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Working Party on the Transport of Dangerous Goods

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Item 3 of the provisional agenda

REPORT OF INFORMAL WORKING GROUPS

Proposal to amend RID/ADR/ADN to include provisions for the retention of documents,
additional inspection requirements and conformity assessment procedures for gas cartridges

Transmitted by the Government of Germany on behalf of the informal working group^{1,2}

Introduction:

1. During the Joint Meeting session in March 2009, the European Commission presented document ECE/TRANS/WP.15/AC.1/2009/8 which proposed to include further provisions into RID/ADR/ADN concerning the period for retention of documents, additional inspection requirements and conformity assessment procedures for gas cartridges. The document did not

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/2009/39.

include a concrete proposal for amendment, but asked the Joint Meeting to establish an informal intersessional Working Group to work out the amendments deemed necessary.

2. In addition to that document, Germany and France also presented informal documents INF. 6 and INF.30. Germany offered in INF. 6 to organise and host the meeting, France highlighted in INF. 30 some main issues to be tackled to meet the objectives of the Commission's initiative.

3. The Joint Meeting decided to establish the Working Group, welcomed the initiative of Germany and agreed to hold the meeting in Bonn (Germany) from 3 – 5 June 2009. The terms of reference were given as follows:

- (a) To verify the provisions suitable for inclusion in RID/ADR/ADN;
- (b) To determine the most appropriate places for inclusion (chapters 1.8, 4.1, 6.2 or 6.8);
- (c) To draft amendments to the provisions in RID/ADR/ADN which may enter into force on 1 January 2011;
- (d) To propose new provisions for the conformity assessment of gas cartridges;
- (e) To present proposals at the September 2009 session of the Joint Meeting.

Background

4. The informal working group met on the invitation of the Federal Ministry for Transport, Construction and Urban Affairs (BMVBS) of Germany in Bonn from 3 to 5 June 2009. Delegates from Austria, Cyprus, France, Finland, Germany, Poland, the Netherlands, Slovenia, Switzerland and the United Kingdom took part. The European Liquefied Petroleum Gas Association (AEGPL) and the European Industrial Gases Association (EIGA) were represented. The European Commission also participated.

5. In view of the time constraints to meet the deadline for submission of an official document, the informal working group agreed to submit this short formal document including the amendments proposed and afterwards to submit the full report of the meeting containing details of the discussion and the reasons for the amendments proposed in a separate informal document once the report has been agreed by the working group by correspondence.

Proposal:

6. The informal working group proposes the amendments to include provisions concerning additional inspection requirements and the retention of technical documentation as listed in Annex I and to include new provisions for the conformity assessment of gas cartridges as listed in Annex II.

7. The Joint Meeting is invited to discuss the issues raised and to agree on the proposals as appropriate.

8. The informal working group would like to remind the Joint Meeting of the importance to decide on the amendments during the session in September 2009 to ensure their entering into force by 2011 to correspond to the planned time scale to review the Directive 1999/36/EC on

transportable pressure equipment (TPED) and to avoid any inconsistencies between that Directive and RID/ADR/ADN which could create obstacles to transport of dangerous goods and to approval procedures for the transportable pressure equipment concerned like pressure receptacles according to chapter 6.2 and tanks for gases according to chapter 6.8 where TT9 and TA4 are assigned to in table A of chapter 3.2.

Future work

9. During its discussions and deliberations the Working Group found out that the provisions for monitoring compliance in section 1.8.1 should be addressed to take account of the new requirements laid down in sections 1.8.6 and 1.8.7 and the resulting obligations for competent authorities to monitor compliance and to enforce provisions adequately.

10. The Joint Meeting is invited to include this issue in the future work program. Delegations should be invited to present the issue in detail and to provide proposals as necessary.

11. When discussing the introduction of conformity assessment procedures for gas cartridges, some inconsistencies were found in the existing provisions for such cartridges. They are listed in Annex III of this document and the Joint Meeting is invited to decide as appropriate on further action.

