

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**

Geneva, 15-19 September 2008

Agenda Item 6

REPORTS OF INFORMAL WORKING GROUPS

Working group on periodicity of testing of cylinders

Submitted by the Government of Germany on behalf of the Working Group

Introduction

1. This INF. document is related to document OTIF/RID/RC/2008/13-ECE/TRANS/WP.15/AC.1/2008/13 (see paragraph 4 therein). It is intended to inform the Joint Meeting of the progress made by the Working Group and consists of

- the minutes of the meeting of the Working Group in Muenster/Westphalia on 11/12 June 2008 as agreed by the participants by written procedure;
- the agenda of that meeting as annex I,
- a preliminary draft for provisions which may result from the work so far as annex II.

Note: The minutes give the results achieved by the Working Group so far and the open questions left. The preliminary draft for provisions in annex II is neither discussed nor agreed by the Working Group and therefore cannot be considered to have any agreed status. The purpose to attach it is only to give an idea how the provisions could look like to make it easier for the Joint Meeting to consider the three options offered on the potential placing of the provisions in RID/ADR to give advice to the Working Group on the preferred option. Based on the option preferred by the Joint Meeting, the Working Group will draft the proposal.

Action to be taken

2. The Joint Meeting is invited to take note of the minutes of the Working Group and the progress made and to endorse the continuing work with the aim to submit a final proposal to the Joint Meeting in March 2009. The Working Group provisionally agreed for the next meeting to be held in Paris on 17/18.12.2008.

3. However, there is one area of concern where the Working Group is seeking advice from the Joint Meeting. That is where to most appropriately place the provisions concerning

the new system to grant a 15-year interval for the periodic inspection of welded steel cylinders for LPG. Details are given in the minutes (see item 7).

4. Three options are presented:

- A: Spread the provisions of the new system to all chapters concerned including cross references as necessary;
- B: Include all provisions of the new system in P 200 (10) v;
- C: Create a specific packing provision P 20X to include all provisions of the new system.

5. It was mentioned that to include all the provisions envisaged in the various chapters of the provisions of RID/ADR dealing with technical requirements (6.2...), responsibilities (1.4...), operational requirements (4.1...) and testing (P 200 (10) v) could lead to a need for plenty of cross references thus not being very user friendly. On the other hand to include them all in P 200 (10) v would extend this clause/letter quite extensively and would lead to further discrepancies between P 200 of RID/ADR/ADN and P 200 of UN, bearing in mind that from 2009, the UN provisions form the basis of chapter 6.2. It was also mentioned, that a specific packing instruction P 20X could avoid such problems and would make the new system to be found at one place and thus being transparent to all parties concerned.

6. The Joint meeting is invited to discuss this issue and give advice to the Working Group on which option to base and draft the final proposal for amendment of RID/ADR.

**Informal Meeting on periodicity of testing of cylinders
Muenster/ Westphalia (Germany) 11/12.06.2008**

Minutes and Conclusions of the meeting

Background:

For the Joint Meeting RID/ADR/ADN in March 2008, Germany presented on behalf of the Working Group document OTIF/RID/RC/2008/13 (ECE/TRANS/WP.15/AC.1/2008/13). This document contained the report of the first meeting of the Working Group in Krefeld in January 2008, dealing with the possible extension of the interval for the periodic inspection of steel gas cylinders from 10 to 15 years.

Following the discussions of the Joint Meeting (see report OTIF/RID/RC/2008/A (ECE/TRANS/WP.15/AC.1/110, §§ 35 to 39), the Federal Ministry for Transport, Building and Urban Affairs (BMVBS) of Germany invited the Working Group for a follow-up meeting, which took place in Muenster/Westphalia on 11/12 June 2008 at the premises of Westfalen AG.

Participation

Representatives of the following countries took part: France, Germany, Switzerland and United Kingdom. Representatives of the following organisations took part: AEGPL (including DVFG as German Member of AEGPL), ECMA, EIGA (including IGV as German Member of EIGA); The meeting was hosted by Westfalen AG and chaired by BMVBS (Gregor Oberreuter). Written comments were received from Belgium and Sweden.

Agenda item 1 (Welcome)

The Chair on behalf of BMVBS and Mr. Schlueter on behalf of Westfalen AG welcomed the participants. Mr. Schlueter gave a short introduction on Westfalen AG, a leading company for filling, distribution and testing of cylinders for LPG in Germany.

Agenda item 2 (Agenda)

The Chair had prepared a draft agenda (see annex I), which was adopted.

