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Item 4.8.5 of the provisional agenda

**1958 Agreement – Consideration of draft amendments
to existing Regulations submitted by GRSP**

Proposal for 03 series of amendments to Regulation No. 94 (Frontal collision)

Submitted by the Working Party on Passive Safety *

The text reproduced below was adopted by the Working Party on Passive Safety (GRSP) at its fifty-seventh session (ECE/TRANS/WP.29/GRSP/57, paras. 26, 27 and 41). It is based on ECE/TRANS/WP.29/GRSP/2015/7 and ECE/TRANS/WP.29/GRSG/2015/13 as amended by Annex III to the report and on GRSP-57-02 as reproduced in Annex VI to the report. It is submitted to the World Forum for Harmonization of Vehicle Regulations (WP.29) and to the Administrative Committee AC.1 for consideration.

* In accordance with the programme of work of the Inland Transport Committee for 2012–2016 (ECE/TRANS/224, para. 94 and ECE/TRANS/2012/12, programme activity 02.4), the World Forum will develop, harmonize and update Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.

Through all the text of the Regulation (including all annexes), Rechargeable Energy Storage System (REESS), correct to read: Rechargeable Electrical Energy Storage System (REESS).

Paragraph 2.3., amend to read:

"2.3. "Vehicle width" means the distance between two planes parallel to the longitudinal median plane (of the vehicle) and touching the vehicle on either side of the said plane but excluding the external devices for indirect vision, side marker lamps, tyre pressure indicators, direction indicator lamps, position lamps, flexible mud-guards and the deflected part of the tyre side-walls immediately above the point of contact with the ground."

Paragraph 2.13. to 2.14., shall be deleted:

Paragraph 3.1., amend to read:

"3.1. The application for approval of a vehicle type with regard to the protection of the occupants of the front seats in the event of a frontal collision (offset deformable barrier test) shall be submitted by the vehicle manufacturer or by his duly accredited representative."

Paragraph 4.2., amend to read:

"4.2. ... (at present 03 corresponding to the 03 series of amendments) ..."

Paragraph 5.2.1.2., amend to read:

"5.2.1.2. The Injury Criteria for the neck (NIC) shall not exceed ..."

Paragraph 5.2.1.4., amend to read:

"5.2.1.4. The thorax compression criterion, (ThCC) shall not exceed 42 mm;"

Paragraph 5.2.2., amend to read:

"5.2.2. Following the test the residual steering wheel displacement, when measured at the centre of the steering wheel hub, shall not exceed 80 mm in the upwards vertical direction and 100 mm in the rearward horizontal direction."

Paragraph 7.1., amend to read:

"7.1. Any modification affecting the structure, the number of front seats, the interior trim or fittings, or the position of the vehicle controls or of mechanical parts which might affect the energy-absorption capability of the front of the vehicle shall be brought to the notice of the Type Approval Authority granting approval. The Type Approval Authority may then either:"

Paragraph 7.1.2.2., amend to read:

"7.1.2.2. If the modifications concern only the interior fittings, if the mass does not increase by more than 8 per cent and if the number of front seats initially provided in the vehicle remains the same, the following shall be carried out:"

Paragraph 11.9., amend to read:

"11.9. Contracting Parties applying the Regulation shall continue to accept approvals to the 01 series of amendments to this Regulation, for the vehicles which are not affected by the 02 series of amendments."