Annex I

Proposal to amend RID/ADR/ADN to include provisions for additional inspection requirements and the retention of technical documentation

1. Amend section 1.8.6 to read (new or amended text is in italics):

“1.8.6 Administrative controls for application on the conformity assessments, periodic inspections, and exceptional checks described in 1.8.7

1.8.6.1 *Approval of inspection bodies*

The competent authority may approve inspection bodies for conformity assessments, periodic inspections, exceptional checks and surveillance of the in-house inspection service as specified in 1.8.7.

1.8.6.2 *Operational obligations for the competent authority, its delegate or inspection body*

1.8.6.2.1

The competent authority, its delegate or inspection body shall carry out conformity assessments, periodic inspections and exceptional checks in a proportionate manner, avoiding unnecessary burdens. The competent authority, its delegate or inspection body shall perform their activities taking into consideration the size, the sector, the structure of the undertakings involved, the relative complexity of the technology and the serial character of production.

1.8.6.2.2 *Nevertheless the competent authority, its delegate or inspection body shall respect the degree of rigour and the level of protection required for the compliance of the transportable pressure equipment by the provisions of parts 4 and 6 as applicable.*

1.8.6.2.3 *Where a competent authority, its delegate or inspection body finds out that requirements laid down in parts 4 or 6 have not been met by the manufacturer, it shall require the manufacturer to take appropriate corrective measures and it shall not deliver any type approval certificate or certificate of conformity.*

1.8.6.3 *Information obligation*

RID Member States/Contracting parties to ADR or ADN shall publish their national procedures for the assessment, appointment and monitoring of inspection bodies and of any changes to that information.

1.8.6.4.1 Subsidiaries and subcontractors of inspection bodies

Note: In-house inspection services according to 1.8.7.6 shall not be considered to be subcontractors [or subsidiaries].

1.8.6.4.1 Where an inspection body subcontracts specific tasks connected with the conformity assessment, periodic inspection or exceptional check or has recourse to a subsidiary, it shall ensure that the subcontractor or the subsidiary meets the requirements set out for the tasks given with the same level of competence and safety as laid down for inspection bodies (see 1.8.6.4). A subcontractor [or subsidiary] shall be included in the accreditation of the inspection body and shall be monitored by the inspection body. The inspection body shall inform the competent authority. [Note: A subsidiary shall be part of the organisation of the inspection body. Subsidiary organisations not being part of an inspection body shall be designated and accredited separately.]

1.8.6.4.2 The inspection body shall take full responsibility for the tasks performed by subcontractors [or subsidiaries] [wherever the tasks are performed or the subcontractors [or subsidiaries] are established].

1.8.6.4.3 The inspection body shall not subcontract the whole task of conformity assessment, periodic inspection or exceptional checks. In any case, the assessment [provisions of 1.8.7...] and the issue of certificates shall be carried out by the inspection body itself.

1.8.6.4.4 Activities shall not be subcontracted [or carried out by a subsidiary] without the agreement of the client.

1.8.6.4.5 The inspection body shall keep at the disposal of the competent authority the relevant documents concerning the assessment of the subcontractor's [or subsidiary's] qualifications and the work carried out by the subcontractor [or the subsidiary].

1.8.6.5 Information obligations for inspection bodies

Any inspection body shall inform the competent authority, which had approved it, of the following:

- (a) - except when the provisions of 1.8.7.2.4 apply - any refusal, restriction, suspension or withdrawal of type approval certificates;*
- (b) any circumstance(s) affecting the scope of and conditions for the approval as granted by the competent authority;*

- (c) *any request for information on conformity assessment activities performed which they have received from competent authorities monitoring compliance according to 1.8.1 or 1.8.6.6;*
- (d) *on request, conformity assessment activities performed within the scope of their approval and any other activity performed, including subcontracting.*

1.8.6.6 (existing 1.8.6.2)

The competent authority shall ensure the monitoring of the inspection bodies and shall revoke or restrict the approval given, if it notes that an approved body is no longer in compliance with the approval and the requirements of 1.8.6.8 or does not follow the procedures specified in the provisions of RID/ADR.

