

ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

Working Party on the Transport of Dangerous Goods

**Joint Meeting of the RID Safety Committee and the
Working Party on the Transport of Dangerous Goods**
(Geneva, 13-17 September 2004)

Transmitted by the European Committee for Standardization (CEN)

Standards Working Group of the Joint Meeting ADR/RID
4th meeting, 13-15 September 2004, Geneva

Comments on standards submitted by CEN before the meeting

A. Standards at Stage 2: Submitted for Public Enquiry

Dispatch from CEN dated 9 April 2004

Reference	Title of document	Where to refer in ADR/RID	Applicable sub-sections and paragraphs
PrEN 1439rev	Transportable refillable welded steel cylinders for liquefied petroleum gas (LPG) – Procedure for checking before, during and after filling		
<p><i>Comments from members of the Joint Meeting:</i></p> <p><u>Switzerland:</u></p> <ol style="list-style-type: none"> In the definitions the old 3.7 „Filling ratio“ is missing and in table A.2 the standard filling ratio of the ADR/RID (P200) should be mentioned 4.1 Cylinders suitable for filling: the manufacturer and his serial number must be identifiable Sentence below Table 2, → a wall thickness less than the minimum design value is not acceptable. We agree with the assessment of the CEN Consultant <p><i>Comments from CEN consultant:</i></p> <ol style="list-style-type: none"> The standard speaks about “filling quantity/amount” not about “filling ratio”; the filling ratios of ADR could be helpful or add” see fixed values in P200 of ADR/RID but the criteria of P200 are included in A2; the objective of the standard is to have deviations from the ADR criteria (reference temperature being accepted). This is not a requirement in the other standards for pre-filling inspection already adopted in P200 (e.g. EN 1919, 1920); Agree 			

Reference	Title of document	Where to refer in ADR/RID	Applicable sub-sections and paragraphs
prEN 1440rev	Transportable refillable welded steel cylinders for liquefied petroleum gas (LPG) – Periodic requalification		
<p><i>Comments from members of the Joint Meeting:</i></p> <p><u>Finland</u></p> <p>1. 5.1, General, the first paragraph: According to ADR (6.2.1.6.1) both the hydraulic pressure test and internal inspection are obligatory in periodic inspection, not alternative. With the agreement of the testing and certifying body approved by the competent authority of the country of approval the hydraulic pressure test may be replaced by a test using gas, where such operation does not entail any danger, or by an equivalent method based on ultrasound or acoustic emission. When it is question about welded steel cylinder (intended for the carriage of UN No. 1965) with a capacity below 6.5 / hydraulic pressure test may be replaced by another test ensuring an equivalent level of safety.</p> <p>The paragraph should be written so that it is according to ADR.</p> <p>2. 5.1, General, the third paragraph: According to ADR 2005 (6.2.1.6.1) a refillable pressure receptacle shall be subjected to periodic inspection by a body approved by the competent authority of the country of approval.</p> <p><u>Switzerland:</u></p> <p>3. The interval between periodic inspection is 10 years. It may be extended with the agreement of the competent authority presumed the requirements of Annex A/A1 are fully complied with. Therefore Annex A should be informative only;</p> <p>4. For the periodic inspection according to the ADR/RID a hydraulic test has to be applied at test pressure. It could be replaced by a pneumatic test at test pressure but not by other tests.</p> <p><i>Comments from CEN consultant:</i></p> <ol style="list-style-type: none"> 1. Agree, same comment made 2. Agree: body competent body instead of competent person 3. Disagree: this annex is the justification for 15 years to be acceptable; the content is normative byt it remains conditional to the approval of the competent authority. 4. Agree, same as 2 			

