

## Economic Commission for Europe

### Inland Transport Committee

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

21 September 2012

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

Geneva, 17-21 September 2012

Item 3 of the provisional agenda

#### Standards

### Report of the Standards Working Group (19<sup>th</sup> meeting)

1. 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:
  - 1.1. **ECE/TRANS/WP.15/AC.1/2012/26** (CEN) - Information on work in progress in CEN -, Part II together with **INF. 28** 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;
  - 1.2. Informal document **INF. 25** (Belgium) - Problems encountered in standards listed in ADR/RID/ADN -.
2. In addition the Working Group reconsidered
  - 2.1. The working procedures applied by the STD's WG with the aim to improve it by the use of telephone/video conferences;
  - 2.2. A consequential deletion of the reference to EN 50015 in the Footnote to ADR 9.7.8.3 following the decision of the Joint Meeting from March 2012 to delete the reference to this standard in the footnote to ADR 9.2.2.5.1(a) (Request from OTIF Secretariat);
  - 2.3. The update of references to EN 2 in ADR 8.1.4.1, to EN 141 in ADR 5.4.3.4, Footnote b) and in ADR 8.1.5.3, Footnote 3) as well as to EN ISO/IEC 17020 in RID/ADR 6.2.2.10 and 6.2.3.6.1 (Request from Sweden).
  - 2.4. The Russian approach in context with the presentation of INF.33 with respect to a participation in the establishment and revision of mandatory standards.
3. **Results:**
  - 3.1. **Discussion of comments on draft standards as per INF. 28**
    - 3.1.1. The agreed results of the discussion on the coherence of the standards at enquiry and formal vote stage with relevant provisions of RID/ADR are summarized in **INF.38** which will also be provided to the relevant standards bodies for consideration.
    - 3.1.2. The STD's WG, in discussing the standards identified several safety issues which were decided to be brought to the attention of the Joint Meeting. This is done with this document and in the expectation that the Joint Meeting may decide on further actions, if deemed necessary.

The following issues are notified:

\*) corrected version as presented to the Joint Meeting on 20 September 2012.

- (i) Use of fusible plugs in acetylene cylinders  
The Group took note of concerns of industry in Europe about the risks associated with the use of fusible plugs. These plugs have caused severe accidents and are no longer part of acetylene cylinder designs in Europe.
- (ii) First period inspection period for acetylene cylinders  
The Group takes note of the needs seen by industry in Europe to clearly identify in the regulations the first periodic inspection for acetylene cylinders, which is carried out at three years after production of the cylinder. This is referred in ISO 10462, but would be more visible if it were in the regulations as well as in the standard. This is seen as necessary to detect cylinders where the porous mass does “shrink” after production with the consequence of gaps that can lead to acetylene gas not being held within the porous material.
- (iii) Type approval for acetylene cylinders  
It was realized that RID/ADR, P200 (p) requires that “the quantity of acetone or suitable solvent” shall be “specified in the approval” and that “the working pressure, the quantity of acetylene and the quantity of solvent shall not exceed the values prescribed in the approval.”  
  
The Group had the impression that the provisions in Section 6.2.3 on the design approval of pressure receptacles may need to be complemented by a specific clause on the type approval of acetylene cylinders to include the details addressed in P200.
- (iv) Dynamic design of tank service equipment  
RID/ADR require shells and their service equipment to be designed (amongst others) against dynamic stresses in normal conditions of carriage as defined in 6.8.2.1.2. Whereas this requirement is well addressed in tank design standards, this isn’t the case for standards on tank service equipment.  
  
It has been experienced that safety valves have been caused to open and not close again after impact. An impact test has been included, therefore, in one of the tank safety valve standards submitted for reference in RID/ADR. It requires withstanding impacts of 100 g in all three axes.  
  
It is unclear how to implement the RID/ADR requirement on the dynamic design of tank service equipment. It is asked to find a procedure to resolve the issue which may be started at the UN level.
- (v) Design and testing of lifting lugs for pressure drums  
Pressure drums cannot be handled manually and are either lifted by forklift pockets at the bottom or lifting devices attached on top of the drums. These lifting devices (lugs) are repeatedly loaded, snatch factors included. There is no related requirements in UN/RID/ADR.  
EN 14893 requires the design of these lugs against snatch loading and an initial and periodic lifting test with every pressure drum with a safety factor of 2,0.
- (vi) The completeness and adequacy of the existing provisions of RID/ADR on valves  
In context with the assessment of these standards for conformity with the existing requirements of RID/ADR in sections 4.1, 6.2 and 6.8 it appeared that consistency, adequacy and completeness of these requirements are questionable.  
  
This issue has become increased relevance with the introduction of the option of separate type approvals for tank equipment in parallel to this option for pressure receptacle

equipment. The design, manufacture and testing/inspection of such equipment require a consistent and complete set of requirements.

