

## **Economic Commission for Europe**

### **Inland Transport Committee**

#### **Working Party on the Transport of Dangerous Goods**

**Joint Meeting of the RID Committee of Experts and the  
Working Party on the Transport of Dangerous Goods**

**14 March 2018**

Bern, 12–16 March 2018

Item 3 of the provisional agenda

**Standards**

### **Information on work in progress in CEN**

**Transmitted by the European Committee for Standardisation (CEN)**

#### **Introduction**

1. Following the cooperation agreement between CEN/CENELEC and the Joint Meeting (see ECE/TRANS/WP.15/AC.1/122/Add.2, as amended by ECE/TRANS/WP.15/AC.1/130/Annex III), the New Approach Consultant will advise the Joint Meeting of work in progress in CEN which will result in standards intended to be referenced in the RID/ADR/ADN.

#### **New CEN Enquiry procedure - 3 Month enquiry with weighted vote and optional formal vote for CEN home-grown projects**

2. With respect to the changes procedures to expedite the preparation of CEN deliverable described in paper 2017/32, CEN is not yet ready to propose consequential changes to the agreements laid down in the documents mentioned in paragraph 1. However the changes on the procedure are minor and can be tackled by the JM STD Working Group without difficulties.

#### **Activities during the last semester**

3. CEN had prepared 2 dispatches which include assessments of the drafts. A Dispatch 3 could also be made available in February 2018 containing General Purpose Standards.

#### **New work items**

4. With respect to CEN's work programme the Joint Meeting is invited to take note that the following new work items related to the transport of dangerous goods have been decided to be added to the programme of CEN/TC's 23, 268, 286 and 296. It has been decided to review additional CEN standards which are already referenced in RID/ADR/ADN. Not all of them are considered candidates for reference in these regulations.

5. The members of the Joint Meeting are invited to advise their experts to take part in the drafting and revision process of these work items via their national standardization bodies.

Table of new CEN work items related to provisions of RID/ADR/ADN

Responsible standardizing body	Work item No.	Reference	Title
CEN/TC 23	00023205	prEN ISO 10460	Gas cylinders - Welded aluminium-alloy, carbon and stainless steel gas cylinders - Periodic inspection and testing (ISO/DIS 10460:2017)
CEN/TC 296	00296100	prEN 13922 rev	Tanks for transport of dangerous goods - Service equipment for tanks - Overfill prevention systems for liquid fuels

### New and amended references to standards

6. Since the session of September 2017, draft standards have reached the enquiry and Formal vote stage and have even be published. They have been made available for consultation by members of the Joint Meeting on the dedicated CEN webpage (Dispatch 1 to 2).

7. Members of the Joint Meeting have already been invited to provide their comments on the documents listed in Dispatch 1. They still have the time to provide their comments to the CEN Consultant ([david.teasdale@btinternet.com](mailto:david.teasdale@btinternet.com)) on Dispatch 2 before 15 February 2018. It is foreseen to organize ad hoc web-conferences in order to review those comments second half of February 2018 (calendar of dates still to be defined with JM Working Group on Standards). All comments will be consolidated in a separate document and be provided to the Joint Meeting.

## Annex

[English only]

### A. Standards at Stage 2: Submitted for Public Enquiry

Dispatch 1

EN 14071_2015_prA1 2017		LPG equipment and accessories - Pressure relief valves for LPG tanks – Ancillary equipment	Where to refer in RID/ADR: 6.2.4.1? 6.8.2.6.1 for equipment	Applicable sub-sections and paragraphs: 6.2.16.3	
WI 00286136				NEW STANDARD	
Positive assessment by CEN Consultant provided					
<b>Comments from members of the Joint Meeting:</b>					
Country	Clause No.	Comment (justification for change)	Proposed change	Comment from CEN Consultant	Comment from WG Standards
UK 1	General	We cannot review this amendment's suitability for referencing since it only gives a few sentences and we need to see the whole text, i.e. the 2015 standard			
UK 2	Scope	Also, I happen to have a copy of this 2015 standard, so I can see from its scope that is for valves on static equipment. It is therefore not suitable for referencing in RID/ADR?	Do we need to spend time considering this standard in the Standards WG?		CEN/TC 286 to confirm this is aimed to become a TDG STD
					NOT for TDG

