Proposal for the 04 series of amendments to UN Regulation No. 95 (Lateral collision)

Submitted by the expert from the European Commission on behalf of the drafting task force *

The text reproduced below was prepared by the experts of the drafting task force to align UN Regulations to the provisions of the revised General Safety Regulation of the European Union to modify the scope of the UN Regulation, to provide appropriate transitional provisions and to make minor adaptations and clarifications to the existing requirements. It is based on GRSP-65-13 distributed during the sixty-fifth session of the Working Party on Passive Safety (GRSP). The modifications to the current text of the UN Regulations are marked in bold for new or strikethrough for deleted characters.

I. Proposal

Paragraph 1., amend to read:

"1. Scope

This Regulation applies to the lateral collision behaviour of the structure of the passenger compartment of vehicles of category M_1 with a maximum permissible mass not exceeding 3,500 kg and to vehicles of category $N_1^{\ 1}$ categories of vehicles where the "R" point of the lowest seat is not more than 700 mm from ground level when the vehicle is in the condition corresponding to the reference mass defined in paragraph 2.10. of this Regulation."

Insert a new paragraph 2.40., to read:

"2.40. "Displacement system" means a device by which the seat or one of its parts can be displaced and/or rotated, without a fixed intermediate position, to permit easy access of occupants to and from the space behind the seat concerned"

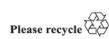
Paragraph 5.3.3.1., amend to read:

"5.3.3.1. open at least one door if there is one, per row of seats. and Wwhere there is no such door, to move the seats or tilt their backrests as necessary it shall be possible to allow the evacuation of all the occupants by activating the displacement system of seats, if necessary. In case no displacement system is available for the evacuation of a rear seated occupant, it shall be shown that a 50th percentile manikin can be evacuated without the use of any devices to support its weight and any other tools.

As defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3.), document ECE/TRANS/WP.29/78/Rev.6, para. 2 www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29resolutions.html









In accordance with the programme of work of the Inland Transport Committee for 2018–2019 (ECE/TRANS/274, para. 123 and ECE/TRANS/2018/21/Add.1, Cluster 3.1), the World Forum will develop, harmonize and update UN regulations to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.

For vehicles of category N1 this evacuation may be done via an emergency window if this window can be easily opened, but if tools are necessary, (e.g. for breaking the window) these tools shall then be provided by the manufacturer and shall be visible and located in close proximity to that emergency window.

This shall be assessed for all configurations or worst-case configuration for number of doors on each side of the vehicle and for both left-hand drive and right-hand drive vehicles, when applicable."

Insert new paragraphs 5.3.8., to read:

"5.3.8. The fuel system and high voltage system shall be assessed for all configurations or worst-case configuration for left-hand drive and right-hand drive vehicles, when applicable."

Insert new paragraphs 10.13. to 10.17., to read:

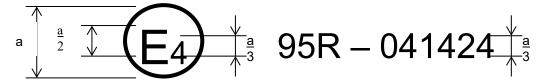
- "10.13. As from the official date of entry into force of the 04 series of amendments, no Contracting Party applying this Regulation shall refuse to grant or refuse to accept type approvals under this Regulation as amended by the 04 series of amendments.
- 10.14. As from 5 July 2022, Contracting Parties applying this Regulation shall not be obliged to accept type approvals to the preceding series of amendments, first issued after 5 July 2022.
- 10.15. Until 5 July 2024, Contracting Parties applying this Regulation shall accept type approvals to the preceding series of amendments, first issued before 5 July 2022.³
- 10.16. As from 5 July 2024, Contracting Parties applying this Regulation shall not be obliged to accept type approvals issued to the preceding series of amendments to this Regulation.
- 10.17. Notwithstanding paragraph 10.16., Contracting Parties applying this Regulation shall continue to accept type approvals issued according to the preceding series of amendments to this Regulation, for the vehicles which are not affected by the changes introduced by the 04 series of amendments."

Annex 2, amend to read:

"Annex 2

Arrangements of the approval mark

Model A (See paragraph 4.5. of this Regulation)



a = 8 mm min.

The above approval mark affixed to a vehicle shows that the vehicle type concerned has, with regard to the protection of the occupants in the event of a lateral collision, been approved in the Netherlands (E 4) pursuant to Regulation No. 95 under approval number **04**1424. The

approval number indicates that the approval was granted in accordance with the requirements of Regulation No. 95 as amended by the **04** series of amendments.

Model B (See paragraph 4.6. of this Regulation)



95	04 2492	<u> </u>	<u>a</u> 2
24	03 1628	<u> </u>	<u>a</u> 2

a = 8 mm min.

The above approval mark affixed to a vehicle shows that the vehicle type concerned has been approved in the Netherlands (E 4) pursuant to Regulations Nos. 95 and 24.² The first two digits of the approval numbers indicate that, at the dates when the respective approvals were granted. Regulation No. 95 incorporated the **04** series of amendments and Regulation No. 24 incorporated the 03 series of amendments.

II. Justification

- 1. The European Union is in the process of adopting the revised General Safety Regulation that introduces a range of new safety features. It however also addresses a number of exemptions for essential vehicle safety requirements for e.g. heavy sport utility vehicles and vans.
- 2. These broad exemptions can no longer be justified in the light of increasing electrification of the vehicle fleet as well as generally the protection of persons in terms of post-crash electric shock and fuel leakage risks, as well as door opening or jamming and the safe evacuation of occupants of such vehicles.
- 3. The envisioned application dates that have been decided by the European Parliament and European Union member States are also proposed in new transitional provisions for this Regulation.
- 4. In wide vehicles it may be not necessary for the front seats to have a displacement system (in accordance with UN Regulation No. 17), as occupants can move forward between the seats. It is proposed to allow this also in this Regulation to allow for the evacuation of rear-seated occupants through a front door in case of a side impact. In some commercial vehicles where no passage to the front row of seat is possible and neither forward seats are provided with a displacement system, evacuation should be guaranteed though for example an emergency window.
- 5. To avoid diverging interpretations by Technical Services and Type-Approval Authorities it is clarified that at least a worst-case configuration for side doors, fuel system and/or electrical system layout must be assessed to prevent that certain configurations would somehow not be checked.

² The latter number is given only as an example.