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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, 13-23 September 2005)

TANKS

The use of standards for the construction of tanks

Transmitted by the Government of the United Kingdom */

Summary: This paper seeks clarification from the Joint Meeting with regards to the use of the standards listed in 6.8.2.6. The current wording of 6.8.2.7 offers the option of either following the listed standards or using technical codes recognised by the Competent Authority and this choice has caused some confusion for UK industry.

Introduction

The United Kingdom informally introduced the perceived problem with the wording of 6.8.2.7 at the March 2005 Tanks Working Group meeting. It was widely accepted that the use of the standards listed in 6.8.2.6 was the preferred option and that such an approach would lead to the harmonisation required for free movement of tanks across member states. This paper seeks clarification from the Joint Meeting as to when, or whether, standards that are directly referenced in RID / ADR should be used in preference to any technical codes that may be recognised by the Competent Authority.

*/ Circulated by the Central Office for International Carriage by Rail (OCTI) under the symbol OCTI/RID/GT-III/2005/59.
**Background**

The United Kingdom notes that the wording in 6.8.2.7 for tanks is the same as the wording for transportable pressure receptacles in 6.2.3. The wording of 6.2.3 was interpreted by the Transportable Pressure Equipment Directive (TPED) experts working group in TPED Guideline number 34 (see annex). This gives the opinion that the listed standards should be used whenever possible and that technical codes should only be used where standards do not exist. Until the 2005 version of RID/ADR there were insufficient standards listed in 6.8.2.6 to allow production of the majority of tank types. With the introduction of the 2005 edition of RID / ADR this position has changed, with the majority of tank types now covered by the listed standards.

The United Kingdom has noted that there appears to be a particular issue with the inclusion of EN13094 as a directly referenced standard in 6.8.2.6. It has been common practice, in many countries, to build ‘g’ tanks to internationally accepted pressure vessel standards such as ASME VIII, PD 5500 and AD Merkblat that have been ‘recognised’ as technical codes by the various Competent Authorities as meeting the requirements of RID/ADR. These static pressure vessel codes are adapted to account for the dynamic forces associated with rail and road transport as required by 6.8.2, whereas EN13094 is a new standard, specifically developed by industry to properly reflect the demands of ‘g’ tanks for rail and road transport. The United Kingdom has noted that in some cases manufacturers are not choosing to use EN13094 but prefer to continue with the static pressure vessel codes.

The United Kingdom had hoped that the introduction of EN13094 would enable ‘g’ tank construction to be harmonised across Member States but experience suggests that the introduction of EN13094 into RID/ADR in 2005 has changed nothing.

**Discussion**

There are several approaches that the Joint Meeting could take depending on the status that should be given to 6.8.2.7.

If the Joint Meeting agrees that the standards listed in 6.8.2.6 should be used where the tank to be manufactured is within the scope of that standard then the United Kingdom suggests that the appropriate wording should be:

“Where appropriate standards have been directly referenced in ADR these must be used. If no appropriate standard exists then a technical code recognised by the competent authority shall be used”

or

If the Joint meeting agrees that the standards listed in 6.8.2.6 offer only one route to compliance with the general provisions of 6.8.2 then the United Kingdom suggests the appropriate wording should be:

‘Standards that are directly referenced shall have the same standing as technical codes recognised by the competent authority and a manufacturer may use either.’

or
If the Joint Meeting agrees that the standards listed in 6.8.2.6 should be used but wishes to give Industry additional time to accept that concept then the United Kingdom suggests the appropriate wording should be:

‘When appropriate standards are directly referenced in 6.8.2.6 of RID/ADR then the competent authority shall withdraw its recognition of any technical codes that conflict with the standard no later than two years after the inclusion of the new standard in RID/ADR.’

The United Kingdom also suggests that more transparency is required to enable users to understand which technical codes have been recognised by which Competent Authority and for which sorts of tanks they are used. The United Kingdom notes that the TPED experts working group dealt with this issue for transportable pressure receptacles in TPED guideline 35 (see annex).

