

Informal document N° 16 (43rd GRPE, 15-18 January 2002 agenda item 4.1)

OICA comments on the document TRANS/WP29/GRPE/2002/1 for the introduction of all composite containers in Regulation N° 67

The introduction, in the regulation ECE 110, of all composite containers allowed the definition of requirements and the associated qualification for the use of such containers on vehicles. The list of requirements defined for this regulation has been defined for a using pressure up to 200 bar (260 bar for the filling unit) and for a temperature range from-40°C up to 120°C.

We think that the proposal for draft amendment of the ECE 67 regulation, for the introduction of the all composite containers, has to be designed regarding existing requirements in the ECE 110 with much lower pressure and similar temperature using conditions. This working process seems pragmatic and will help the evolution of the both regulations to be easier.

Regarding the list of requirements introduced into the TRANS / WP29 / GRPE / 2002 / 1 proposal we do think this proposal proceeds comparing the both regulations.

If some tests exist in ECE 110 and in the ECE 67 amendment proposal as **the burst test**, the **acid environment test** or the **drop test**, <u>the impact test</u>, which is severe, is introduced without any requirement coming from ECE 110 NGV regulation with its more severe pressure and temperature using conditions. On the contrary the (bullet) penetration test considered as useful ECE 110 is not included in the TRANS / WP29 / GRPE / 2002 / 1 proposition.

On the other hand it seems to us that the <u>gas cycling test</u> (with NGV for ECE 110 and LPG for ECE 67) is representative for NGV and not representative for the LPG. For that reason this test needs to be included in the ECE 110, as it is, and needs to be deleted from the ECE 67 evolution proposal. When filling up, NGV pressure in the container increases from a low value up to 200 bar and this cycling condition may be repeated for each filling .

There is no comparison with the LPG filling conditions because filling is performed with liquid and not gas, and existing pressure in the container all along his life remains around the LPG saturated vapour pressure whenever emptying and filling. For that reason the LPG cycling test cannot be linked to any life cycling as it is in the present proposal. The only variation, which might be taken into account, would be the pressure evolution related to ambient temperature fluctuations and would stay, anyway, at a lower level than the 30 bar required in the proposed cycling test.

Conclusion:

We think that this proposition which goes deeply into the details needs further considerations. Each requirement need to be analysed and compared with the equivalent requirement coming from the NGV ECE 110 regulation.

We cannot support this proposition as it is.