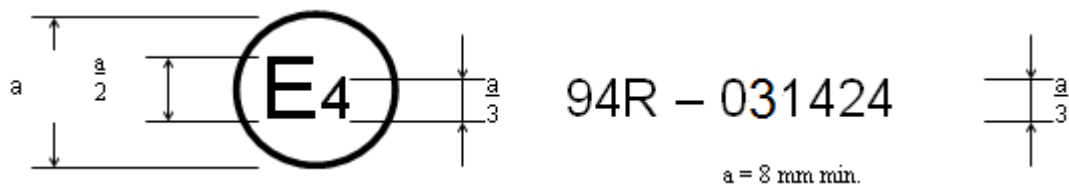
Insert new paragraphs 11.11. to 11.15., to read:

- "11.11. As from the official date of entry into force of the 03 series of amendments, no Contracting Party applying this Regulation shall refuse to grant approval under this Regulation as amended by the 03 series of amendments.
- 11.12. As from 1 September 2018, Contracting Parties applying this Regulation shall grant approvals only to those types of vehicle which comply with the requirements of this Regulation as amended by the 03 series of amendments.
- 11.13. Contracting Parties applying this Regulation shall not refuse to grant extensions of approvals for existing types which have been granted according to the preceding series of amendments to this Regulation.
- 11.14. Contracting Parties applying the Regulation shall continue to accept approvals to the 01 series of amendments to the Regulation, granted before 23 June 2013 or 2014, as foreseen in paragraph 11.5. above.
- 11.15. Contracting Parties applying the Regulation shall continue to accept approvals to the 02 series of amendments to the Regulation, granted before 1 September 2018."

Annex 2, amend to read:

"Model A

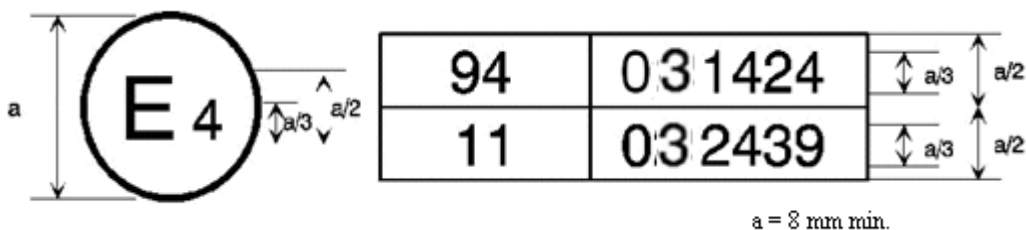
(See paragraph 4.4. of this Regulation)



The above approval mark ... approval number 031424. The approval number indicates that the approval was granted in accordance with the requirements of Regulation No. 94 as amended by the 03 series of amendments."

Model B

(See paragraph 4.5. of this Regulation)



The first two digits of the approval numbers indicate that, at the dates when the respective approvals were granted, Regulation No. 94 incorporated the 03 series of amendments and Regulation No. 11 incorporated the 03 series of amendments."

Annex 3,

Paragraph 1.4.3.1., amend to read:

"1.4.3.1. Position of steering wheel

The steering wheel, if adjustable, shall be placed in the normal position indicated by the manufacturer or, in the absence of any particular recommendation by the manufacturer, midway between the limits of its range(s) of adjustment. At the end of propelled travel, the steering wheel shall be left free, with its spokes in the position which according to the manufacturer corresponds to straight-ahead travel of the vehicle."

Paragraph 1.4.3.3., amend to read:

"1.4.3.3. Gear-change lever

The gear-change lever shall be in the neutral position. If the vehicle is propelled by its own engine, then the gear-change level shall be defined by the manufacturer."

Paragraph 1.4.3.10., amend to read:

"1.4.3.10. Head restraints

Head restraints adjustable for height shall be in their appropriate position as defined by the manufacturer. In the absence of any particular recommendation from the manufacturer, then the head restraints shall be in their uppermost position."

Paragraph 2.1.1. and footnote 1, amend to read:

"2.1.1. A dummy corresponding to the specifications for Hybrid III fiftieth percentile male dummy¹ fitted with a 45° ankle and meeting the specifications for its adjustment shall be installed in each of the front outboard seats in accordance with the conditions set out in Annex 5. The ankle of the dummy shall be certified in accordance with the procedures in Annex 10.