Dispatch 1

prEN 13175_2017		LPG Equipment and accessories - Specification and testing for Liquefied Petroleum Gas (LPG) pressure vessel valves and fittings	Where to refer in RID/ADR: 6.2.4.1 for closures and 6.8.2.6.1 for equipment	Applicable sub-sections and paragraphs: 6.2.3.1 and 6.2.3.3 and 6.8.2.1, 6.8.2.2.and 6.8.2.4.1, 6.8.3.2.3	
WI 00286183					
Negative assessment by CEN Consultant provided					

Comments from members of the Joint Meeting:					
Note: we need to discuss in the Standards WG if it should also be also referenced in 6.2.4.1					
Country	Clause No.	Comment (justification for change)	Proposed change	Comment from CEN Consultant	Comment from WG Standards
DE		The comments from the CEN consultant seems to be related to PED only. Knowing that there was another assessment related to ADR, we fully support the comments given in this assessment.			
<b>DT</b>		<b>TDG Comments added DT 17/02/2018</b>			
DT 1	4.4	Valves and fittings shall be designed for a maximum allowable pressure of 25 bar. RID/ADR P200 UN 1965 Mixture C has a Test Pressure of 30 bar. RID/ADR (tanks) 4.3.3.2.5 has a test pressure for UN 1965 Mixture C has a Test Pressure of 27 bar. RID/ADR for design uses the 'test pressure' rather than the maximum allowable pressure, (PED) term for clarity this should be included in the definitions.	Clarify the maximum allowable pressure for all the mixtures in UN 1965.		
DT 2	6.1.5	For mobile applications, the valves and fittings shall be capable of withstanding a deceleration of 100 times gravity in the X, Y and Z axis and shall remain leak tight. The requirement for tanks in RID/ADR e.g. 6.8.2.1.2 has loading requirements for design.	Clarify the requirement '100 times gravity' equates to a design load.		
<b>DT</b>		<b>PED Comments Deleted DT 17/02/2018</b>			
<b>DT 4</b>	<del>3.1.2 Definitions. (ge)</del>	<del>pressure vessel assembly of the pressure envelope (including the openings and their closures) and non-pressure-retaining parts attached directly to it.</del>  <del>The PED Article 2 defines 'pressure equipment' and 'vessel' there is no definition for pressure vessel.</del>	<del>The definition in Article 2 should be used for vessel.</del>		
<b>DT 2</b>	<del>7.3.1 General (ge)</del>	<del>Ball valves shall be in accordance with EN 1983 or EN 13547.</del> <del>Only dated references should be referenced.</del>	<del>The references should be dated as per those</del>		

			in the list of Normative References.		
DT 3	7.13.1 Pressure gauge (ge)	7.13.1 The pressure gauge shall conform to the appropriate requirements of this European Standard and to EN 837-1 and shall be resistant to the effects of the weather	The reference should be dated as per those in the list of Normative References.		
DT 4	7.13.3 Pressure gauge (ge)	7.13.3 The accuracy shall be in accordance with the requirements of EN 837-1, with a minimum Class 2,5.	The reference should be dated as per those in the list of Normative References		
DT 5	Annex ZA 2.1 (ge)	<p>8.2 8.3 8.4 8.6 8.9 8.10 8.11</p> <p>2.1. General</p> <p>The pressure equipment shall be properly designed taking all relevant factors into account in order to ensure that the equipment will be safe throughout its intended life.</p> <p>The design shall incorporate appropriate safety coefficients using comprehensive methods which are known to incorporate adequate safety margins against all relevant failure modes in a consistent manner.</p> <p>The requirement of 2.1 (first paragraph) is very general it is difficult to ascertain compliance with this very general requirement.</p> <p>There is also clause e.g. 8.4 for example where it would be difficult to demonstrate even the very general conformity with 2.1.</p>	These clauses of the standard should be aligned with more applicable requirements of the directive so conformity can be assessed.		
DT 6	Annex ZA 2.2.1 (ge)	<p>Clause 6 excluding 6.1.5, 6.1.6, 6.1.8 and 6.1.11</p> <p>2.2.1. The pressure equipment shall be designed for loadings appropriate to its intended use and other reasonably foreseeable operating conditions. In particular, the following factors shall be taken into account: ...</p> <p>6.1.2 It is unclear how this requirement meets the requirements for the elements of similar in 2.2.1 this concerns the function of the valve.</p> <p>6.1.3 It is unclear how this requirement meets the requirements for the elements of similar in 2.2.1 this concerns the function of the valve.</p>	<p>Exclude 6.1.2 or clarify the requirement.</p> <p>Exclude 6.1.3 or clarify the requirement</p>		