Reference	Title of document	Where to refer in ADR/RID	Applicable sub-sections and paragraphs
prEN 14763	Transportable refillable composite cylinders for Liquefied Petroleum Gas (LPG)- Procedure for checking before, during and after filling		
<p><i>Comments from members of the Joint Meeting:</i></p> <p><u>Finland</u></p> <p>1. 5, Table 1: The table 1 is more specific than the equivalent table in the standard prEN 14767, although the standard prEN 14767 is for periodic inspection and the standard prEN 14763 is only for checking during normal filling procedure.</p> <p>2. Annex A: In the picture A.6 it is referred to “level 1”, which has not specified in</p>			

Reference	Title of document	Where to refer in ADR/RID	Applicable sub-sections and paragraphs
	standard.		
	<p><u>Switzerland:</u></p> <p>3. The words transparent and translucent are used in this standard. Is there a difference in the meaning?</p> <p>4. 3.13 reconditioning in accordance with this point is not acceptable</p> <p>5. 3.14 the characteristics of a cylinder should be compared with the specified requirements of the type approval, independent of the used standards</p> <p>6. 4.1 Cylinders suitable for filling: the manufacturer and his serial number must be identifiable</p> <p>7. 4.3 instead of the standard the type approval should be used for compliance check</p> <p>8. 4.3.d cylinders that can not be identified have to be scraped</p> <p>9. Table 1, Rejection limits: „when the depth exceeds 10% of composite overwrap thickness“ → How do you know the thickness of the overwrap? This may vary from one supplier to an other. We suggest that a rejection should be made as soon as the fibre matrix is hurt.</p> <p>Heat/fire Figure A7 should be figure A9</p> <p>There should be an additional line: Lack of identity</p> <p><i>Comments from CEN consultant:</i></p> <ol style="list-style-type: none"> 1. Technical comment for the TC; 2. Cannot see “level 1” on fig.6; 3. Technical comment for the TC 4. 3.13 is a definition of what is “reconditioning” 5. agree; same comment made on the scope; not limited to cylinders manufactured according to EN 14427;l 6. see comment above for EN 1439; 7. see comment for 5; 8. This is a first selection; the “further assessment” by a more competent person may come to that conclusion 9. Agree; same remark made; 		

Reference	Title of document	Where to refer in ADR/RID	Applicable sub-sections and paragraphs
prEN 14767	Transportable refillable composite cylinders for Liquefied Petroleum Gas (LPG) - Periodic requalification		
	<p><i>Comments from members of the Joint Meeting:</i></p> <p><u>Finland</u></p> <p>1. 5.1, General, the first and second paragraph: According to ADR (6.2.1.6.1) both the hydraulic pressure test and internal inspection are obligatory in periodic inspection.</p> <p>With the agreement of the testing and certifying body approved by the competent authority of the country of approval the hydraulic pressure test may be replaced by a test using gas, where such operation does not entail any danger, or by an equivalent method based on ultrasound or acoustic emission. When it is question about welded steel cylinder (intended for the carriage of UN No.1965) with a capacity below 6.5 / hydraulic pressure test may be replaced by another test ensuring an equivalent level of safety.</p>		

The paragraph should be written so that it is according to ADR.

2. 5.1, General, the third paragraph

According to ADR 2005 (6.2.1.6.1) a refillable pressure receptacle shall be subjected to periodic inspections by a body approved by the competent authority of the country of approval.

3. 5.2.3, Table 1

The table 1 is less specific than the equivalent table in the standard prEN 14763, although the standard prEN 14767 is for periodic inspection and the standard prEN 14763 is only for checking during normal filling procedure. The table 1 should be complemented according to prEN 14763.

4. Annex A

In the pictures it is referred to "level 1", "level 2" and "level 3", which have not specified in standard.

5. Annex B, B.3

Should standard EN 1440 replaced with prEN 14763?