It became also obvious during the discussion of such standards that the understanding of the term “pressure receptacle” in 1.2.1 RID/ADR and its use throughout RID/ADR would in- or exclude service equipment

CEN is aware, that most of the questioned RID/ADR requirements are related to the UN Model Regulations. However, CEN is no body accredited with the UN Subcommittee of Experts on the Transport of Dangerous Goods. It is asked that the Joint Meeting discusses this paper and may agree on suggestions to be moved to the UN –level.

CEN will submit an official paper for the next session with detailed proposals for amendment.

### 3.1.3. Proposed new and amended reference to standards

As a consequence of the discussion of standards at formal vote stage the following new or amended references to standards in the text of RID/ADR 2015 are proposed as follows:

#### **Proposal 1**

This proposal is conditional on the submission of a new draft of the standard the contents of which includes the changes agreed in this meeting. This is why the proposal includes square brackets.

Amend the existing d reference to EN 14893:2006 + AC:2007 in the table of RID/ADR subsection 6.2.4.1 under “*for design and construction*” as indicated below in bold letters:

Reference	Title of document	Applicable sub-sections and paragraphs	Applicable for new type approvals or for renewals	Latest date for withdrawal of existing type approvals
(1)	(2)	(3)	(4)	(5)
<b>for design and construction</b>				
EN 14893:2006 + AC :2007	LPG equipment and accessories – Transportable LPG welded steel pressure drums with a capacity between 150 and 1 000 litres	6.2.3.1 and 6.2.3.4	<b>Until further Notice [Until 31 December 2016]</b>	
<b>[EN 14893:[2012]</b>	<b>LPG equipment and accessories – Transportable LPG welded steel pressure drums with a capacity between 150 and 1 000 litres</b>	<b>6.2.3.1 and 6.2.3.4</b>	<b>Until further notice]</b>	

#### **Proposal 2**

Add an additional entry in the table of ADR subsection 6.8.2.6.1 under “*For tanks for gases of Class 2*” as indicated below in bold letters:

Reference	Title of document	Applicable sub-sections 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 for gases of Class 2</i>				
EN 14129:[2012]	<b>LPG Equipment and accessories - Pressure relief valves for LPG pressure vessels</b>	<b>6.8.2.1.1 and 6.8.3.2.9</b>	<b>Until further notice</b>	

### Proposal 3

Add an additional entry in the table of ADR subsection 6.8.2.6.1 under “*For tanks intended for the carriage of liquid petroleum products ...*” as indicated below in bold letters:

Reference	Title of document	Applicable sub-sections 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>				
<b>EN 16257:2012</b>	<b>Tanks for the transport of dangerous goods - Service equipment - Footvalve sizes other than 100 mm dia (nom)</b>	<b>6.8.2.2.1 and 6.8.2.2.2</b>	<b>Until further notice</b>	

### 3.2. Results in informal document INF. 25 (Belgium) - Problems encountered in standards listed in ADR/RID/ADN -

Having examined the document in more detail the Group arrived at the following conclusions:

There are two types of errors identified in the INF 25 (editorial – technical); Editorial errors can be corrected by means of a corrigendum issued by the CEN/TC secretary. There is no vote on this and following a period of notification, the original standard is made available with a separated corrigendum sheet.

For the technical mistakes, the CEN/TC has to initiate work on an amendment or on a revision of the standard. In this case the normal process is followed (with a vote by the national standardization bodies). It is noted that when a standard is amended by more than one amendment, CCMC issue a ‘consolidated’ version. Otherwise, the original standard is made available with a separated amendment text.

The WG standard reviewed the INF 25 and agreed that only comments (b) and (c) on EN 13094:2008 are of editorial nature. The other points are either suggestion for improvements of the related standards or indeed technical mistakes. The CEN Consultant will contact the concerned TC Secretaries in order to address the issues listed in INF 25 and as characterized in the following table.

Ref. in INF 25	Standard	Title	Type of correction
2 a)	EN 1251-2 :2000	Cryogenic vessels - Transportable vacuum insulated vessels of not more than 1000 litres volume - Part 2: Design, fabrication, inspection and testing	Improvement
2 b)			Technical
2 c)			Improvement
3 a)	EN 13094 :2008	Tanks for the transport of dangerous goods - Metallic tanks with	Improvement

3 b)		a working pressure not exceeding 0,5 bar - Design and construction	Editorial corrigenda
3 c)			Improvement
3 d)			
4	EN 14025 :2008	Tanks for the transport of dangerous goods - Metallic pressure tanks - Design and Construction	Technical
5 a) – 5 g)	EN 14208 :2004	Transportable gas cylinders - Specification for welded pressure drums up to 1000 litre capacity for the transport of gases - Design and construction	Improvements
6 a) – 6.d)	EN 14398-2:2003+A2:2008	Cryogenic vessels - Large transportable non-vacuum insulated vessels - Part 2: Design, fabrication, inspection and testing	Improvements

### 3.3. Working procedures – additional use of telephone/video conferences (“teleconfs”)

The STD’s WG is convinced that the quality and efficiency of its discussions could significantly be improved by the use of teleconfs allowing the involvement of experts which otherwise are not able to attend sessions of the Joint Meeting extending over days or even a week.