		<p>6.1.4 As this is a 'transportation' requirement it is not appropriate to PED type equipment.</p> <p>6.1.9 It is unclear how this requirement meets the requirements for the elements of similar in 2.2.1 this concerns the function of the valve.</p>	<p>Exclude 6.1.4 or clarify the requirement</p> <p>Exclude 6.1.9 or clarify the requirement</p>		
DT 7	Annex ZA 2.2.1 (ge)	<p><del>Clause 7</del></p> <p>2.2.1. The pressure equipment shall be designed for loadings appropriate to its intended use and other reasonably foreseeable operating conditions. In particular, the following factors shall be taken into account:...</p> <p>A lot of the requirements in the sub-clauses in Clause 7 deal with functionality of the pressure accessories and in themselves are not loadings. Therefore, Clause 7 should not be referenced in its entirety.</p>	<p>Review all the sub-clauses in Clause 7 for conformity with the requirements of 2.2.1 only the elements that are in conformity with 2.2.1 should be included.</p>		
DT 8	Annex ZA 2.2.1 (ge)	<p>8.9</p> <p>Clause 8.9 contains elements that are not in conformity with the 2.2.1 criteria.</p>	<p>It should be confirmed which elements of 8.9 deal with the requirements of 2.2.1 designed for adequate strength rather than the functioning of the valve for its use.</p>		
DT 9	Annex ZA 2.3 (ge)	<p><del>Clause 6 excluding 6.1.5, 6.1.6, 6.1.8 and 6.1.11</del></p> <p>2.3. Provisions to ensure safe handling and operation</p> <p>The method of operation specified for pressure equipment shall be such as to preclude any reasonably foreseeable risk in operation of the equipment. Particular attention shall be paid, where appropriate, to:...</p> <p>6.1.1, 6.1.2, 6.1.4, 6.1.7, 6.1.9, 6.1.10,</p>	<p>It is unclear as to how these sub-clauses meet the requirements of 2.3 — these should be reviewed.</p>		

DT 10	Annex ZA 2.3 (ge)	<p><b>Clause 7</b></p> <p><b>2.3. Provisions to ensure safe handling and operation</b></p> <p>The method of operation specified for pressure equipment shall be such as to preclude any reasonably foreseeable risk in operation of the equipment. Particular attention shall be paid, where appropriate, to:...</p> <p>A lot of the requirements in the sub-clauses in Clause 7 deal with functionality of the pressure accessories and in themselves are not concerned with safe handling and operation. Therefore, Clause 7 should not be referenced in its entirety.</p>	Review all the sub clauses in Clause 7 for conformity with the requirements of 2.3 only the elements that are in conformity with 2.3 should be included.		
DT 11	Annex ZA 3.3 (ge)	<p><b>Clause 10</b></p> <p><del>Details some items and then in a Note.</del></p> <p><del>NOTE 1 Where marking is regulated by PED [4], this takes precedence over any clause in this European Standard. The PED [4] includes additional marking requirements, e.g. CE-marking.</del></p> <p><del>Effectively referring back to the PED, with which the accessory has to comply.</del></p>	<p><del>Either detail the marking requirements in the PED for these accessories and delete the note, or delete 3.3.</del></p>		
UK1	General	Apart from the lack of correspondence between dated and undated references, the Consultant's negative assessment seems to relate only to the PED, not RID/ADR. Is this correct?			PED assessment deleted and TDG assessment added
UK2	General	<p>I support adding this as a reference in 6.2.4.1 for valves fitted to e.g. pressure drums. However, it should be noted that this standard addresses the requirements of 6.8 of RID/ADR and does not address the valve protection requirements of 4.1.6.8.</p> <p>DE: We fully agree, such valves, if used for pressure drums have to be used with a valve protection (e.g. shroud) according to 4.1.6.8 ADR.</p>			

DE	4.4, 8.4.4, 8.5.9 and 8.9.5	For 6.2 ADR: To also cover mixture C, we don't agree to an endurance test pressure of 12 bar and a tightness test pressure of 25 bar. Both test pressures shall be raised to 30 bar.	Change test pressures to 30 bar.		
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## Dispatch 1

