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, 17–21 March 2014 Item 4 of the provisional agenda Interpretation of RID/ADR/ADN

14 March 2014

Comments on document ECE/TRANS/WP.15/AC.1/2014/17

Transmitted by the Government of France

- 1. We would like to thank the International Organisation for Standardisation (ISO), the European Cylinder Makers Association (ECMA), the European Industrial Gases Association (EIGA), and the European Committee for Standardisation (CEN) for the effort in preparing ECE/TRANS/WP15/AC.1/2014/17 to explain the meaning of 'design specification' in 6.2.1.5.1 (g) on hydraulic pressure test, and consequentially to clarify the situation when the volumetric expansion test shall be used.
- 2. This document follows a first proposal made by EIGA, ECMA and CEN in ECE/TRANS/WP.15/AC.1/2010/15 and adopted during the March 2010 session of the Joint Meeting to harmonise the requirements for pressure testing during the initial inspection and test.
- 3. However in our view the proposal in ECE/TRANS/WP.15/AC.1/2014/17 does not really solve the issue and causes further problems because both types of tests (the classical European proof pressure test with no visible permanent expansion and the water jacket test which measures volumetric expansion and detects any permanent expansion) are not equivalent. The first one covers pressure receptacles which are not liable to show any permanent deformation after the test (initial or periodic test). The second one covers pressure receptacles which are liable to be permanently deformed at the end of the test (initial or periodic test). The current wording in 6.2.1.5.1 (g) on hydraulic pressure test carried out during initial inspection and test (which is applicable to UN and non-UN pressure receptacles since RID/ADR 2013) requires a measurement of the permanent expansion after the initial test which is relevant for both tests. We don't think it is necessary for the time being to modify the requirements of 6.2.3.4.1 and 6.2.3.5.1 for the initial and periodic test of non-UN receptacles.
- 4. Furthermore the proposal in ECE/TRANS/WP.15/AC.1/2014/17 has led us to consider some design standards listed in 6.2.4.1. It appears that for a same kind of cylinder (PW = 200 bars, D = 200 mm and Re = 800 MPa), it results in designs of equipment having different safety levels according to the used standard. For example:

Annexe I. Parts 1 to 3, 84/525/EEC: thickness = 4.8 mm

EN 1964 -1: thickness = 4,3 mm EN ISO 9809 : thickness = 3.9 mm

5. Consequently, we have some doubts about the coherence of the system and we believe that this issue shall be checked by independent experts. The Joint Meeting is requested to confirm the establishment of such a group in order to investigate the global consistency of the system.