Agenda item 3 (Where are we?)

The Chair shortly recalled the results of the meeting in Krefeld and of the Joint Meeting in March 2008 (see report OTIF/RID/RC/2008/A-ECE/TRANS/WP.15/AC.1/110, paras. 35 to 39).

Agenda item 4 (How do they do it?)

Annex 3 of the report of the meeting in Krefeld gave an overview on the current application of packing instruction P 200 (10) v in various countries. As no additional information was available, the Working Group agreed not to pursue the list any longer as in view of the progress made in Krefeld, a harmonised solution for RID/ADR/ADN may be achieved in the foreseeable future. Concerning the report of the Krefeld meeting, France noticed that not all

of the proposed amendments on how P 200 (10) v is applied in France had been taken and asked for a correction. The Chair agreed to do so.

Agenda item 5 (Which option to be preferred?) and item 6 (which requirements are needed?)

Both items were discussed together. The Chair had prepared a discussion paper on options and a thought starter on provisions to be drafted. It is to be recalled that the Working Group at present only deals with the provisions to grant a 15-year testing interval to welded steel cylinders for LPG.

During the intense and detailed discussions on requirements for design and construction, filling operations and technical requirements for qualification and testing, the following conclusions were achieved:

1. The new system should not be mandatory to all welded steel cylinders for LPG. It should be an option to choose. So the general testing period should remain 10 years as in the current P 200.
2. The new system should not be limited to new or pi-marked cylinders, but should be open also to existing cylinders with or without a pi-mark, thus being independent from the assessment or re-assessment of conformity according to TPED.

Note: This result is basically conforming to option 5 as presented to the Joint Meeting in March 2008(see Informal Document Inf. 15).

3. The new system should be based on technical requirements and on the safety standard of the cylinders; cylinders manufactured in compliance with RID/ADR in connection with EN 1442 should be eligible for the new system.
4. Cylinders with a type approval according to RID/ADR and EN 1442 were introduced first in 1997. Such cylinders should be eligible for the new system. Cylinders manufactured prior to 1997 were manufactured according to national standards and therefore have not automatically proved to be eligible for the new system. Therefore an assessment by the competent authority or an inspection body according to 1.8.6 and 1.8.7 RID/ADR/ADN (further called “1.8.6-body”) should be made to prove that the cylinders present an equivalent technical and safety standard as required by RID/ADR/ADN in connection with EN 1442. This could be done for an existing type approval or for a lot of identical cylinders as specified in the assessment.
5. If the option in 6.3.5 of EN 1442 for the manufacturer is used (“... if not otherwise specified...”), the alternative measures for that case should be approved by the “1.8.6.body”.
6. Only valves suitable for a 15 year period of use should be fitted to cylinders approved for a 15-year interval. Cylinders undergoing a periodic inspection should only be fitted with new or [refurbished and retested/inspected and checked] valves conforming to EN 14912:.... (Year). There should be no periodic inspection of valves having been fitted before. This may need further consideration.

7. External corrosion should not be a bigger problem than for “10-year-cylinders”. In case of visible external corrosion, cylinders should be sorted out and treated as appropriate during any process before re-filling.

Note: It was noted, that EN 1440:2008, annex E, is only mentioned in RID/ADR/ADN 2009 in letter v of P 200 (10). EN 1440 is not mentioned in P 200 (9), e.g. for letter c) for gases of classification code 2F.

8. Internal corrosion could be a more delicate issue, especially inside the upper part of the cylinder, which is not readily visible. Therefore a [spectroscopic/endoscopic] inspection of these parts for internal corrosion should be included in the inspection procedure. Cylinders showing internal corrosion as specified in EN (13143??), should not be granted a 15-year interval again, they should preferably be sorted out. This may need further consideration.
9. To prevent internal corrosion, only LPG of high purity and with very low potential contamination should be filled in cylinders approved for a 15-year interval. This should be deemed to be fulfilled, if only LPG conforming to the corrosion contaminates level of ISO 9162, annex E letter b) is filled in.
10. Cylinders approved for a 15-year interval should only be filled in licensed filling centres. These filling centres should apply a quality system to prove that the provisions of P 200 (7) and the requirements and responsibilities according to EN 1439:.... (Year) are fulfilled and correctly applied. This QS system should be approved by the “1.8.6-body”.

Note: France highlighted that countries should check whether their national provisions are in line with the requirements of EN 1439.