Switzerland:

6. 4. The interval between periodic inspection is part of the type examination and will be decided by the competent authority. It may be extended with the agreement of the competent authority presumed the requirements of Annex B/B1 are fully complied with. Therefore Annex B should be informative only.
7. Table 1, Rejection limits: „when the depth exceeds 10% of composite overwrap thickness“ → How do you know the thickness of the overwrap? This may vary from one supplier to an other. We suggest that a rejection should be made as soon as the fibre matrix is hurt.
Heat/fire Figure A7 should be figure A9
There should be an additional line: Lack of identity
8. 5.1 Second sentence should read: ...or is a **non translucent cylinder** then....described in 5.4 5.3
9. 5.4.3.2 f) a cylinder that fails the pneumatic test is not allowed to be reconditioned!
10. 5.4.4 this test can not replace the pressure test at test pressure
11. 5.4.4.2 Note 1.....with the acceptance of the competent authority
12. Note 2: as ultrasonic testing is not a standard procedure it can not be replaced by a standard procedure as visual inspection
13. Annex A : There are several editorial errors in this annex

Comments from CEN consultant:

1. Agree; similar comment made;
2. Agree; as above for EN 1440
3. Technical comment for the TC
4. Technical comment for the TC
5. Agree, same comment made for EN 1439;
6. if the content of Annex B shall be complied with, why cannot it stay normative; extension is always subject to approval from competent authority.
7. Technical comment for the TC;
8. Technical comment for the TC;
9. editorial: cross reference is 5.3 instead of 5.4
10. agree, same comment made;
11. agree, same comment made;
12. Technical comment for the TC
13. Editorial comment for the TC

Reference	Title of document	Where to refer in ADR/RID	Applicable sub-sections and paragraphs
prEN 14794	LPG equipment and accessories - Transportable refillable aluminium cylinders for liquefied petroleum gas (LPG) - Procedure for checking before, during and after filling		
<p><i>Comments from members of the Joint Meeting:</i></p> <p><i>1.1. Finland</i></p> <p>1. 3.6, cylinder The word "container" should be replaced with the words "pressure receptacle".</p> <p>2. 4.2, paragraph e) The example is misleading. The conformity mark (Π) is used to indicate that a equipment fulfils the regulations of the directive of the transportable pressure equipment. It is not the symbol of inspection body.</p> <p>3. 6.1, Safe filling quantity The text of the special packing provision "t" (section 4.1.4, P200 in ADR) should be modified. If text is not modified, other filling criteria can't use for aluminium cylinders.</p> <p><u>Switzerland:</u></p> <p>4. 4.2 Cylinders suitable for filling: the manufacturer and his serial number must be identifiable</p> <p>5. 4.4a) There is no indication of tara weight in EN 13110</p> <p>6. 4.5 Repairs are only allowed at the valve.</p> <p>7. 5. Reassessment of cylinders; The decision if a cylinder is still serviceable according to table 1-3 must be done by the competent body</p> <p>8. Table 2 : A reduction of the calculated wall thickness can not be accepted</p> <p>9. Annex A: In table A.1 the standard filling ratio of the ADR/RID (P200) should be mentioned</p> <p><i>Comments from CEN consultant:</i></p> <p>1. editorial comment for the TC;</p> <p>2. agree; the example should be removed;</p> <p>3. agree; if this standard is adopted; provision "ta" of P200 should be modified;</p> <p>4. see previous comment above;</p> <p>5. see Annex A of EN 13110 for details of marking</p> <p>6. Technical comment for the TC;</p> <p>7. There is no competent body involved during the pre-fill inspections;</p> <p>8. it is "below the design min wall thickness"</p> <p>9. same comment as for EN 1439 –see above</p>			