1.8.6.7(existing 1.8.6.3)

If the approval of the inspection body is revoked or restricted or if the inspection body ceased activity, the competent authority shall take appropriate steps to ensure that the files are either processed by another inspection body or kept available.

1.8.6.8(existing 1.8.6.4)

The inspection body shall:

- (a) Have a staff with an organisation structure, capable, trained, competent and skilled, to satisfactorily perform its technical functions;
- (b) Have access to suitable and adequate facilities and equipment;
- (c) Operate in an impartial manner and be free from any influence which could prevent it from doing so;
- (d) Ensure commercial confidentiality of the commercial and proprietary activities of the manufacturer and other bodies;
- (e) Maintain clear demarcation between actual inspection body functions and unrelated functions;
- (f) Have a documented quality system;
- (g) Ensure that the tests and inspections specified in the relevant standard and in RID/ADR are performed; and
- (h) Maintain an effective and appropriate report and record system in accordance with 1.8.7 and 1.8.8.

The inspection body shall additionally be accredited according to the standard EN ISO/IEC 17020:2004, as specified in 6.2.2.9, 6.2.3.6 and TA4 and TT9 of 6.8.4.

An inspection body starting a new activity may be approved temporarily. Before temporary designation, the competent authority shall ensure that the inspection body meets the requirements of the standard EN ISO/IEC 17020:2004. The

inspection body shall be accredited in its first year of activity to be able to continue this new activity.”

2. Amendments to 1.8.7:

(a) Add a new 1.8.7.1.5 to read:

“1.8.7.1.5 *Design type approval certificates and certificates of conformity - including the technical documentation - shall be retained by the manufacturer or by the applicant for the type approval, if he is not the manufacturer, and by the inspection body, who issued the certificate, for a period of at least 20 years starting from the last date of production of products of the same type.*”

(b) Add a new 1.8.7.1.X to read:

“1.8.7.1.6 *When a manufacturer or owner intends to cease operation, he shall send the documentation to the competent authority. The competent authority shall then retain the documentation for the rest of the period specified in 1.8.7.1.5.*”

(c) The existing text under the heading of 1.8.7.5 becomes 1.8.7.5.1. Add a new 1.8.7.5.2 to read:

“1.8.7.5.2 *Reports of periodic inspections and tests of pressure receptacles shall be retained by the applicant at least until the next periodic inspection. Note: For tanks see provisions for tank records in 4.3.1.7.*”

3. Add a new 4.1.6.14 to read:

“4.1.6.14 *Owners shall, on the basis of a reasoned request from the competent authority, provide it with all the information necessary to demonstrate the conformity of the pressure receptacle in a language easily understood by the competent authority. They shall cooperate with that authority, at its request, on any action taken to eliminate non-conformity of the pressure receptacles which they own.*”

4. Renumber 4.1.6.14 to 4.1.6.15.

5. Consequential amendments

(a) In 6.2.2.9 replace “1.8.6.4” by “1.8.6.2, 1.8.6.4, 1.8.6.5 and 1.8.6.8” (thrice);

(b) In 6.2.3.6.1 replace “1.8.6.4” by “1.8.6.2, 1.8.6.4, 1.8.6.5 and 1.8.6.8” (thrice);

- (c) In 6.8.4 special provision TA 4 replace “1.8.6.4” by “*1.8.6.2, 1.8.6.4, 1.8.6.5 and 1.8.6.8*”;
- (d) In 6.8.4 special provision TT 9 replace “1.8.6.4” by “*1.8.6.2, 1.8.6.4, 1.8.6.5 and 1.8.6.8*”.

