Economic Commission for Europe

Inland Transport Committee

Working Party on the Transport of Dangerous Goods

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Joint Meeting of the RID Committee of Experts and the Working Party on the Transport of Dangerous Goods

Geneva, 19–23 September 2016 Item 5 (a) of the provisional agenda **Proposals for amendments to RID/ADR/ADN:** pending issues

Comments on ECE/TRANS/WP.15/AC.1/2016/22 Alternative methods for periodic inspection of refillable pressure receptacles

Transmitted by the Government of Spain

Analysis

1. In ECE/TRANS/WP.15/AC.1/2016/22 3 different proposals on alternative methods for periodic inspection of refillable pressure receptacles are proposed.

2. Nevertheless, the document does not present any new data concerning safety of the affected pressure receptacles, nor any new justification for the general introduction of a testing system based on statistical assessment into the regulation. Also, no new or additional measures are introduced to detect and separate those pressure receptacles that have been deteriorated by specifically aggressive conditions of use or maintenance.

3. Nevertheless, Spain could support in principle proposals 1 and 2, with some amendments related to:

- In 6.2.3.5.3 the equivalency of the level of safety should be certified by an accredited inspection body
- If there is really a non-destructive test that ensures an equivalent level of safety, why should the applicability of these be limited to those pressure receptacles where the result of the original test or inspection is not meaningful? If the level of safety is really the same, we should consider to not limit the applicability of these tests.
- In 6.2.3.5.3.1 it has to be clearly specified to which inspections or tests the substitution by non –destructive testing is referred (all tests and inspections are relevant)

4. In regards to the proposal 3, Spain can still not support the introduction of these destructive tests and a statistical analysis. Additionally, it has not been demonstrated yet that there are no non-destructive tests that do not permit a "meaningful interpretation" for the relevant cases. The design of pressure receptacles which cannot individually tested should not be encouraged by the introduction of this possibility into the general regulations.

5. In regards to this proposal, it would be necessary not to improve the text, but to justify that the statistical method is really equivalent.

6. Additionally, to the specific points of proposal 3 the following considerations can be made:

(a) Assessment of the method

It is not clear not who should be considered an expert, nor from whom is he depending. The equivalent level of safety, should, as in 6.2.3.5.3, be certified by an accredited inspection body.

It is very difficult to take into account the modification of the distribution function because of service degradation; this is a data completely unknown when a new type of pressure receptacle is introduced into the market. Precisely the impossibility to predict what will happen to each individual pressure receptacle is the most important point to not allow test methods which are not performed on the 100% of the population.

Nowhere the distribution function that has to be used is defined, nor the statistical method to be employed to reach a 100% satisfaction of the equivalency to the original method. A system based on probability is not enough when safety is concerned.

(b) Dividing the population of a design type into groups for statistical purposes

The grouping has to be made not by the owner/operator, but by the manufacturer. The manufacturer is the only one to know when a modification of the material or manufacturing process has occurred. The alternative method to group the population proposed cannot be admitted, because it accepts as a basis the whole of the annual production, without considering modifications of design type, material or manufacturing process.

All filling centres work under the supervision of the owners or operators, this is no additional requirement which would impose additional safety.

The last indent of the "alternative method" should be applicable in all cases, information on the pressure receptacles should be transferred always.

(c) Traceability

The measures proposed here are the usual measures that already are the good practice of the sector. They do not imply additional safety for the pressure receptacles.

(d) Sampling for statistical assessment

The procedure should not be detailed clearly in the specific application, but should already be readily available to assure the safety to the equivalency of the method.

A specific rule has to be included that defines the minimum size of the lot in relationship with the size of the grouping.

- (e) Test method for destructive testing
- (f) Statistical evaluation of test results

It is not defined which is the requested reliability level. This level has to be clearly defined, and agreed by the whole group. This reliability level means to implicitly accept a percentage of non-compliant pressure receptacles on the market-a fact that Spain is not prepared to accept, and therefore opposes to the introduction of the statistical method. A limit to the potential consequences of an in-service failure of the pressure receptacle has to be clearly defined. I cannot be left to the economical operators to make this justification, and to set the acceptance level for risks. The responsibility on these crucial issues cannot be transferred to the interested parties.

(g) Measures if requirements are not met

It is unclear for us how it should be demonstrated that there exist unaffected parts of the population group without making 100% tests. The grouping should have been made in such a way that the elements inside the group are homogenous, and when failures appear, there seems to be no justification possible to not reject the whole group. If there appear differences inside the group, it is precisely because of the different use of the different pressure receptacles, and therefore, once again, no grouping should be permitted and tests should be made on the 100% of the population.

(h) Filling centers

The measures proposed here are the usual measures that already are the good practice of the sector. They do not imply additional safety for the pressure receptacles affected.

Conclusion

7. Document ECE/TRANS/WP.15/AC.1/2016/22 does not present any new data concerning safety of the affected pressure receptacles, nor any new justification for the general introduction of a testing system based on statistical assessment into the general regulation.

8. The introduction of a reliability level would imply to accept a percentage of noncompliant pressure receptacles on the market.

9. The proposals leave in the hands of the economical operators the safety, the definition of the processes, size of grouping, modification of the grouping size, size of sampling, level of risk, testing methods employed, acceptance of potential consequences of in-service failure of the pressure receptacle, etc. This way the responsibility for failures is transferred from the economical operator to the users (and to the competent authority that has accepted the method), which may be made responsible for misuse of the pressure receptacle, especially in all those cases when the specific pressure receptacle has not been tested in all extents.

10. For all the specified reasons, Spain opposes to the adoption of ECE/TRANS/WP.15/AC.1/2016/22.