Reference	Title of document	Where to refer in ADR/RID	Applicable sub-sections and paragraphs
prEN 14795	Transportable refillable aluminium cylinders for Liquefied Petroleum Gas (LPG) – Periodic requalification		
<p><i>Comments from members of the Joint Meeting:</i></p> <p>Finland</p> <ol style="list-style-type: none"> 1. 3.3 Periodic inspection Should the standard reference be EN 13110 instead of EN 1442? EN 13110 is adopted for reference in ADR 2005 (6.2.2). 2. 4.2 Criteria, 4.2.1 and 4.2.2: It would be better if words “an equivalent” were replaced with words “an equivalent <u>standard approved by a competent authority</u>”. 3. 7.5, Marking text below the list: According to ADR (6.2.1.7) the height of markings depends on the size of a cylinder. The height of markings shall be according ADR regulations. <p><u>Switzerland:</u></p> <ol style="list-style-type: none"> 4. 3.3 ... specified requirements as defined in EN 1442 → EN 13110/EN12862 or an equivalent standard 5. 4. Agree with the comment of the CEN consultant but → The interval between periodic inspection is 10 years. It may be extended with the agreement of the competent authority presumed the requirements of 4.2 are fully complied with. Therefore it should read: of 10 years may apply..... 6. 5.2 For the periodic inspection according to the ADR/RID a hydraulic test has to be applied at test pressure. It could be replaced by a pneumatic test at test pressure but not by other tests. In our opinion it is important the tests at test pressure carried out an therefore no change or note in the ADR/RID should be made 7. 5.3.2 last sentence: There should be a list of allowed reconditioning work 8. Table 2: A reduction of the calculated wall thickness can not be accepted 9. 5.5.2.2 Reference should be made to a standard concerning Aluminium cylinders instead of steel cylinders EN1439 10. 7.3 There is no indication of tara weight in EN 13110 11. 7.7 The cylinder content shall be identified according to the ADR/RID 12. Bibliography: the appropriate standards for aluminium cylinders should be mentioned instead of standards for steel cylinders <p><i>Comments from CEN consultant:</i></p> <ol style="list-style-type: none"> 1. Agree; cross refer to EN 13110; 2. Agree, same comment made; 3. Agree; 4. Same as 1; 5. Same comment; 6. Same comment made as for EN 1440; 7. Technical comment for the TC; 8. ... not below the minimum wall thickness (as proposed) 9. Agree; should refer to EN 14794; 10. see Annex A of EN 13110 11. is “commercial propane” not equivalent to “propane” 12. Agree; editorial comments for the TC 			

Dispatch from CEN dated 1 June 2004

Reference	Title of document	Where to refer in ADR/RID	Applicable sub-sections and paragraphs
prEN 14914	Transportable refillable welded steel cylinders for liquefied petroleum gas (LPG) – Alternative design and construction - Periodic inspection		
<p><i>Comments from members of the Joint Meeting:</i> <u>Switzerland:</u> 1. 4. The interval between periodic inspection is 10 years. It may be extended with the agreement of the competent authority presumed the requirements of Annex A/A1-A3 are fully complied with. Therefore Annex A should be informative only 2. 5.1 Third sentence:under the authority of a competent person body 3. 5.2.3 A wall thickness less than the minimum design value is not acceptable 4. 5.3.2.4 Note1: Welding or repairing.....approved by the competent person body</p> <p><i>Comments from CEN consultant:</i></p> <p>1. Same comment as for EN 14767; 2. when the “retester” operates under an QC system, the competent body keeps the “responsibility” but has no “authority” on the workers performing the retesting operations; 3. Agree; same comment made; 4. debatable; ADR does not forbid repairs; Technical comment to TC</p>			

Reference	Title of document	Where to refer in ADR/RID	Applicable sub-sections and paragraphs
prEN 14912	LPG equipment and accessories – Inspection and maintenance of LPG cylinder valves at time of periodic inspection of cylinders		
<p><i>Comments from members of the Joint Meeting:</i> <u>Switzerland:</u> 1. In our opinion this standard should not be referred to in ADR/RID as it is part of the standards for periodic testing and not part of an ADR/RID requirement.</p> <p><i>Comments from CEN consultant:</i></p> <p>1. what about 6.2.1.6.1 (a) External examination of the receptacle, <u>equipment</u> and markings;</p> <p>1.</p>			

