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agenda item 4.)

PROPOSAL FOR AMENDMENTS TO DOCUMENT TRANS/WP.29/GRSG/2003/25

(Proposal for 01 series of amendments to Regulation No. 66)
(strength of superstructure of large passenger vehicles)

Transmitted by the expert from the Netherlands

Note: The text reproduced below was prepared by the expert from the Netherlands. It is based on the text of informal document No. 18, distributed without a symbol at the eighty-fifth session (TRANS/WP.29/GRSG/64, para. 16).

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

A. PROPOSAL

"2.17. "Individual occupant mass" (M_{mi}) means the mass of an individual occupant. The value of this mass is 68kg."

Paragraph 3.1., amend to read:

"3.1. The application for approval of a vehicle type with regard to the strength of its superstructure shall be submitted by the vehicle manufacturer or by his duly accredited representative to the Administrative Department."

Paragraph 3.2.1.4., amend to read:

"3.2.1.4. The total effective vehicle mass, and the associated axle loads."

Paragraph 6.1.1., amend to read:

"6.1.1. agree that the modifications made are unlikely to have an appreciable effect and that in any case the vehicle type still complies with the requirements of this Regulation;
or "

Annex 3, paragraph 2.6.1., replace the reference to paragraph 2.5.2. by the reference to paragraph 2.6.2.

Annex 4, paragraph 1.5., should be deleted.

Annex 5, paragraph 3.3., amend to read:

"3.3. For inside observation high-speed photography, video, deformable templates, electrical contact sensors or other suitable means shall be used to determine that the requirements of paragraph 5.1. in the main text of this Regulation have been met. This shall be verified at any places of the passenger, driver's and crew compartment where the residual space seems to be endangered, the exact positions being at the direction of the technical service. At least two positions, nominally at the front and rear of the passenger compartment shall be used."

Annex 6, paragraph 3.1.3., amend to read:

"3.1.3. in an artificial body section (see paragraph 2.25. of the main text of this Regulation) the ratio of the mass of any one bay to any other bay shall not exceed 2;"

Annex 7, paragraph 4.3., amend to read:

"4.3. The body section passes the loading test , if:

$$E_{BS} \geq E_{min}$$

In this case, all the ..."

Annex 8.

Paragraphs 2.1.4. and 2.1.5., should be deleted.

Paragraph 3.3., amend to read:

"3.3. The vehicle type shall be approved if $E_a \geq E_T$ "

Annex 8, appendix 1,

Paragraph 2.3., should be deleted.

Paragraph 3.2., amend to read:

"3.2. by using a dynamic factor K_d to transform the quasi-static PH characteristics. This transformation means that the values of the quasi-static bending moment may be increased by K_d .

For steel structural elements $K_d = 1,2$ may be used without laboratory test."

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B. JUSTIFICATION

Re. paragraph 2.17.

A statement that in Regulation No. 36 the mass of an occupant is defined as 68 kg is just an indication where this value comes from, but does not oblige to use that value.

Re. paragraph 3.1.

The Administrative Department cannot grant an approval before he has received an application for approval.

Re. paragraph 3.2.1.4.

The reference to paragraph 2.11. is erroneous; paragraph 2.16. (that is meant as reference) does not contain any more a formula. The calculation of the total effective vehicle mass is sufficiently prescribed in the definition of paragraph 2.16.

Re. paragraph 6.1.1.

In case of a modification, the type approval will be extended but no new type approval is granted. The last part concerning a "group of vehicle types" is confusing and should be either clarified or deleted.

Re. annex 4, paragraph 1.5.

This should be concluded on the basis of paragraph 6. of this Regulation concerning modification and extension of an approval.

Re. annex 5, paragraph 3.3.

According to paragraph 2.13. of this Regulation the definition of residual space also includes the driver's compartment and (if available) the crew compartment.

Re. Annex 7, paragraph 4.3.

With regard to paragraph 4.2. of this annex the test should also be passed if the absorbed energy is equal to the minimum required energy.

Re. annex 8, paragraphs 2.1.4. and 2.1.5.

These paragraphs are not needed in the computer model but they can be taken into account during evaluation on a geometrical basis in the post processing work.

Re. annex 8, appendix 1, paragraph 2.3.

These definitions do not contribute to the calculation. In fact the whole measured curve, as it is, is used in the calculation, which makes it unnecessary to define.

Re. annex 8, appendix 1, paragraph 3.2.

It is very unusual to scale the angle as well in applying a dynamic factor. Normally only the bending moment is scaled up.