It was agreed that an official paper shall be prepared by the CEN Consultant in collaboration with CCMC and consulted with the chair and co- chair of the Joint Meeting in advance.

It will be submitted to the next session and address the following points:

- The Working paper, once adopted shall be understood as an amendment of the cooperation agreement (ECE/TRANS/WP.15/AC.1/122/Add.2).
- After adoption, interested members will be provided by CEN with the necessary information and the programme to be used. A training service may also be offered. (There are no costs resulting from the attendance in teleconfs. The programme used will also not conflict with the firewalls of the participating companies/institutions)
- Teleconfs may then be arranged under the chair of the CEN Consultant at any time between the sessions of the Joint meeting, however not later than 4 weeks ahead of the next session of the Joint Meeting.
- The Chair of the teleconfs will provide a report in the form of an INF.- document 4 weeks in advance of the next session of the Joint Meeting.
- The CEN Consultant will introduce this report(s) to the Joint Meeting. Any unresolved or new issue possibly put forward by Plenary could be settled - if specific expertise is required – by a teleconf during the session week.

### 3.4. Consequential deletion of the reference to EN 50015 in the Footnote to ADR 9.7.8.3 (Observation by the OTIF Secretariat).

The STD’s WG, having checked the issue, confirms that it overlooked that EN 50015 is also referenced in the footnote to ADR 9.7.8.3. This reference asked to be deleted as well with the same reasoning as for the deletion of this standard in ADR 9.2.2.5.1 (a): It has been withdrawn.

It was understood that this amendment could be adopted as a correction of the text of ADR to become effective by 1 January 2013.

#### Proposal 4

Delete “EN 50015” in the footnote to ADR 9.7.8.3.

### 3.5. Update of references to EN 2, EN 141 and EN ISO/IEC 17020 (Request from Sweden).

Generally these standards are typical examples for “general purpose standards” the update of which is intended to be discussed during the next session in March 2013 based on INF. 26.

However, it was brought to the attention of the Group that the correct quotation of EN ISO/IEC 17020 has a paramount importance for the accreditation of inspection bodies which may be blocked because the accreditation bodies are forced to follow the valid version EN ISO/IEC 17020: 2012 – whereas RID/ADR 2013 would require following the outdated version.

It was also noted that the provision in RID/ADR 6.2.5 and 6.8.2.7 that “a standard which has been adopted for reference in a future edition of the ADR may be approved by the competent authority for use ...” is not added to subsection 1.8.6.8, where EN ISO/IEC 17020: 2004 is referred to and asked to be applied as specified in 6.2.2.10, 6.2.3.6 and TA4 and TT9 of 6.8.4.

The Std’s WG therefore asks the Joint Meeting to consider a corrigendum to the text of RID/ADR to become effective by 1 January 2013.

#### **Proposal 5**

Correct the text of RID/ADR 2013,

- Subsection 1.8.6.8, last paragraphs,
- Subsection 6.2.2.10,
- Subsection 6.2.3.6
- Subsection 6.8.2.4.6 (RID only)
- Section 6.8.4, TA4 and TT9

with respect to the replacement of “EN ISO/IEC 17020:2004” by “**EN ISO/IEC 17020:2012**”.

### **3.6. Participation of the Russian Federation in the establishment and revision of mandatory standards**

In relation to the concern expressed by the Russian delegation on the accessibility of European standards into Russian language, the standard working group had a discussion, which may be summarized as follows:

- For Russia and other CIS countries, the best approach is to participate at ISO level in the elaboration of standards (ISO standards may be published in English, French and Russian language) and CEN-CENELEC are striving to use as far as possible those Global standards;
- CEN-CENELEC have currently 33 national Members (national standards organizations. This include all of the EU member states (EU 27), 3 EFTA countries (Iceland, Norway and Switzerland) and 3 EU candidate countries (Croatia, Turkey and the former Yugoslav Republic of Macedonia);
- CEN-CENELEC have signed (e.g. for Canada, China, Japan) or are negotiating (e.g. for Russia) cooperation agreements with National Standards Bodies.
- With Russia, the aim is to allow ROSSTANDART to translate and make available the Russian translations of European standards at the condition that Russia will not modify the content of the initial EN text.
- With respect to the participation in the discussions of the STD’s WG it has been recalled that all members of RID/ADR/ADN are allowed and would be welcomed to participate. The discussion in held in English and it is understood that interpretation is not provided. It needs also be considered that consecutive interpretation would lead in exceeding the available time (part of lunch break and time after the end of the plenary session till closing of building).

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