Reference	Title of document	Where to refer in ADR/RID	Applicable sub-sections and paragraphs
prEN 14913	Transportable refillable welded steel cylinders for liquefied petroleum gas (LPG) – Alternative design and construction - Procedure for checking before, during and after filling		
<p><i>Comments from members of the Joint Meeting:</i> <u>Switzerland:</u></p> <ol style="list-style-type: none"> 4.1 Cylinders suitable for filling: the manufacturer and his serial number must be identifiable 5.2 A wall thickness less than the minimum design value is not acceptable 5.3 Table 4: Cut or gouge → what is the undamaged inner Wall? Annex A: Table A.1, the standard filling ratio of the ADR/RID (P200) should be mentioned <p><i>Comments from CEN consultant:</i></p> <ol style="list-style-type: none"> see comment above; these cylinders are approved on the basis of experimental testing without minimum design thickness; the acceptance of reduced thickness should be subject to approval of competent body and not competent person; see comment as for EN 1439 			

Reference	Title of document	Where to refer in ADR/RID	Applicable sub-sections and paragraphs
prEN 14876	Transportable gas - Periodic inspection and testing of welded steel pressure drums		
<p><i>Comments from members of the Joint Meeting:</i> <u>Switzerland:</u></p> <ol style="list-style-type: none"> 4./9. Additional test shall be carried out in agreement with the competent body 10.4 such re-machining has to be recorded by writing and approved by the competent body 14.5 / 14.6 Stamping and marking has to be in accordance with ADR/RID Table 1: Any reduction of the calculated wall thickness can not be accepted Table 2: Chain pitting add "or if the wall thickness is less than design thickness" Table 2: Crevice corrosion add " or if the wall thickness is less than design thickness" <p><i>Comments from CEN consultant:</i></p> <ol style="list-style-type: none"> unclear about the referred paragraph technical comment for TC reference is made to ISO 13769 that will be replacing EN 1089-1 and hopefully be in compliance with ADR; accepted as note b); is this not understood with note c) 			

Reference	Title of document	Where to refer in ADR/RID	Applicable sub-sections and paragraphs
PrEN 14893	LPG Equipment and accessories - Transportable LPG metallic pressure drums with a capacity between 150 and 1000 litres		
<p><i>Comments from members of the Joint Meeting:</i> <u>Switzerland:</u></p> <ol style="list-style-type: none"> 11. Marking according to ADR 12.3 the cylinder shall be partially be filled with water Annex D: There should only be a reference to the appropriate standards eg. EN ISO 6520-1 <p><i>Comments from CEN consultant:</i></p> <ol style="list-style-type: none"> hopefully shall EN 14894 when ready be adopted as a reference document in ADR ; partially filled is more dangerous in case of rupture; Technical comment for the TC; 			

Reference	Title of document	Where to refer in ADR/RID	Applicable sub-sections and paragraphs
prEN 14894	LPG Equipment and accessories – LPG cylinder marking		
<p><i>Comments from members of the Joint Meeting:</i> <u>Switzerland:</u></p> <ol style="list-style-type: none"> If you put the gas name „Butane“ somewhere in the ADR marking this may be confusing. If the test pressure of 15 bar is a problem for the owner then it should clearly be stated above or below the ADR/RID marking „FOR UN 1011/1965 BUTANE ONLY“. But this marking shall not conflict with the required marking O2: The marking of the empty mass consists only of the figures XXXKG. If the customer wishes to have the Gas indicated it should be placed outside the range of the ADR/RID marking (→A8) and show the correct term in accordance with ADR/RID e.g. UN1965 Propane ore UN 1965 Butan A2: According to ADR/RID 2005 four digits may also be used to indicate the year. The month need not be indicated if the interval between periodic inspections is ten years or more <p><i>Comments from CEN consultant:</i></p> <ol style="list-style-type: none"> The product mark is after the manufacturer marks; I do not see a cause for confusion; There is no sequence for the operational marks in ADR ; I see no added value in indicating UN 1965 before Propane or Butane; Technical comment for the TC; it seems that this allowance has disappeared in the 2005 edition 			