<b>prEN 14025_2017</b>		<b>Tanks for the transport of dangerous goods - Metallic pressure tanks - Design and construction</b>	<b>Where to refer in RID/ADR:</b> 6.8.2.6.1	<b>Applicable sub-sections and paragraphs:</b> 6.6.2.1 and 6.8.3.1	
WI 00296094					
Assessment by CEN Consultant provided					
<b>Comments from members of the Joint Meeting:</b>					
Country	Clause No.	Comment (justification for change)	Proposed change	Comment from CEN Consultant	Comment from WG Standards
UK	General	No Comment			
DE	Annex B	Annex B is an informative part of the standard. The explosion pressure shock resistant design is not obligatory according to RID/ADR. In 5.1 - 3) of the standard the manufacturer can choose (or not) an explosion pressure shock resistant design if required. Annex B should be the basis for the design if an explosion shock resistant design is chosen. Insofar the Annex B should be normative in our opinion.	Change Annex B from "informative" to "normative"		Agree on the principle

## Dispatch 1

<b>prEN ISO DIS 14245_2017</b>		<b>Gas cylinders - Specifications and testing of LPG cylinder valves - Self-closing</b>	<b>Where to refer in RID/ADR:</b> 6.2.4.1 for equipment P200 (12) 3.4, 4.1.6.15	<b>Applicable sub-sections and paragraphs:</b> 4.1.6.8, 6.2.3.1 and 6.2.3.3	
WI 00286168					
Assessment by CEN Consultant provided [No Comments]					
<b>Comments from members of the Joint Meeting:</b>					



Country	Clause No.	Comment (justification for change)	Proposed change	Comment from CEN Consultant	Comment from WG Standards	
UK	General	No Comment				
DE	5.11.1	Even if the test pressure for the tightness test for the valve operating mechanism was raised to 30 bar to also cover mixture C, we don't agree to maintain it for the endurance test for the valve operating mechanism at 12 bar. The endurance test pressure shall also be raised to 30 bar.	Change endurance test pressure to 30 bar.			
DE	5.16.1	The same requirement as given above does also apply to the endurance test pressure for testing the non-return valve.	Change endurance test pressure to 30 bar.			
DE	Annex B	The tightness test pressure for tightness testing at normal temperature range was raised to 30 bar. For the low temperature test the same test pressure shall be applied.	Change tightness test pressure to 30 bar.			
<b>Decision of the STD's WG:</b>		Accepted Refused Postponed	Comments Still at enquiry stage; technical improvement to be carried out.	Proposed transition regulation	Applicable for new type approvals or for renewals	Latest date for withdrawal of existing type approvals
				EN ISO 14245:2010	Between 1 January 2013 and 31 December 2020	
				EN ISO 14245:[2018]	Until further notice	

Dispatch 1

<b>FprEN ISO DIS 15995_2017</b>	<b>Gas cylinders - Specifications and testing of LPG cylinder valves - Manually operated</b>	<b>Where to refer in RID/ADR:</b> 6.2.4.1 for equipment <b>P200 (12) 3.4,</b> <b>4.1.6.15</b>	<b>Applicable sub-sections and paragraphs:</b> <b>4.1.6.8, 6.2.3.1 and 6.2.3.3</b>
WI 00286169			
Assessment by CEN Consultant provided [No Comments]			
<b>Comments from members of the Joint Meeting:</b>			

Country	Clause No.	Comment (justification for change)	Proposed change	Comment from CEN Consultant	Comment from WG Standards	
UK	General	No Comment				
DE	5.13.1	Even if the test pressure for the tightness test for the valve operating mechanism was raised to 30 bar to also cover mixture C, we don't agree to maintain it for the endurance test for the valve operating mechanism at 12 bar. The endurance test pressure shall also be raised to 30 bar.	Change endurance test pressure to 30 bar.			
DE	5.16.1	The same requirement as given above does also apply to the endurance test pressure for testing the non-return valve.	Change endurance test pressure to 30 bar.			
DE	Annex C	The tightness test pressure for tightness testing at normal temperature range was raised to 30 bar. For the low temperature test the same test pressure shall be applied.	Change tightness test pressure to 30 bar.			
<b>Decision of the STD's WG:</b>		Accepted Refused Postponed	Comments Still at enquiry stage; technical improvement to be carried out.	Proposed transition regulation	Applicable for new type approvals or for renewals	Latest date for withdrawal of existing type approvals
				EN ISO 15995:2010	Between 1 January 2013 and 31 December 2020	
				EN ISO 15595:[2018]	Until further notice	