¹ The technical specifications and detailed drawings of Hybrid III corresponding to the principal dimensions of a fiftieth percentile male of the United States of America, and the specifications for its adjustment for this test are deposited with the Secretary-General of the United Nations and may be consulted on request at the secretariat of the Economic Commission for Europe, Palais des Nations, Geneva, Switzerland."

Annex 4,

The title, amend to read:

"Head Performance Criterion (HPC) and 3 ms head acceleration Performance criteria"

Paragraphs 1. to 1.1., amend to read:

"1. Head Performance Criterion (HPC₃₆)

1.1. The Head Performance Criterion (HPC₃₆) is considered to be satisfied when, during the test, there is no contact between the head and any vehicle component."

Paragraphs 2. to 2.1., amend to read:

- "2. Injury Criteria for neck
- 2.1. These criteria are determined by the compressive axial force, the axial tensile force and the fore/aft shear forces at the head/neck interface, expressed in kN and measured according to paragraph 5.2.2. of Annex 3 and by the duration of these forces expressed in ms."

Annex 5,

Paragraph 2.4.3.2., amend to read:

- "2.4.3.2. Pelvic angle
- As determined using the pelvic angle gauge (GM) drawing 78051-532 incorporated by reference in Part 572, which is inserted into the "H" point gauging hole of the dummy, the angle measured from the horizontal on the 76.2 mm (3 inch) flat surface of the gauge shall be 22.5 degrees plus or minus 2.5 degrees."

Paragraph 2.6.1., amend to read:

- "2.6.1. The right foot of the driver test dummy shall rest on the undepressed accelerator with the rearmost point of the heel on the floor surface in the plane of the pedal. If the foot cannot be placed on the accelerator pedal, it shall be positioned perpendicular to the tibia and placed as far forward as possible in the direction of the centreline of the pedal with the rearmost point of the heel resting on the floor surface. The heel of the left foot shall be placed as far forward as possible and shall rest on the floor pan. The left foot shall be positioned as flat as possible on the toe board. The longitudinal centreline of the left foot shall be placed as parallel as possible to the longitudinal centreline of the vehicle. For vehicles equipped with a footrest, it shall be possible at the request of the manufacturer to place the left foot on the footrest. In this case the position of the left foot is defined by the footrest."

Paragraph 2.8., amend to read:

- "2.8. The temperature of the dummy and the system of measuring instruments shall be stabilized before the test and maintained so far as possible within a range between 19 °C and 22.2 °C."

Paragraph 3., amend to read:

- "3. Adjustment of restraint system
- The dummy jacket shall be installed at the appropriate position where the bolt hole of the neck lower bracket and the work hole of the dummy jacket are at the same position. With the test dummy at its designated seating position, as specified by the appropriate requirements of paragraphs 2.1. to 2.6. and 3.1 to 3.6. above, place the belt around the test dummy and fasten the latch. Remove all slack from the lap belt. Pull the upper torso webbing out of the retractor horizontally at a position via the centre of the dummy and allow it to retract. Repeat this operation four times. The shoulder belt should be at the position between the area which shall not be taken off from shoulder and shall not contact with the neck. The seat belt path shall be positioned: for Hybrid III fiftieth percentile male dummy, the hole of the outer side dummy jacket shall not be fully hidden by the seat belt. Apply a 9 to 18 N tension load to the lap belt. If the belt system is equipped with a tension-relieving

device, introduce the maximum amount of slack into the upper torso belt that is recommended by the manufacturer for normal use in the owner's manual for the vehicle. If the belt system is not equipped with a tension-relieving device, allow the excess webbing in the shoulder belt to be retracted by the rewind force of the retractor.

Where the safety belt and safety belt anchorages are located such that the belt does not lie as required above then the safety belt may be manually adjusted and retained by tape."

Annex 8,

Paragraphs 4. to 4.3., shall be deleted.

Paragraphs 5. to 6., renumber as paragraphs 4. to 5.