Dispatch from CEN dated 28 June 2004

Reference	Title of document	Where to refer in ADR/RID	Applicable sub-sections and paragraphs
prEN ISO10297	Transportable gas cylinders – Cylinder valves – Specification and type testing		
<p>Comments from members of the Joint Meeting:</p> <p>Comments from CEN consultant:</p> <p>2.</p>			

Reference	Title of document	Where to refer in ADR/RID	Applicable sub-sections and paragraphs
ISO/DIS 16148.2	Gas cylinders – Refillable seamless steel gas cylinders – Acoustic emission examination (AEE) for periodic inspection		
<p>Comments from members of the Joint Meeting:</p> <p>Comments from CEN consultant:</p> <p>3.</p>			

B. Standards at Stage 3: Submitted for Final Voting

Reference	Title of document	Where to refer in ADR/RID	Applicable sub-sections and paragraphs
EN1442:1998:prA2	Transportable refillable welded steel gas cylinders for liquefied petroleum gas (LPG) - Design and construction		
<p><i>Comments from members of the Joint Meeting:</i></p> <p><u>Switzerland:</u></p> <p>1. If you put the gas name „Butane“ somewhere in the ADR marking area, this may be confusing. If the test pressure of 15 bar is a problem for the owner then it should clearly be stated above or below the ADR/RID marking „FOR UN 1011/1095 BUTANE ONLY“. But this marking shall not conflict with the required marks.</p> <p><i>Comments from CEN consultant:</i></p> <p>1. I do not see the potential for confusion and conflict with other markings;</p> <p>4. Decision of the Standards Working Group: Accepted Rejected</p>			

Dispatch from CEN dated 28 June 2004

Reference	Title of document	Where to refer in ADR/RID	Applicable sub-sections and paragraphs
PrEN 13769:2003/pr A1	Transportable gas cylinders – Cylinder bundles – Design, manufacture, identification and testing		
<p>Comments from members of the Joint Meeting:</p> <p>Comments from CEN consultant:</p> <p>5. Decision of the Standards Working Group: Accepted Rejected</p>			

Reference	Title of document	Where to refer in ADR/RID	Applicable sub-sections and paragraphs
prEN 14595	Tanks for transport of dangerous goods - Service equipment for tanks – Pressure and vacuum breather vent		
<p>Comments from members of the Joint Meeting:</p> <p>Comments from CEN consultant:</p> <p>6. Decision of the Standards Working Group: Accepted Rejected</p>			

Reference	Title of document	Where to refer in ADR/RID	Applicable sub-sections and paragraphs
prEN 14596	Tanks for transport of dangerous goods - Service equipment for tanks – Emergency pressure relief valve		
<p><i>Comments from members of the Joint Meeting:</i></p> <p><u>Germany:</u></p> <p>1. This kind of safety valve is in Germany not in use. Because of lack of information we do not know the accidental behaviour of such emergency valves in the event of an overturning of the tank. Due to the relatively large cross section of the opening of the emergency pressure relieve valve (diameter approx. 250 mm) and the specified venting capacity of the valve and the relatively low opening pressure, we fear that in a case of overturning on the side of the tank an unacceptable large quantity (against the provisions of 6.8.2.2.1 ADR) of the content is released by this type of safety valve.</p> <p>We need more information about the release behaviour of this kind safety valve in the event of overturning before we can take a decision about the referencing in ADR.</p> <p><i>Comments from CEN consultant:</i></p> <p>1. A drop test similar the one included in the standards for the petroleum service equipment is also included in this standard.</p> <p>7. Decision of the Standards Working Group: Accepted Rejected</p>			

Reference	Title of document	Where to refer in ADR/RID	Applicable sub-sections and paragraphs
<p>Comments from members of the Joint Meeting:</p> <p>Comments from CEN consultant:</p> <p>8. Decision of the Standards Working Group: Accepted Rejected</p>			
