Proposal for supplement 6 to the original version of UN Regulation No. 158 (Devices for Means of Rear Visibility or Detection)

Submitted by the expert from the Kingdom of the Netherlands on behalf of the Task Force on Automated Vehicles Regulatory Screening*

The text reproduced below was prepared by the Task Force on Automated Vehicles Regulatory Screening (TF-AVRS), with the aim to amend and supersede document ECE/TRANS/GRSG/2025/39. The modifications to ECE/TRANS/GRSG/2025/39 are marked in (bold) red for new or strikethrough for deleted characters.

^{*} In accordance with the programme of work of the Inland Transport Committee for 2025 as outlined in proposed programme budget for 2025 (A/79/6 (Sect. 20), table 20.6), the World Forum will develop, harmonize and update UN Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.

I. Proposal

Renumber the first paragraph of the introduction to 0.1:

"0.1. The purpose of this Regulation is to provide the provisions for means of rear visibility and detection that would improve the driver's awareness of vulnerable road users behind vehicles when reversing. UN Regulation No. 46. provides the provisions for indirect vision of motor vehicles. This Regulation expands driver's awareness behind vehicles when reversing. Therefore, some requirements of this Regulation may be satisfied by devices complying with UN Regulation No. 46.

This Regulation cannot cover all the traffic conditions and infrastructure features in the type approval process; this Regulation recognises that the performances required in this Regulation cannot be achieved in all conditions (vehicle speed and condition, weather conditions, and traffic scenarios, etc. may affect the system performances). "

Insert a new paragraphs 0.2., 0.2.1. to 0.2.3., to read:

- "0.2. For supplement 6 to the original version of the Regulation:
- 0.2.1. The Regulation is amended to account for vehicles of categories X and Y ¹.
- 0.2.2. In preparing for the introduction of Automated Driving Systems (ADS) ¹, GRSG recognises that responsibility for rearward visibility will sit with ADS, if fitted and when an ADS feature is activated. As such, supplement 6 to this regulation exempts vehicles of category ies X and Y, as well as vehicles of category X that do not have a manual mode, intended to be operated on-board the vehicle from the requirements, and limits the requirements for other vehicles equipped with an ADS and when an ADS feature is active.
- 0.2.3. In the case of vehicles equipped with an ADS other than vehicles of categories X and Y, in the manual driving mode no special provisions or exemptions apply.
 Other than vehicles of category Y, vehicles equipped with an ADS must comply with this Regulation when operated manually by a driver on-board the vehicle."

Paragraph 1.4., amend to read:

- "1.4. The following vehicles of category M and N¹ shall be exempted from this Regulation:
 - (a) Vehicles where installation of means of rear visibility or detection is incompatible with their on-road use may be partly or fully exempted from this Regulation, subject to the decision of the Type Approval Authority;
 - (b) Vehicles of category ies X and Y and to vehicles of category X without manual mode which is intended to be operated on-board the vehicle."

Insert new footnote 1, to read:

"1 As defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3.), document ECE/TRANS/WP.29/78/Rev.8, para. 2 -

https://unece.org/transport/vehicle-regulations/wp29/resolutions"

Paragraph 5.4.1., footnote 1, renumber to footnote 2 and amend to read:

The distinguishing numbers of the Contracting Parties to the 1958 Agreement are reproduced in Annex 3 to the Consolidated Resolution on the Construction of Vehicles (R.E.3), document ECE/TRANS/WP.29/78/Rev.78 -

https://unece.org/transport/vehicle-regulations/wp29/resolutions"

Paragraph 12.4., amend to read

"12.4. "Vehicles of categories M₁, M₂, M₃, N₁, N₂ and N₃" means those defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3), (document ECE/TRANS/WP.29/78/Rev.78)."

Insert a new paragraph 15.1.3., to read:

"15.1.3. The requirements in paragraph 15 shall not apply while an ADS feature is active."

Paragraph 15.2.2., amend to read:

"15.2.2. The close-proximity rear-view field of vision shall be established using ambinocular vision, the eyes being at the "driver's ocular points" as defined in paragraph 12.1. above. The fields of vision shall be determined when the vehicle is in running order as defined in the consolidated Resolution on the Construction of vehicles (R.E.3) (ECE/TRANS/WP.29/78/Rev. 78, para. 2.2.5.4.), plus for M₁ and N₁ vehicles one front seat passenger (75 kg). When established through windows, the glazing shall have a total light transmission factor in accordance with UN Regulation No. 43, Annex 24"

Annex 9, paragraph 1.3.3.2., amend to read:

"1.3.3.2. Vehicle load.

The vehicle is in running order as defined in the consolidated Resolution on the Construction of vehicles (R.E.3) (ECE/TRANS/WP.29/78/Rev.**78**, paragraph 2.2.5.4.), plus for M_1 and N_1 vehicles one front seat passenger (75 kg).