### B. Standards at Stage 3 or 4: Submitted for Formal vote or Published

Dispatch 1

<b>FprEN 12807_2017</b>	<b>LPG equipment and accessories - Transportable refillable brazed steel cylinders for liquefied petroleum gas (LPG) - Design and construction</b>	<b>Where to refer in RID/ADR 6.2.4.1</b>	<b>Applicable sub-sections and paragraphs: 6.2.3.1. and 6.2.3.4</b>
WI 00286173			
Negative assessment by CEN Consultant provided.			
Enquiry draft not discussed by STD's WG			

Comments from members of the Joint Meeting:					
Country	Clause No.	Comment (justification for change)	Proposed change	Comment from CEN Consultant	Comment from WG Standards
DT 1	9.6.2 (Gen)	<p>9.6.2 Every cylinder brazed since the preceding acceptable ultrasonic or macro examination shall be set aside until it is demonstrated that these cylinders are satisfactory either by ultrasonic or macro examination or other appropriate means.</p> <p>Clarify what is meant by other appropriate means, as this would need to be approved by the Type test as only ultrasonic and macro are currently referenced and accepted.</p>	Delete or other appropriate means		
DT 2	9 Production testing and examination requirements (Gen)	<p>The requirement for Production tests in the standard are equivalent to the Initial inspection and tests of ADR/RID for which there are a number of requirements.</p> <p>6.2.1.5.1 On an adequate sample of pressure receptacles: (a) Testing of the mechanical characteristics of the material of construction; (b) Verification of the minimum wall thickness; (c) Verification of the homogeneity of the material for each manufacturing batch; (d) Inspection of the external and internal conditions of the pressure receptacles; (e) Inspection of the neck threads; (f) Verification of the conformance with the design standard; It could be considered that (a) and (c) are considered by the production tests however it should be clarified how (b) (d) (e) and (f) are.</p>			
UK 1	General	I do not read the Consultant's assessment as being positive. In particular, clause 9 is insufficient			
UK 2	Clause 9	I support the observations of the Consultant. It should be noted that Clause 9 of the standard is identical to			

		Clause 9 in the 2008 version which is referenced in 6.2.4.1.			
<b>Decision of the STD's WG:</b>	Accepted	Comments A second formal vote is needed on the version of the standard which has already been accepted by the CEN Consultant as answering his comments.	Proposed transition regulation	Applicable for new type approvals or for renewals	Latest date for withdrawal of existing type approvals
	<b>Refused</b>		EN 12807:2008	Between 1 January 2011 and 31 December 2020	
	Postponed		EN 12807:[2018]	Until further notice	

## Dispatch 1

<b>FprEN ISO/FDIS 21028-2:2018</b>	<b>Cryogenic vessels - Toughness requirements for materials at cryogenic temperature - Part 2: Temperatures between -80 degrees C and -20 degrees C (ISO/FDIS 21028-2:2017)</b>		<b>Where to refer in RID/ADR</b>	<b>Applicable sub-sections and paragraphs: 6.8.5.2. and 6.8.5.3</b>	
WI 00268063			6.8.5.4		
Positive assessment by CEN Consultant provided.					
<b>Comments from members of the Joint Meeting:</b>					
Country	Clause No.	Comment (justification for change)	Proposed change	Comment from CEN Consultant	Comment from WG Standards
UK 1	Gen	No Comments			
<b>Decision of the STD's WG:</b>	<b>Accepted</b>	In RID/ADR, 6.8.5.4 replace: EN 1252-2:2001 Cryogenic vessels - Materials - Part 2: Toughness requirements for temperatures between -80°C and -20°C by:	Proposed transition regulation	Applicable for new type approvals or for renewals	Latest date for withdrawal of existing type approvals
	Refused		none required		
	Postponed				

		EN ISO 21028-2:[2018] Cryogenic vessels - Toughness requirements for materials at cryogenic temperature - Part 2: Temperatures between -80 °C and -20 °C			
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Dispatch 2

<b>ISO EN ISO 14246:2014/Amd 1:2017</b>	<b>Gas cylinders - Cylinder valves - Manufacturing tests and examinations - Amendment 1 (ISO 14246:2014/Amd 1:2017)</b>		<b>Where to refer in RID/ADR 6.2.4.1</b>	<b>Applicable sub-sections and paragraphs 6.2.3.1 and 6.2.3.4 not a NEW Standard?</b>	
00023191					
Positive Assessment by Consultant provided.					
<b>Comments from members of the Joint Meeting:</b>					
Country	Clause No.	Comment (justification for change)	Proposed change	Comment from CEN Consultant	Comment from WG Standards
UK		No Comment			
<b>Decision of the STD's WG:</b>	<b>Accepted</b> Refused Postponed	Comments	Proposed transition regulation	Applicable for new type approvals or for renewals	Latest date for withdrawal of existing type approvals
			<b>ISO EN ISO 14246:2014</b>	Between 1 January 2015 and 31 December 2020	
			<b>ISO EN ISO 14246:2014/Amd 1:2017</b>	Until further notice	

