2922	[Slavsilane]	
	2923	Triphenylchlorosilane	
	2924	Dimethylchlorosilane	
	2985	Dimethylchloro- methylchlorosilane	
	2985	Methylvinyldichlorosi- lane	
	2985	Methylchloromethyldi- chlorosilane	
	2985	Triethylchlorosilane	
	2988	Phenylchlorosilane	
	2988	Ethylchlorosilane	
	need not be mers registered lic of Lithuan	quirements of this special provising when using wagons and contain the Republic of Hungary, Reita, Republic of Latvia, Republic of Republi	ain- pub- c of
11 '66	containers, fix	anks (including tank-wagons, taxed tanks, portable tanks, demon	ınt-
	able tanks, ele	ements of battery-wagons or MI	EGC)

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	on railways with gauge width 1520 mm, including when received from railways with gauge width 1435 mm, these goods shall be carried only when accompanied (see 7.5.9) by an expert team or attendants of the consignor (consignee). Note 1: This special provision shall also apply to the return of empty uncleaned tanks. Note 2: The requirements of this special provision need not be applied for the Republic of Hungary, Republic of Poland and the Slovak Republic.		quired.	
7.5.11 CW67	If carried in tanks (including tank-wagons, tank-containers, fixed tanks, portable tanks, demountable tanks, elements of battery-wagons or MEGC) on railways with gauge width 1520 mm, including when received from railways with gauge width 1435 mm, goods classified under unspecified or n.o.s. (not otherwise specified) entries with the following technical names shall be carried only when accompanied (see 7.5.9) by an expert team or attendants of the consignor (consignee). Un No. Technical name 1992 Solvent ["Deciline"] 1992 [Samine] 1992 [Samine] 1993 [Product T-185] Note 1: This special provision shall not be applied for the return of empty uncleaned tanks unless they pass through the territory of the Russian Federation. Note: The requirements of this special provision need not be applied for the Republic of Hungary,	No text	Difference in kind. No changes required.	Additional requirement for UN 1992, 1993.

	Republic of Poland and the Slovak Republic.			
7.5.11 CW68	If carried in tanks (including tank-wagons, tank-containers, fixed tanks, portable tanks, demountable tanks, elements of battery-wagons or MEGC on railways with gauge width 1520 mm, including when received from railways with gauge width 1435 mm, goods classified under unspecified or n.o.s. (not otherwise specified) entries with the following technical names shall be carried only when accompanied (see 7.5.9) by an expert team or attendants of the consignor (consignee). Un No. Technical name 3161 Vinyl 3286 Heptyl Note 1: This special provision shall also apply to the return of empty uncleaned tanks. Note 2: The requirements of this special provision need not be applied for the Republic of Hungary,		Difference in kind. No changes required.	Additional requirement for UN 3161, 3286.
7.5.11 CW69	Republic of Poland and the Slovak Republic. Empty uncleaned tanks (including tank-wagons, tank-containers, fixed tanks, portable tanks, demountable tanks, elements of battery-wagons or MEGC) which were used to carry these goods shall be accompanied by an expert team or the attendants of the consignor (consignee) (see 7.5.9 on the territory of the Republic of Kazakhstan and Russian Federation. Note: The requirement of this special provision need not be applied for other countries.		Difference in kind. No changes required.	Additional requirement for UN 1017, 1038, 1067, 1076, 1163, 1230, 2015, 2032.
7.5.11 CW70	These packaged goods shall not be loaded in one wagon or container with dangerous goods of othe classes and with goods of this class which have	No text	Difference in kind. No changes re-	Additional requirement for UN 3343, 3357, 1310, 1320, 1321, 1322, 1336,

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	different UN numbers.		quired.	1337, 1344, 1347, 1348,
				1349, 1354, 1355, 1356,
				1357, 1517, 1571, 2555,
				2556, 2557, 2852, 2907,
				3221, 3222, 3223, 3224,
				3225, 3226, 3227, 3228,
				3229, 3230, 3317, 3319,
				3344, 3364, 3365, 3366,
				3367, 3368, 3370, 3376,
				3380, 3101, 3102, 3103,
				3104, 3105, 3106, 3107,
				3108, 3109, 3110, 3123
				(packing group I, II), 3124
				(packing group I, II), 3125
				(packing group I, II), 3385,
				3386, 2921 (packing group
				I, II), 3094 (packing group
				I, II), 3095 (packing group
				I, II), 3096 (packing group
				I, II), 3301 (packing group
				I, II).
	(Reserved)	Provisions for carriage as colis express (express	Differences in	Carriage of dangerous
		parcels)	kind.	goods in passenger trains
			No changes re-	is regulated by SMPS.
			quired.	Under this Agreement
				carriage of such goods is
			D:00	prohibited.
Chapter	(Reserved)	Carriage of dangerous goods as hand luggage,	Differences in	Carriage of dangerous
7.7		registered luggage or in or on board vehicles (car	kind.	goods in passenger trains
		on train)	No changes re-	is regulated by SMPS.
			quired.	Under this Agreement
				carriage of such goods is
				prohibited.