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Item 16.1. of the provisional agenda

REGULATION No. 94
(Frontal collision)

Head acceleration

Proposal for draft amendments to Regulation No. 94

Submitted by the expert from Australia

The text reproduced below was prepared by the expert from Australia in order to clarify the requirements for head injury assessment contained in ECE R94. It is based on a document without a symbol (informal document No. GRSP-40-02), distributed during the fortieth session of GRSP (see report ECE/TRANS/WP.29/GRSP/40, para. 48).

The modifications to the existing text of the Regulation are marked in **bold** characters or marked as strikethrough.

Note: This document is distributed to the Experts of the Working Party on Passive Safety (GRSP) only.

A. PROPOSAL

Annex 4

Paragraph 1., amend to read:

"1. HEAD PERFORMANCE CRITERION (HPC) AND 3 ms HEAD ACCELERATION"

Paragraph 1.1., amend to read:

"1.1. ~~This~~ **The head performance** criterion (HPC) is considered to be satisfied when, during the test, there is no contact between the head and any vehicle component."

Paragraph 1.2., amend to read:

"1.2. ~~If that is not the case,~~ **during the test, there is contact between the head and any vehicle component,** a calculation of HPC is made,..."

B. JUSTIFICATION

This document aims to clarify the requirements for assessment of head injury in Regulation No. 94.

The title of Annex 4 Paragraph 1 in the current text refers only to the head performance criterion (HPC). However, subparagraph 1.3. contains an additional requirement to determine the resultant head acceleration during forward impact which is exceeded for 3 ms cumulatively. This is clarified by amending Annex 4 Paragraph 1. to also refer to the 3 ms head acceleration.

Annex 4 Paragraph 1.1. of the current text states that "This criterion is considered to be satisfied...", but does not specify to which of the two head injury criteria this refers. This is clarified by the proposed amendments to paragraphs 1.1. and 1.2. that specify that these paragraphs refer only to the HPC.