## Dispatch 2

<b>FprEN 12972_2018</b>		<b>Tanks for transport of dangerous goods - Testing, inspection and marking of metallic tanks</b>		<b>Where to refer in RID/ADR</b> 1.8.7.8 & 6.8.2.6.2 6.8.2.6.1		<b>Applicable sub-sections and paragraphs:</b> 6.8.2.3?? 6.8.2.4 and 6.8.3.4	
WI 00296099							
Assessment by CEN Consultant provided.							
<b>Comments from members of the Joint Meeting:</b>							
Country	Clause No.	Comment (justification for change)		Proposed change	Comment from CEN Consultant	Comment from WG Standards	
UK	General	No misalignment with the regulation detected					
<b>Decision of the STD's WG:</b>		<b>Accepted</b> Refused Postponed	Comments	Proposed transition regulation	Applicable		
				EN 12972_2007	Until 31 December 2020		
				<b>EN 12972 [2018]</b>	Mandatorily from 1 January 2021		

## Dispatch 2

<b>FprEN 13317_2018</b>		<b>Tanks for transport of dangerous goods - Service equipment for tanks - Manhole cover assembly</b>		<b>Where to refer in RID/ADR</b> 6.8.2.6.1 for equipment		<b>Applicable sub-sections and paragraphs:</b> 6.8.2.2.and 6.8.2.4.1	
WI 00296092							
Assessment by CEN Consultant provided.							
<b>Comments from members of the Joint Meeting:</b>							

Country	Clause No.	Comment (justification for change)		Proposed change	Comment from CEN Consultant	Comment from WG Standards
UK		No comment				
<b>Decision of the STD's WG:</b>	<b>Accepted</b> Refused Postponed	Comments		Proposed transition regulation	Applicable for new type approvals or for renewals	Latest date for withdrawal of existing type approvals
				EN 13317_2002 + A1 2006	Between 1 January 2007 and 31 December 2020	
				<b>EN 13317_[2018]</b>	Until further notice	

Dispatch 3

<b>EN 1442_2017</b>	LPG equipment and accessories — Transportable refillable welded steel cylinders for LPG — Design and construction	<b>Where to refer in RID/ADR 6.2.4.1</b>	<b>Applicable sub-sections and paragraphs: 6.2.3.1 and 6.2.3.4</b>			
WI 00286153						
Positive assessment by CEN Consultant provided.						
<b>Comments from members of the Joint Meeting:</b>						
Country	Clause No.	Comment (justification for change)		Proposed change	Comment from CEN Consultant	Comment from WG Standards
UK						

Decision of the STD's WG:	Accepted Refused Postponed	Comments	Proposed transition regulation	Applicable for new type approvals or for renewals	Latest date for withdrawal of existing type approvals
			EN 1442:2006 + A1:2008	Between 1 January 2009 and 30 December 2020	
			EN 1442:2017	Until further notice	

### **WIs of General purpose standards reaching soon publication (reference of standards in RIDADR)**

EN ISO 2592:2017                      Petroleum and related products - Determination of flash and fire points - Cleveland open cup method. ISO 2592 is an undated reference in the UN Manual of Tests and Criteria.

EN 590:2013+A1:2017                Automotive fuels - Diesel - Requirements and test methods. Currently referenced in the second entry for UN1202 in RID/ADR 3.2.1 Table A as EN 590:2013 + AC:2014

EN 60079-18:2015/A1:2017        Explosive atmospheres - Part 18: Equipment protection by encapsulation "m" (undated in ADR Part 9 currently, therefore no change is required)

EN IEC 60079-7:2015/A1:2018    Explosive atmospheres - Part 7: Equipment protection by increased safety "e" (undated in ADR Part 9 currently, therefore no change is required.)

~~FprEN 13765                      Thermoplastic multi layer (non-vulcanized) hoses and hose assemblies for the transfer of hydrocarbons, solvents and chemicals — Specification. Standards for hoses are not referenced in RID/ADR~~

### **Note related to EN 12245 based on the INF paper that will be prepared by AEGPL**

#### **First proposal for a text of a note:**

“NOTE: This standard does not apply to cylinders and tubes without liner, manufactured from two parts joined together”