Annex II

Proposal to amend RID/ADR/ADN
to include provisions for conformity assessment of gas cartridges

1. Add a new 1.8.8 to read:

“1.8.8 Procedures for conformity assessment of gas cartridges

NOTE: In this section, “relevant body” means a body assigned in 6.2.3.6 for the conformity assessment of non-UN pressure receptacles, if the procedures according to 1.8.7. are applied. If the procedures of 1.8.8 are applied, the supervision of manufacture shall be carried out by a type A body and the tests as required in 6.2.6 shall be carried out either by that type a body or by an IS-body approved by that type A body; for definition of type A and type IS body see definitions in 6.2.3.6.1.

1.8.8.1 General provisions

1.8.8.1.1 When assessing the conformity of gas cartridges, one of the following procedures shall be applied according to the table in 6.2.3.6.1:

(a) the procedure in section 1.8.7 for gas receptacles, with the exception of 1.8.7.5, or

(b) the procedure in section 1.8.8.

The provisions of 6.2.3.6.2 shall be applied.

1.8.8.1.2 By the application of 1.8.8, the applicant shall demonstrate, ensure and declare on his sole responsibility the conformity of gas cartridges with the provisions of 6.2.6 and all further applicable provisions of RID/ADR/ADN.

1.8.8.1.3 The applicant shall

(a) carry out a design type examination of each type of gas cartridges (including materials to be used and variations of that type, e.g. volumes, pressures, drawings and closing and release devices) according to 1.8.8.2;

(b) operate an approved quality system for design, manufacture, inspection and testing according to 1.8.8.3 ;

(c) operate an approved testing regime according to 1.8.8.4 for the tests required in 6.2.6;

- (d) *address for the approval of his quality system for supervision of manufacture and for testing one relevant body of his choice of the Member State/Contracting Party; if the applicant is not established in a Member State/Contracting Party he shall address one relevant body of a Member State/Contracting Party prior to first transport into a Member State/ a Contracting Party;*
- (e) *if the cartridge is finally assembled from parts manufactured by the applicant by one or more other enterprise(s), he shall provide written instructions how to assemble and fill the cartridges to meet the provisions of his type examination certificate.*

1.8.8.1.4 Where the applicant, as well as enterprises assembling and/or filling gas cartridges according to the instructions of the applicant, can demonstrate to the satisfaction of the competent authority or its delegate or inspection body conforming to 1.8.6.2, 1.8.6.4, 1.8.6.5 and 1.8.8.6, they may establish an in-house inspection service which may perform part or all of the inspections and tests specified in 6.2.6.

1.8.8.2 Design and type examination

1.8.8.2.1 The applicant shall establish the technical documentation as specified in 1.8.8.1.3 (a) for each type of gas cartridges including the technical standard(s) applied. If he chooses to apply a standard not referenced in 6.2.6, he shall add the standard applied to the documentation.

1.8.8.2.2 The applicant shall retain the technical documentation together with samples of that type at the disposal of the relevant body during production and afterwards for a period of minimum 5 years starting from the last date of production of gas cartridges according to that type examination certificate.

1.8.8.2.3 The applicant shall after careful examination issue a design type certificate which shall be valid for a maximum period of ten years; he shall add this certificate to the documentation. This certificate authorises him to produce gas cartridges of that type for that period.

1.8.8.2.4 If within that period the relevant technical requirements of RID/ADR (including referenced standards) have changed so that the design type is no longer in conformity with them, the applicant shall withdraw his design type certificate and inform the relevant body.

1.8.8.2.5 The applicant may after careful and complete review reissue the certificate for another period of maximum ten years.

1.8.8.3 Supervision of manufacture

1.8.8.3.1 The procedure of design type examination as well as the manufacturing process shall be subject to a survey by the relevant body to ensure the type certified by the applicant and the product as produced are in conformity with the provisions of the design type certificate and the applicable provisions of RID/ADR/ADN. If 1.8.8.1.3. (e) applies, the assembling and filling enterprises shall be included in that procedure.

