

## 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

Bern, 21-25 March 2011

Item 3 of the provisional agenda

#### Standards

### Report of the Standards Working Group (17<sup>th</sup> meeting)

The Standards Working Group (STD's WG) met outside the plenary sessions of the Joint Meeting under the chairmanship of Mr Karol Wieser. It was tasked by the Plenary Meeting to consider

#### 1 Terms of references

**ECE/TRANS/WP.15/AC.1/2011/37** (CEN) Information on work in progress in CEN, Part II together with **INF. 38** with the consolidated comments submitted by Members of the Joint Meeting on standards and standard revisions in various stages of evolution to prepare decisions by the Joint Meeting on new or amended references to standards;

#### 2 Results:

##### 2.1 Discussed standards

Detailed results of the discussion of the following standards at enquiry and formal vote stage are compiled in the revised issue of INF.38 (**INF.38rev**) which will also be provided to the relevant standards bodies for consideration and for the preparation of the final texts of these standards, as relevant.

Standards at enquiry stage:

- prEN ISO 11120:1999 + prA1,
- prEN 16249,
- prEN 16257,
- EN ISO 22435:2007 + prA1,
- prEN 14427,
- prEN 13776 and
- prEN ISO 11114-2.

Standards at formal vote stage:

- EN 12245:AC together with EN 12245:2009 + FprA1
- EN 1440:2008 + FprA1:2011,
- EN 13082:2008 + FprA1,
- FprEN ISO 10961,
- FprEN ISO 11372,
- FprEN 15888,
- FprEN 417:2011,

- FprEN 13110 (discussion postponed because only enquiry draft was provided to the delegates),
- FprEN 13799 (agreed to be no candidate for reference in RID/ADR/ADN),
- EN 12493 + FprA1 and
- FprEN 12252:2011 (reference refused).

## 2.2 Proposed amendments of RID/ADR

As result of the discussion on the standards at formal vote stage and of the published standard the following amendments of RID and ADR are proposed (new text in bold letters, deleted text crossed out):

### Proposal 1

Replace the last two entries at the end of the table in RID/ADR subsection 4.1.4.1, P200(11) as follows:

(11) The applicable requirements of this packing instruction are considered to have been complied with if the following standards, as relevant, are applied:		
Applicable requirements	Reference	Title of document
<del>(10) p</del>	EN 1801:1998	<del>Transportable gas cylinders – Filling conditions for single acetylene cylinders (including list of permissible porous materials)</del>
<del>(10) p</del>	EN 12755:2000	<del>Transportable gas cylinders – Filling conditions for acetylene bundles</del>
<b>(10) p</b>	<b>EN ISO 11372:[2011]</b>	<b>Gas cylinders - Acetylene cylinders – Filling conditions and filling inspection (ISO 11372:2010)</b>

### Proposal 2

Amend the table in RID/ADR subsection 6.2.4.1 as indicated in bold letters and stricken out below:

<i>Reference</i>	<i>Title of document</i>	<i>Applicable sub-sections and paragraphs</i>	<i>Applicable for new type approvals or for renewals</i>	<i>Latest date for withdrawal of existing type approvals</i>
(1)	(2)	(3)	(4)	(5)
for design and construction				
EN 12245:2002	Transportable gas cylinders – Fully wrapped composite cylinders	6.2.3.1 and 6.2.3.4	<del>Until further notice</del> <b>Before 1 January 2015</b>	
<b>EN 12245:2009 +A1:[2011]</b>	<b>Transportable gas cylinders – Fully wrapped composite cylinders</b>	<b>6.2.3.1 and 6.2.3.4</b>	<b>Until further notice</b>	
EN 13769:2003	Transportable gas cylinders – Cylinder bundles – Design, manufacture, identification and testing	6.2.3.1 and 6.2.3.4	Before 1 July 2007	
EN 13769:2003 +A1:2005 A1:2005	Transportable gas cylinders – Cylinder bundles – Design, manufacture, identification and testing	6.2.3.1 and 6.2.3.4	<del>Until further notice</del> <b>Before 1 January 2015</b>	
<b>EN ISO 10961:[2012]</b>	<b>Gas cylinders - Cylinder bundles - Design, manufacture, testing and inspection</b>	6.2.3.1 and 6.2.3.4	<b>Until further notice</b>	

### Proposal 3

At the end of the table in 6.2.4.2 add the following new standards:

Reference	Title of document	Application authorized
(1)	(2)	(3)
<i>for periodic inspection and test</i>		
EN 15888:[2011]	Transportable gas cylinders - Cylinder bundles - Periodic inspection and testing	Mandatory from 1 January 2015
EN 1440:2008 +A1:[2012] (except Annexes G and H)	LPG equipment and accessories – Periodic inspection of transportable refillable LPG cylinders	Mandatory from 1 January 2015

### Proposal 4

Amend the existing reference to EN 417 in RID/ADR subsection 6.2.6.4, second indent, as follows:

- for UN No. 2037, small receptacles containing gas (gas cartridges) containing UN No. 1965, hydrocarbon gas mixture n.o.s, liquefied: EN 417:~~2003~~**[2011]** Non-refillable metallic gas cartridges for liquefied petroleum gases, with or without a valve, for use with portable appliances - Construction, inspection, testing and marking.

### Proposal 5

(ADR only) Amend the table in 6.8.2.6.1 as indicated in bold letters and stricken out below:

Reference	Title of document	Applicable subsections and paragraphs	Applicable for new type approvals or for renewals	Latest date for withdrawal of existing type approvals
(1)	(2)	(3)	(4)	(5)
<i>For tanks intended for the carriage of liquid petroleum products and other dangerous substances of Class 3 which have a vapour pressure not exceeding 110 kPa at 50 °C and petrol, and which have no toxic or corrosive subsidiary hazard</i>				
EN 13082:2001	Tanks for transport of dangerous goods – Service equipment for tanks – Vapour transfer valve	6.8.2.2 and 6.8.2.4.1	<del>Until further notice</del> <b>Between 1 January 2005 and 30 June 2013</b>	<b>31 December 2014</b>
EN 13082:2008 +A1:[2011]	<b>Tanks for transport of dangerous goods – Service equipment for tanks – Vapour transfer valve</b>	<b>6.8.2.2 and 6.8.2.4.1</b>	<b>Until further notice</b>	

### Proposal 6

(ADR only) Amend the table in 6.8.2.6.1 as indicated in bold letters and stricken out below.

It is emphasized that this proposed amendment was adopted under the condition that major inconsistencies with the ADR design rules, which had already been noted for the earlier version of the standard will be aligned during the next full revision of the standard.

#### *For tanks for gases of Class 2*

EN 12493:2001 (except Annex C)	Welded steel tanks for liquefied petroleum gas (LPG) – Road tankers – Design and manufacture <i>NOTE: Road tankers is to be understood in the meaning of "fixed tanks" and "demountable tanks" as per ADR.</i>	6.8.2.1(with the exception of 6.8.2.1.17); 6.8.2.4.1 (with the exclusion of the leakproofness	Between 1 January 2005 and 31 December 2010	31 December 2012
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EN 12493:2008 (except Annex C)	LPG equipment and accessories - Welded steel tanks for liquefied petroleum gas (LPG) – Road tankers – Design and manufacture <i>NOTE: Road tankers is to be understood in the meaning of "fixed tanks" and "demountable tanks" as per ADR.</i>	test); 6.8.2.5.1, 6.8.3.1 and 6.8.3.5.1 1.2.1, 6.8.1 6.8.2.1 (with the exception of 6.8.2.1.17), 6.8.2.5, 6.8.3.1, 6.8.3.5, 6.8.5.1 to 6.8.5.3	<del>Until further notice</del> <b>Between 1 January 2010 and 31 December 2012</b>	<b>31 December 2014</b>
EN 12493:2008+ A1:[2012] (except Annex C)	<b>Welded steel tanks for liquefied petroleum gas (LPG) – Road tankers – Design and manufacture</b> <i>NOTE: Road tankers is to be understood in the meaning of "fixed tanks" and "demountable tanks" as per ADR.</i>	<b>1.2.1, 6.8.1 6.8.2.1 (with the exception of 6.8.2.1.17), 6.8.2.5, 6.8.3.1, 6.8.3.5, 6.8.5.1 to 6.8.5.3</b>	<b>Until further notice</b>	

### 2.3 Consequential amendment

In context with the discussion of the proposed reference to EN 1440:2008 + A1:2012 in the table of RID/ADR 6.2.4.2 (see above) the Consultant made the observation that EN 1440:2008 is referenced to in RID/ADR, subsection 4.1.4.1, P200(12) 2.5 and could require adaptation .

The reference in P200(12) 2.5 is used to specify the quality of LPG, the limitations on corrosive contaminants of LPG, more precisely. For this purpose, the reference is limited to Annex E.1, letter b) of the standard. This Annex includes the following sentence only:

*“LPG quality shall comply with the limitations on corrosive contaminants specified in ISO 9162.”*

The Consultant recommends that P200(12) 2.5 should directly refer to ISO 9162 rather than to adapt the reference to the amended version of EN 1440.