11. The filling centres should only fill 15-year cylinders from known owners. It was mentioned that a list of known owners may be required to be provided by the filling centre.
12. The owner of cylinders should be the applicant for granting a 15-year interval for his own cylinders. Additionally to the provisions of RID/ADR/ADN, the applicant should provide the information necessary to the “1.8.6 body” to demonstrate that all requirements of the new system are fulfilled.
13. The owner of cylinders approved for a 15-year interval should ensure that these cylinders are only filled in licensed filling centres (see above).

Note: The Working Group is of the view, that the requirements on licensed filling centres and on the owner practically do not include privately owned cylinders for LPG, as private owners are not expected to meet the requirements of the new system.

14. Some kind of marking to show the 15-year extension and to identify the licensed filling centre was deemed to be useful for transparency, but not to be necessary for safety reasons. Some delegations felt that the existing marking provisions to show the dates of the last and the next periodic inspection should be sufficient. This may need further consideration.

There was no consensus on the provisions to require for the first qualification of cylinders for a 15-year interval according to the new system or for the re-qualification of cylinders, which had already been approved for such interval before.

For every 15 year cycle France was of the view, that for all cylinders, tests [burst test] on a sample of the cylinders have to be carried out to check that the quality level has not decreased. The system currently applied in France was highlighted.

No other participant shared that view. They deemed this not being a method necessary for safety reasons and were of the view, that for cylinders designed, manufactured and tested according to ADR and EN 1442, strength and suitability of design and structure had already been proven sufficiently and deemed the way as proposed by France to be an unnecessary burden. They were of the view that for the provisions as already basically agreed combined with a periodic inspection should be sufficient; for newly manufactured cylinders, which have not been filled and transported with LPG (or other gases) before, even the periodic inspection could be omitted, because all new cylinders undergo testing during manufacture and before first use.

France was invited to present test results for further discussion at the next meeting.

Agenda item 7 (How to move on?)

As the new system is intended to include requirements on design and construction, operational requirements, responsibilities for owners and filling centres and requirements for qualification and re-qualification including periodic inspection of the cylinders, there was some discussion where to appropriately place the new provisions in RID/ADR/ADN.

It was mentioned that to include them in the various chapters of the provisions dealing with technical requirements (6.2...), responsibilities (1.4...), operational requirements (4.1...) and testing (P 200 (10) v) could lead to a need for plenty of cross references thus not being very user friendly. On the other hand to include this all in P 200 (10) v would extend it quite extensively and would lead to further discrepancies between P 200 of RID/ADR/ADN and P 200 of UN, bearing in mind that from 2009, the UN provisions form the basis of chapter 6.2. It was also mentioned, that a specific packing instruction P 20X could avoid such problems and would make the new system to be found at one place and thus being transparent to all parties concerned.

It was agreed to address this issue to the Joint Meeting in September 2008 for advice on the following options:

- A: Spread the provisions of the new system to all chapters concerned including cross references as necessary;
- B: Include all provisions of the new system in P 200 (10) v;
- C: Create a specific packing provision P 20X to include all provisions of the new system.

So the Joint meeting is invited to discuss this issue and give advice to the Working Group on which option to base the final proposal for amendment.

The Working Group did not yet agree on specific text for amendments to RID/ADR/ADN. The Chair offered to draft text based on the results achieved for consideration at the next meeting. This should include draft transitional provisions. It was mentioned that the new system should be applicable from 2011, but that the current system of P 200 (10) v (as approved by the country/the countries) should be applicable for a certain overlapping period (e.g. until 30. June 2015) and that cylinders approved by such a country/such countries until that date should be permitted to continuously be used in that country/these countries according to the system as applied until that date. So they will continue to be limited to the national market of that country/these countries.

Agenda item 8 (Further work needed?)

As not all issues had been solved and as the text of the proposal to be submitted to the Joint Meeting still has to be discussed and agreed, the Working Group agreed to submit an interim report to the Joint Meeting in September 2008 on the results and open issues for information and to only address the issue of where to most appropriately place the provisions for the new system to the Joint Meeting for advice.

It was agreed that Germany submits a short official document with a status report to the Joint Meeting in due course to meet the deadline and to add the full report of the meeting with annexes as appropriate at a later stage as an Inf. Document after having been agreed by the Working Group by written procedure.

Note: See Document OTIF/RID/RC/2008/13 (ECE/TRANS/WP.15/AC.1/2008/13).

France proposed to organise and host the next meeting in Paris by maintaining the lead and Chairmanship of Germany. There was no other suggestion and the working Group provisionally agreed on the 17/18.12.2008 as dates for that meeting. The meeting should start early on 17.12. and finish about 15.00 h on 18.12.2008.