1.8.8.3.2 The applicant shall take all the necessary measures to ensure that the manufacturing process complies with the applicable provisions of RID/ADR/ADN and of his design type certificate and its annexes. If 1.8.8.1.3. (e) applies, the assembling and filling enterprises shall be included in that procedure.

1.8.8.3.3 The relevant body shall:

- (a) verify the conformity of the design type examination of the applicant and conformity of the type of gas cartridges with the technical documentation specified in 1.8.8.2;*
- (b) verify that the manufacturing process produces products in conformity with the requirements and the documentation which apply to it; if the cartridge is finally assembled from parts manufactured by the applicant by one or more enterprise(s), the relevant body shall also verify that the cartridges are in full conformity with all applicable provisions after final assembly and filling and that the instructions of the applicant are correctly applied;*
- (c) verify that the personnel undertaking the permanent joining of parts and the tests are qualified or approved;*
- (d) record the results of its surveys.*

1.8.8.3.4 If the findings of the relevant body show non-conformity of the design type certificate of the applicant or the manufacturing process, he shall require appropriate corrective measures or withdrawal of the certificate from the applicant.

1.8.8.4 Leakproofness test

1.8.8.4.1 The applicant and enterprises finally assembling and filling gas cartridges according to the instructions of the applicant shall:

- (a) carry out the tests required in 6.2.6;*
- (b) record the test results;*

- (c) *issue a certificate of conformity only for gas cartridges, which are in full compliance with the provisions of his design type examination and the applicable provisions of RID/ADR/ADNN and have successfully passed the tests as required in 6.2.6;*
- (d) *retain the documentation as specified in 1.8.8.7 during production and afterwards for a period of minimum 5 years from the last date of production of cartridges belonging to one type approval for inspection by the relevant body at random intervals;*
- (e) *affix a durable and legible mark identifying the type of cartridge, the applicant and the date of production or batch number; where due to limited available space the mark cannot be fully applied to the body of the cartridge, he shall affix a durable tag with this information to the cartridge or place it together with a cartridge in an inner packaging.*

1.8.8.4.2 *The relevant body shall:*

- (a) *perform the necessary examinations and tests at random intervals, but at least shortly after starting of manufacture of a type of gas cartridges and thereafter at least once every three years, in order to verify that the procedure for design type examination of the applicant as well as that the manufacture and testing of the product are carried out in accordance with the design type certificate and the relevant provisions;*
- (b) *check the certificates supplied by the applicant;*
- (c) *carry out the tests as required in 6.2.6 or approve the program of testing and the in-house inspection service to carry out the tests;*

1.8.8.4.3 *The certificate shall contain as a minimum:*

- (a) *the name and address of the applicant and – when these are different – the enterprise(s) carrying out the final assembly in accordance with the written instructions of the applicant;*
- (b) *a reference to the version of RID/ADR/ADN and the standard(s) used for manufacture and tests;*
- (c) *the result of inspections and tests;*
- (d) *the data for the marking as required in 1.8.7.4.1 (e).*

1.8.8.5 (reserved)

1.8.8.6 *Surveillance of the in-house inspection service*

The applicant and enterprises assembling and/or filling the gas cartridges according to the written instructions of the applicant may apply for approval of an in-house inspection service. For such applications, the provisions of 1.8.7.6.1 (a) to (c), 1.8.7.6.2 (a), (c) and (d), 1.8.7.6.3 (a) to (e) and 1.8.7.6.4 shall be applied.

1.8.8.7 *Documents*

The provisions of 1.8.7.7.1, 1.8.7.7.2, 1.8.7.7.3 and 1.8.7.7.5 shall be applied.

2. Add new transitional provisions to 1.6 to read:

“1.6.X Member States/ Contracting Parties need not apply the requirements of 1.8.6, 1.8.7 or 1.8.8 for the conformity assessment of gas cartridges until [31. December 2012]. For conformity assessment of gas cartridges, the Member States/ Contracting Parties shall instead apply the provisions of RID/ADR as in force on 31. December 2008.