#### Proposal 7

Amend RID/ADR subsection 4.1.4.1, P200(12) 2.5 to read:

“2.5 To prevent internal corrosion, only gases of high quality with very low potential contamination shall be filled into the cylinders. This is deemed to be fulfilled, if the gases conform to ~~the corrosion contaminates level of~~ **ISO 9162.**“

### 2.4 Additional issues discussed

In addition the Working Group discussed the following items raised by the Consultant:

#### 2.4.1 Implementation of earlier decisions

The Working Group, during its meeting in March 2011, had postponed decisions on two standards to await decisions from other bodies. This concerned

- EN 13082:2008 Tanks for transport of dangerous goods — Service equipment for tanks — Vapour transfer valve, and
- EN ISO 11117:2008 Gas cylinders – Valve caps and valve guards – Design, construction and tests.

An amendment of EN 13082:2008 had been launched and closed on 14 April 2011. This amendment was subject to discussion by the WG with positive results, see Proposal 5.

For EN ISO 11117:2008 it was expected that the ISO version would be referenced in the new edition of the UN Model Regulations and that the coordination group (WP.15/AC.1/HAR) would recommend this standard to be endorsed in RID/ADR.

In fact document ECE/TRANS/WP.15/AC.1/2011/30/Add.1 includes the following recommendation:

*4.1.6.15 In the first line for 4.1.6.8 (b) and (c), replace "ISO 11117:1998" with "either ISO 11117:1998 or ISO 11117:2008 + Cor 1:2009".*

This recommendation has been adopted by the Joint meeting without amendment. Both issues are considered as resolved, therefore.

#### **2.4.2 Consideration of decisions taken by EN and ISO on the revision of standards.**

ISO has decided to repeat the final step of the adoption process on EN ISO 7866 Gas cylinders – refillable seamless aluminium alloy gas cylinders – Design, construction and testing (ISO/DIS 7866:2011) and to launch a second FV vote on 19 November 2011 lasting 2 month. This has impact on the year of publication of the amended version which was decided to be referenced in RID/ADR 6.2.4.1 under “for design and construction” (see ECE/TRANS/WP.15/AC.1/122, ANNEX II). This decision need to be amended with respect to the year of publication.

#### **Proposal 8**

Amend the draft amendment in ECE/TRANS/WP.15/AC.1/122, Annex II related to EN ISO 7866 in the Table in 6.2.4.1, under “for design and construction” with respect to the year of publication (2011) which need to be put in square brackets.

#### **2.4.3 Implementation of the RID/ADR/ADN definition of LPG.**

In context with the discussed standards related to the transport of LPG the Consultant made the WG STD'S aware that the definition CEN/TC 286 has decided to be use throughout its standards is not fully consistent with the definition found by the Joint Meeting. It is recalled that the Joint Meeting agreed on a definition of LPG based on input from the LPG industry to read as follows:

*"Liquefied Petroleum Gas (LPG)" means a low pressure liquefied gas composed of one or more light hydrocarbons which are assigned to UN 1011, UN 1075, UN 1965, UN 1969 or UN 1978 only and which consists mainly of propane, propene, butane, butane isomers, butene with traces of other hydrocarbon gases.*

*NOTE 1: Flammable gases assigned to other UN numbers shall not be regarded as LPG.*

*NOTE 2: For UN 1075 see NOTE 2 in 2.2.2.3 under 2F/UN 1965".*

CEN/TC 286 has now agreed upon on the following definition:

#### **Liquefied petroleum gas**

#### **LPG**

one or more light hydrocarbons which are assigned to UN 1011, UN 1075, UN 1965, UN 1969 or UN 1978 only and which consists mainly of propane, propene, butane, butane isomers, butene or traces of other hydrocarbon gases.

The Working Group discussed the differences and came to the conclusion that it could not be tolerated.

This was justified by the fact that different test pressures may be derived for the transport of substances classified as UN 1075 without the additional criteria “low pressure liquefied gas” or “high pressure liquefied gas)” (acc. to RID/ADR 2.2.2.1.2). The change of the term “... with traces...” into “...or traces...” could lead to completely different mixtures of gases. The omission of the two notes was seen as tolerable.

CEN/TC 286 will need to be advised that the definition shall be aligned with RID/ADR. The Joint Meeting is asked to take note of this conclusion.