

### **Pedestrian Protection**

#### **OICA additional comments to the draft gtr - ECE/TRANS/WP.29/GRSP/2006/2**

Following the proposal submitted by the GRSP Informal Group on Pedestrian Safety, OICA herewith submits some further relatively minor comments, to correct some issues which seemed to have been overlooked when preparing the draft gtr, before it is finalised and submitted to AC.3 for voting.

#### **I. Proposed amendments to ECE/TRANS/WP.29/GRSP/2006/2**

1. Part A, Statement of technical rationale and justification, item VI, section (b): delete this whole section and insert it in item V as a new section above existing section (d) - Future consideration, with the following amendments, to read:

"Points Tested

~~**As head injuries to both adults and children occur throughout a wide range of areas at the front of the vehicle, subsystem tests using the adult and child headform impactors are appropriate to evaluate the bonnet top and windscreen.**~~

The informal group considered whether to specify both the number of test points and the minimum spacing of such test points. On consideration, the group determined that the specification of such points did not have a place within this proposed gtr for the following reasons:

1. For governments that used a self-certification regulatory framework, it was not considered necessary to mention the number of tests required for ~~head impact~~ testing or their spacing, as this would be incumbent on vehicle manufacturers to ensure that vehicles comply with all the impact zone requirements defined within this proposed gtr when tested by the regulating authority.
2. For type approval, the number of tests that need to be carried out to satisfy the relevant authority that vehicles meet the requirements is an issue for that authority, which may specify the number of tests and the spacing between the test points.

3. The mention of a minimum number of tests or a minimum distance apart between tests could result in manufacturers being burdened with unnecessary tests and/or authorities being unnecessarily restricted in test programs, as it would be difficult to set a target that would encompass both the largest and smallest test zones, and the situation could arise where test zones could be smaller than the minimum number of test required that could be fitted into that zone."

2. Part A, Statement of technical rationale and justification, item V: insert a new section above existing section (d) - Future consideration, to read:

### **"Vehicle Design Position**

**As vehicles come in many variants and modifications, the ride height may vary greatly. Taking into account the differences between type approval and self certification, it is recommended that Contracting Parties take this into account upon national implementation of the gtr. As guidance to Contracting Parties, the EU addresses this issue by defining the concept of "primary reference marks". This definition (§2.2 of EU Commission Decision of 23 December 2003) reads: 'Primary reference marks' means holes, surfaces, marks and identification signs on the vehicle body. The type of reference mark used and the vertical (Z) position of each mark relative to the ground shall be specified by the vehicle manufacturer according to the running conditions specified in point 2.3. These marks shall be selected such as to be able to easily check the vehicle front and rear ride heights and vehicle attitude.**

**If the primary reference marks are found to be within  $\pm 25$  mm of the design position in the vertical (Z) axis, then the design position shall be considered to be the normal ride height. If this condition is met, either the vehicle shall be adjusted to the design position, or all further measurements shall be adjusted, and tests performed, to simulate the vehicle being at the design position)."**

3. Part B, text of the regulation, paragraph 3.6: amend the first sub-paragraph to read:

**"Bonnet rear reference line means the geometric trace of the most rearward points of contact between a 165 mm diameter sphere and the front structure of the vehicle when the sphere is traversed across the front structure of the vehicle while maintaining contact with the windscreen (see Figure 2). **The wiper blades and arms are removed during this process.****

Where the bonnet rear reference line...(remainder unchanged)"

## **II. Proposed amendments to document INF GR/PS/141**

1. Header: delete the word "DRAFT"
2. Title: amend to read:

"Certification Standard for Type Approval Testing of Active Deployable Systems of the Bonnet /~~Windscreen~~ Area"

### **Justification**

#### **I. Proposed amendments to ECE/TRANS/WP.29/GRSP/2006/2**

1. Part A, re-location of item VI, section (b):

The current text of the pre-amble relating to the issue of the number of test points is part of item VI. This item VI specifically deals with the head protection. However, it is clear that the same reasoning equally applies to the leg tests, as also demonstrated by the fact that the text of the regulation does not give any details relating to the test points for the leg testing either. It therefore seems more appropriate to move the existing section (b) of item VI to item V, dealing with general issues, with some editorial changes as appropriate.

2. Part A, item V, new section on vehicle design position:

Vehicles may come in many variants and modifications and the ride height may therefore vary greatly, thereby potentially leading to a multitude of test configurations on the same vehicle family. This case is foreseen in the EU Phase 1 requirements in its § 2.2, such that some flexibility is provided and such that one vehicle is considered as representative of others within the same model, provided the reference marks are within  $\pm 25$  mm of the design position.

This provision was however erroneously omitted in the draft gtr. Taking into account the differences in the various certification schemes, OICA understands that it would be difficult to include similar wording in the draft gtr, if only because the draft gtr does not contain the concept of primary reference marks.

OICA consequently suggests to insert some wording in the preamble, as a natural "follow-up" of the issue of the test points (see item 1 above).

3. Part B, paragraph 3.6:

The draft gtr erroneously omits the removal of the windscreen wipers for the marking of the Bonnet Rear Reference Line, foreseen in the EU Phase 1 Regulation in its paragraph 2.9.7.

## **II. Proposed amendments to INF GR/PS/141**

### 1. Header: deletion of the word "DRAFT":

The informal group recommends the use of the certification standard for active systems (INF GR/PS/141), as indicated in the preamble under item VIII.2. It is therefore necessary to delete the word "draft" in order to avoid any misunderstanding as to the status of this document.

### 2. Title:

As noted in the preamble, item II.(a), the informal group recommends not to include windscreen area testing in the gtr at this stage.

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