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, 22 - 26 March 2010
Item 3 of the provisional agenda

STANDARDS

Proposal for adopting EN ISO 13340 – Cylinder valves for non-refillable cylinders –
Specification and prototype testing in the table for closures in section 6.2.4.1

Transmitted by the European Cylinder Makers Association (ECMA)\(^1\)\(^2\)

**Executive summary:** The design standard for non-refillable gas cylinders EN 12205, which is referenced in RID/ADR/ADN requires indispensably that such “cylinders shall be fitted with non-reusable valves which conform to EN ISO 13340. As this valve standard does contain specific provisions relating the valve fitting procedures and tests of the combination cylinder with valve (valve to cylinder interface test), it is considered essential that the valve standard EN ISO 13340 is also referred to in RID/ADR/ADN in order to make it normative.

**Action to be taken:** Adopt EN ISO 13340–“Cylinder valves for non-refillable cylinders - Specification and prototype testing” in the table for closures in section 6.2.4.1. Relevant provisions for transition periods shall also be given.

**Related documents:** EN 12205 and EN ISO 13340

\(^1\) In accordance with the programme of work of the Inland Transport Committee for 2006-2010 (ECE/TRANS/166/Add.1, programme activity 02.7 (c)).

\(^2\) Circulated by the Intergovernmental Organisation for International Carriage by Rail (OTIF) under the symbol OTIF/RID/RC/2010/16.
Introduction

1. Non-refillable non-UN gas cylinders in Europe are designed and constructed in accordance with EN 12205 and equipped with valves to EN ISO 13340.

2. EN 12205 is referenced in RID/ADR/ADN in table 6.2.4.1 for design and construction whereas EN ISO 13340 is not referenced there.

3. The design standard EN 12205 requires that “non-refillable cylinders shall be fitted with non-reusable valves which conform to EN ISO 13340”. The valve standard contains several provisions which are indispensable for a non-refillable gas cylinder to be fulfilled when it is approved, namely:

   (a) The valve shall be fixed to the gas cylinder in an inseparable way (e.g. by welding, brazing, crimping or gluing)

   (b) Valve to cylinder interface tests are required to be performed.

   This prevents that a non-refillable cylinder can be refilled and the valve can be replaced after the cylinder has once been emptied.

   In addition EN 12205 requires a drop test with a valve fitted to be carried out.

4. The foreword of EN 12205 contains the following statement:

   “This Standard has been submitted for reference into the RID and/or the technical annexes of the ADR. Therefore in this context the standards listed in the normative references and covering basic requirements of the RID/ADR not addressed within the present standard are normative only when the standards themselves are referenced to in the RID and/or the technical annexes of the ADR”

   With that statement it is clear that the valve standard EN ISO 13340, which is quoted under “Normative References” in EN 12205, can only be considered normative if it has been referenced in RID/ADR/ADN.

5. According to TPED it is currently allowed that cylinders and valves may undergo a separate conformity assessment which may for non-refillable gas cylinders result in non-conformities when the package cylinder/valve is not subjected to the necessary combined tests required in EN 12205 and EN ISO 13340.

6. It is therefore considered crucial that the valve standard EN ISO 13340 is referenced in the next version of RID/ADR/ADN so that approvals of non-refillable cylinders must always consider the requirements of both standards.

Proposal

7. The following additional reference shall be adopted in table 6.2.4.1 under “closures”:
<table>
<thead>
<tr>
<th>Reference</th>
<th>Title of document</th>
<th>Applicable subsections and paragraphs</th>
<th>Applicable for new type approvals or for renewals</th>
<th>Latest date for withdrawal of existing type approvals</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN ISO 13340:2001</td>
<td>Transportable gas cylinders – Cylinder valves for non refillable cylinders – Specification and prototype testing</td>
<td>6.2.3.1</td>
<td>As from 1 January 2011</td>
<td>[31 December 2011] if the valve has not been taken into account during type approval</td>
</tr>
</tbody>
</table>

**Justification**

8. This simple change will bring uniformity of practice and ensure that approvals of non-refillable gas cylinders do always include the attached valve.

9. **Safety:** There is a safety concern if non refillable cylinders are approved without considering the valve which must be non-reusable and shall be attached by a inseparable fixing method. Cases happened where such cylinders were imported to Europe with replaceable valves.

10. **Feasibility:** without any problem.

11. **Transitional period:** see table above.

12. **Enforceability:** no problems are expected.

________________