If the Joint Meeting agrees that more transparency is required in the use of technical codes then the United Kingdom suggests the following wording could be used:

“Every Competent Authority should describe on the UNECE website the list of all technical codes that it recognises and details of where these may be obtained.”

**Justification**

These suggestions would aid clarity in ADR, and help industry to make more effective business decisions.
Annex

Guideline TPED 34

Question: Under what Circumstances can a Competent Authority recognise a technical code to which pressure receptacles in scope of TPED may be built?

Article: 3

Answer:

A technical code may be recognised by a Competent Authority in accordance with the provisions of 6.2.3 to allow manufacturers to build to:

1) A European standard which has been agreed by the RID/ADR Joint Meeting for inclusion in a future edition of 6.2.2 or 6.2.5 of RID/ADR - subject to the decision to defer implementation of TPED for certain types of equipment;

2) Another standard which covers a type of pressure receptacle not yet covered in the standards either currently listed in 6.2.2 or not to be listed in a future edition of 6.2.2, such as one which takes account of recent technological advances.

Where, in the latter case, a technical code is recognised by a Competent Authority, it should ask the relevant CEN committee to work on a harmonised standard for inclusion in 6.2.2 of RID/ADR at the earliest opportunity. It should also recognise the technical code in accordance with Guideline TPED 35.

Recognition of a technical code should not be used to unnecessarily prolong the use of national standards for types of pressure receptacle for which there are equivalent EN standards.

A Notified Body, approved by the Competent Authority, can only work in accordance with the standards listed in 6.2.2 and 6.2.5 or a technical code recognised in accordance with 6.2.3. They cannot work to their own interpretations of the requirements of 6.2.1 of RID/ADR.

Comment:

Article 3 of TPED requires that new pressure receptacles should meet the relevant requirements of RID/ADR. The construction requirements are in Chapter 6.2. 6.2.3 allows for pressure receptacles not built according to any of the standards listed in 6.2.2 to be designed, constructed and tested in accordance with a technical code recognised by a competent authority providing the same level of safety as the standards listed in 6.2.2 and which meet the requirements of 6.2.1 and 6.2.3.

Alternatively, pressure receptacles may be constructed to the ISO standards listed in 6.2.5. For the free movement of pressure receptacles in EU to function properly, it is necessary
that such equipment is built to standards acceptable across the EU. For many types of pressure receptacles, the standards listed in 6.2.2 and 6.2.5 should be used wherever possible.

Note: Question proposed by UK (UK 2)

Accepted by the TDG Expert Group on: 2 April 2004.
**Guideline TPED 35**

**Question:** Where transportable pressure receptacles within scope of TPED are constructed to a technical code recognised by a Competent Authority in accordance with Guideline TPED 34 should:

1. the technical code be recognised through a formal document?
2. other Competent Authorities be informed of its recognition? and
3. it contain requirements that are not in compliance with the requirements of RID/ADR?

**Article:** 3

**Answer:**

1. Yes, a certificate should be issued by the Competent Authority to provide evidence that it has recognised a technical code so that users of the code are left in no doubt as to its status.

2. Yes, it is necessary that all Competent Authorities have access to the technical codes that each member state has recognised. This information can be maintained on the Competent Authority's web pages with clear instruction on how to obtain copies of technical codes where such a code needs to be referred to.

3. No, the technical code must fulfil the requirements of sections 6.2.1 and 6.2.3 of RID/ADR (see also Guideline TPED34).

**Comment:**

If Competent Authorities do not share details of technical codes they have recognised, then there is no mechanism for other Competent Authorities to check that pi-marked pressure receptacles have been built to standards other than those listed in 6.2.2.

**Note:** Question proposed by UK (UK 1)

**Accepted by the TDG Expert Group on:** 6 November 2003.