Item 9 (Other Business):

Concerning the comments from Belgium, AEGPL explained that after having had an exchange with the Belgium Ministry for Transport, they could be deemed as withdrawn.

Concerning the comments from Sweden, the Working Group shortly checked them point by point and came to the conclusion that they all had been considered and tackled appropriately. It was agreed that the Chair sends a more detailed answer to Sweden.

The Chair and the Working Group thanked Mr. Schlueter and his colleagues of Westfalen AG especially for having so perfectly organised and hosted the meeting. The warm and friendly welcome, the frankness of co-operation, the profound expertise and the most interesting guided tour around the facilities of Westfalen AG were much appreciated and deemed to have very much supported the progress achieved.

Annex I

Agreed Agenda

Meeting of the informal Working Group of RID/ADR/ADN on the extension of the periodicity of periodic testing of steel gas cylinders Muenster (Westphalia), Germany, 11/12.06.2008

Item 1: Welcome

Welcoming and presentation of delegates
Information about the meeting (e.g. locations, program, transport facilities)
Document(s): Invitation, Program of Meeting

Item 2: Agenda

Adoption of the Agenda

Document: Revised Draft Agenda

Item 3: Where are we?

Documents:

- ECE/TRANS/WP.15/AC.1/2007/59 (Germany)
- Report of the Krefeld Meeting, see Inf. 15 of Joint Meeting RID/ADR/ADN, March 2008
- ECE/TRANS/WP.15/AC1/110, Report of Joint Meeting RID/ADR/ADN, March 2008, §§ 35 to 39
- Directive 1999/36/EC (TPED)
- Draft for a proposal of the European Commission for a revised TPED (draft version 8)
- RID/ADR as amended for 2009, especially sections 1.8.6 and 1.8.7, chapter 4.1 and 6.2, and current Packing Instruction P 200 (10) v
- Technical Standards concerned [see EN 1440:2006, ISO 6406:199, EN 1968:2002 (except annex B), EN 1968:1996 + A1:2005 (except annex B)]

Item 4: How do they do it?

Update of the information about the situation concerning the extension of periodicity

Documents:

- annex 3 to the report of the Krefeld Meeting,
- Inf. 15 of JM RID/ADR/ADN in March 2008.

Item 5: Which option to be preferred?

(a) discuss pros and cons of options 3 to 5

Documents:

- para. 19 of the report of the Krefeld Meeting,
- Inf. 15 of JM RID/ADR/ADN,

- (b) work out the preferred option to be pursued,

Document: - paper on options presented by the chair.

Item 6: Which requirements are needed?

- (a) Design and Construction of the cylinder,
- (b) Filling operations including “customer-control”,
- (c) Re-qualification and technical requirements;

Documents: - thought starter presented by the chair,
- para. 22 of the report of the Krefeld Meeting,
- Inf.15 of JM RID/ADR/ADN.

Item 7: How to move on?

- (a) where to insert it in RID/ADR/ADN?
- (b) Wording to be drafted?
- (c) Transitional provisions needed?

[Draft: 1.6.X: The provisions of chapter 4.1, packing instruction P 200 (10) v of ADR as applicable on 31.12.2010 may be applied by member states/contracting parties until 31.12.2012. Cylinders appointed for a 15 year testing period according to these provisions may continue to be transported until the next periodic inspection.]

May need to be précised. Intention to keep existing populations of 15 year cylinders in the old system usable for national transport and use.

[With the agreement of the CA of the country/of the countries, where the periodic inspection and the carriage take place, these cylinders may continue to be transported, used and periodically tested for 15 year intervals under the conditions as specified in P 200 (10) v of ADR as applicable on 31.12.2010.]

Item 8: Further work needed?

- (a) has a solution been found?
- (b) was a final draft agreed?
- (c) what to report to the Joint Meeting RID/ADR/ADN, September 2008?
- (d) do we need another meeting?

Item 9: Other Business

Annex II

PROVISIONAL DRAFT

Paper for Discussion for the Working Group on periodicity of testing of cylinders for the next meeting (envisaged for 17/18 December 2008)

Drafted by the Chair of the Working Group (Bonn, 25.07.2008)

Note: This provisional draft is not yet discussed and agreed by the Working Group. It is only intended to start the discussion and to give an idea on how the provisions could read based on the results achieved in the meeting in Krefeld and especially in Muenster/Westphalia

“X.1 General Provisions

X.1.1 These provisions shall be applied if an applicant has applied to the competent authority or an inspection body according to 1.8.6 (for simplification further called “1.8.6-body”) for granting a 15-year interval for periodic inspection of his welded steel cylinders for LPG.