1.6.Y Gas cartridges manufactured and prepared for transport before and during the period specified in 1.6.X may be transported after the end of that period, provided the applicable provisions of RID/ADR are met.”.

Annex IIIList of inconsistencies of existing provisions for gas cartridges

Issue	Sections concerned	Suitable action
<p>The definition of gas cartridges in 1.2.1 is not consistent with UN 2037 (or vice versa):</p> <ul style="list-style-type: none"> - the definition in 1.2.1 and EN 417 referenced in 6.2.6 provide for gas cartridges with or without a release device, but UN 2037 only covers those without such a device; - in 6.2.6 only UN 1965 and UN 1011 are mentioned for LPG content, that does not cover all LPG compositions used in such cartridges; - gas cartridges are also used for gases of classification codes A and O with a pressure higher than the 13,2 bar limit in 6.2.6 and with volumes above 120 ml to 1000 ml, but as no specific provisions exist in 6.2.6, they need to be tested and assessed as non-refillable gas receptacle and to fulfil the same requirements as receptacles above 1000 ml volume; - special provisions for gas cartridges are not fully consistent; 	1.2.1, certain special provisions and 6.2.6	<p>Industry to develop a proposal to align the definition and the related provisions accordingly.</p> <p>Note: In the UN Model Regulations provisions no such definition exists, but UN 2037 only permits for gas cartridges without a release device.</p>
<p>Technical requirements and standards for gas cartridges:</p> <ul style="list-style-type: none"> - only for gas cartridges with UN 1965 for 50 to 1000 ml volume EN 417 is referenced; - for gas cartridges with UN 1011, no applicable standard is listed; 	6.2.6	<p>The Joint meeting may decide to address the CEN consultant to check the situation with CEN and to propose</p> <ul style="list-style-type: none"> - either the reference of further suitable standards for gas cartridges, or

<ul style="list-style-type: none"> - for gas cartridges with gases of classification code A and O no applicable standard is listed; - the standard EN 417 as referenced is not mandatory as all other referenced standards in chapter 6.2 are from 2009; - there are no basic technical requirements to be applied for gas cartridges not manufactured according to EN 417; - EN 417 provides for a type approval and a testing regime, there are no such basic requirements in RID/ADR/ADN 		<ul style="list-style-type: none"> - if no such standard exists, to elaborate whether CEN should be addressed for development of (a) suitable standard(s).
<p>UN gas cartridges versus RID/ADR/ADN gas cartridges :</p> <ul style="list-style-type: none"> - meanwhile for a certain type of cartridges EN 417 is referenced in RID/ADR/AND, in the UN Model Regulation no (corresponding or alternative) ISO standard is listed; - the UN model regulation does not provide for a definition of gas cartridges as RID/ADR do; as only UN 2037 exists, there are no provisions for gas cartridges with a release device, but such cartridges are manufactured and used. 	6.2.4 of UN and 6.2.6 of RID/ADR/ADN	The Joint Meeting may decide to require the secretariat(s) to bring this issue to the attention of the UN Sub-Committee of Experts on the Transport of Dangerous Goods.
There are no marking provisions for gas cartridges to show compliance with a type, a manufacturer and/or the provisions applied; so it may not be possible while monitoring transport of dangerous goods to	1.8.1; 6.2.6	The Joint Meeting may decide to invite industry organisations to develop and submit a proposal to introduce a simple but harmonised marking of such cartridges.

<p>check whether a gas cartridge is in compliance with the provisions, so competent authorities may not be able to fulfil their tasks according to 1.8.1.</p>		
<p>Alternative test methods to the water bath test are permitted for aerosols (see 6.2.6.3.2.2), but not for gas cartridges; but according to EN 12402-7 alternative test methods exist for one-way gas cylinders for life saving appliances</p>	<p>6.2.6.3.1</p>	<p>The Joint Meeting is invited to include this item in the program of future work; at the same time, it could be further discussed how to introduce transparency which alternative test methods have been accepted by the competent authority according to 6.2.6.3.2.2.</p>
