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(37th GRSP, 23-27 May 2005,  
agenda item B.1.7)

**Draft amendments to TRANS/WP.29/GRSP/2005/6(Draft amendment to Regulation No.44)**

Transmitted by the expert from Japan

Note: The text reproduced below was prepared by Japan in order to delete the requirement of acceleration distance for acceleration sled device. The amendments of the deletion to the text are marked in being ~~double-crossed-through~~.

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Note: This document is distributed to the Experts on Passive Safety only.

## A. PROPOSAL

Paragraph 8.1.3.1.1.3.2, amend to read:

### 8.1.3.1.1.3.2. Acceleration test device

For frontal impact, the trolley shall be so propelled that, during the test, its total velocity change  $\Delta V$  is  $[50 \text{ km/h } \begin{smallmatrix} +2 \\ -0 \end{smallmatrix} \text{ km/h}]$  and its acceleration curve is within the hatched area of the graph in annex 7 appendix 1 and stay above the segment defined by the coordinates  $[5g, 10ms]$  and  $[9g, 20ms]$ . ~~The distance to achieve the first  $[49 \text{ km/h } \begin{smallmatrix} +1 \\ -0 \end{smallmatrix} \text{ km/h}]$  of the velocity change of the trolley shall be of  $[650 \text{ mm } \pm 50 \text{ mm}]$ .~~ The start of the impact (T0) is defined, according to ISO DIS 17 373 for a level of acceleration of 0.5 g.

For rear impact, the trolley shall be so propelled that, during the test, its total velocity change  $\Delta V$  is  $[32 \text{ km/h } \begin{smallmatrix} +2 \\ -0 \end{smallmatrix} \text{ km/h}]$  and its acceleration curve is within the hatched area of the graph in annex 7 appendix 2 and stay above the segment defined by the coordinates  $[5g, 5ms]$  and  $[10g, 10ms]$ . ~~The distance to achieve the first  $[31 \text{ km/h } \begin{smallmatrix} +1 \\ -0 \end{smallmatrix} \text{ km/h}]$  of the velocity change of the trolley shall be of  $[275 \text{ mm } \pm 25 \text{ mm}]$ .~~ The start of the impact (T0) is defined, according to ISO DIS 17 373 for a level of acceleration of 0.5 g.

Despite the fulfilment of the above requirements, the technical service shall use a mass of trolley (equipped with its seat), as specified in paragraph 1 of annex 6, superior to 380 kg."

Paragraph 8.1.3.1.1.4.2, amend to read:

8. 1. 3. 1. 1. 4. 2. ~~the stopping distance~~ the distance to achieve the first  $[49 \text{ km/h } \begin{smallmatrix} +1 \\ -0 \end{smallmatrix} \text{ km/h}]$  of the velocity change of the trolley for frontal impact and to achieve the first  $[31 \text{ km/h } \begin{smallmatrix} +1 \\ -0 \end{smallmatrix} \text{ km/h}]$  of the velocity change of the trolley for rear impact may be calculated by double integration of the recorded sled ~~acceleration~~ or deceleration.

Paragraph 8.1.3.2.1.6.2, amend to read:

8. 1. 3. 2. 1. 6. 2. ~~the stopping distance~~ the distance to achieve the first  $[49 \text{ km/h } \begin{smallmatrix} +1 \\ -0 \end{smallmatrix} \text{ km/h}]$  of the velocity change of the trolley for frontal impact and to achieve the first  $[31 \text{ km/h } \begin{smallmatrix} +1 \\ -0 \end{smallmatrix} \text{ km/h}]$  of the velocity change of the trolley for rear impact may be calculated by double integration of the recorded sled ~~acceleration~~ or deceleration.

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## B. JUSTIFICATION

In Japanese understanding, for deceleration sleds, the stopping distance is specified to ensure the consistency of test conditions. For acceleration sleds, however, the same level of consistency can be achieved by specifying the requirements on initial slope of acceleration.