X.1.2 These provisions shall only be applied to cylinders having been manufactured in conformity with the provisions of RID/ADR/ADN in combination with EN 1442 since 1. January 1997. They may also be applied to cylinders manufactured prior that date in conformity with RID/ADR/ADN in combination with a technical code accepted by the national competent authority, if they are of equivalent safety to the provisions of RID/ADR/ADN and EN 1442 as applicable at the time of application.

X.1.3 The owner of the cylinders may apply to the “1.8.6-body” for granting the 15 year interval, if he can demonstrate/prove that the requirements of X.2 to X.4 are met.

X.1.4 The “1.8.6-body” shall check whether the provisions of X.2 to X.4 are fulfilled and correctly applied. If all provisions are fulfilled, the “1.8.6-body” may/has to grant an approval for the cylinders. In the approval, the type or lot of cylinders covered by the approval shall be clearly identified. A copy of the approval shall be kept by the “1.8.6-body”.

X.1.5 The “1.8.6-body” having been granted an approval according to X.1.4 shall monitor the owner of the cylinders and the filling centres according to X.3.1 for compliance with the provisions of RID/ADR/ADN and the approval granted as appropriate and on a regular basis.

X.2 Technical Provisions

X.2.1 The applicant has to present documents to the “1.8.6-body” demonstrating that the cylinders are manufactured in conformity with RID/ADR/ADN and EN 1442. If the cylinders are manufactured before 1. January 1997, he has present a document demonstrating that a “1.8.6-body” has carried out an assessment proving that the cylinders present an equivalent technical and safety level as required by RID/ADR/ADN and EN 1442 as applicable at the time of application.

X.2.2 If the option in 6.3.5 of EN 1442 has been applied by the manufacturer, the alternative measures taken shall be checked by the “1.8.6-body”, if they ensure equivalent the same safety.

X.3 Operational Provisions

X.3.1 Cylinders having been granted a 15 year interval for periodic testing shall only be filled in licensed/authorised filling centres. The filling centres have to demonstrate/prove to the “1.8.6-body”, that they apply a quality assurance system (QS-system) to ensure that all the provisions of P 200 (7) and the requirements and responsibilities of EN 1439:... (Year) are fulfilled and correctly applied.

X.3.2 The filling centre shall only fill LPG into the cylinders from known owners. It shall provide a list of the owners known to it and the cylinders of such owners.

X.3.3 The owner of the cylinders with 15 year testing interval has to ensure, that his cylinders are only filled with LPG in filling centres according to X.3.1. The owner shall provide a copy of the approval for the 15 year interval to the filling centre(s).

X.3.4 To prevent internal corrosion, only LPG of high quality with very low potential contamination shall be filled into the cylinders. This is deemed to be fulfilled, if only LPG conforming to the corrosion contaminates level of ISO 9261, annex E, letter b, is filled in.

X.3.5 In case of external corrosion on a cylinder, the filling centre shall take appropriate measures to remove corrosion and to repaint the treated parts as appropriate before re-filling with LPG.

X.4 Provisions for qualification and periodic inspection

Note: For this part, discussion of the Working Group is ongoing. Therefore this part of the draft is considered to be just informal and a place holder. [...] show potential provisions where no agreement could be achieved in Muenster. Text without square bracket I deem to be basically considered to be useful.

X.4.1 When a 15 year interval has been granted, the cylinders should be subject to a periodic inspection according to [This may be omitted for newly manufactured welded LPG cylinders, which have not been filled or transported with LPG before.]

Note: This is reflecting on the position of almost all participants in Muenster, except France.

X.4.2 [Additionally for each 15-year-cycle, a burst test has to be carried out on a sample of each type of cylinder to check the structural stability and the conformity of the cylinders.]

Note: This is reflecting on the position of France.

X.4.3 To check for internal corrosion of the cylinders the upper part/head of each cylinders shall be checked additionally by spectroscopic means/device. If internal corrosion has

been detected, the cylinder shall be sorted out and shall not be granted any further period for filling and transport with LPG.

X.4.4 Only new or refurbished valves according to EN 14912:... (Year) suitable for a 15 year period of use shall be fitted to the cylinders. There shall be no periodic inspection on valves having been fitted before.

X.5 Marking

X.5.1 [...] [to be drafted if deemed necessary.]
