agenda item 15)

# Proposal for the 03 series of Amendments to UN Regulation No. 125 (Forward field of vision of drivers)

## Submitted by the Informal Working Group on Field of Vision Assistant \*

The text reproduced below was prepared by the Informal Working Group on Field of Vision Assistant (IWG-FVA), in the framework of the process of splitting the UN Regulation No. 125 into two separate UN Regulations and to create a new UN Regulation on uniform technical prescriptions concerning approval of a vehicle about its Field of Vision Assistant. This document includes the update the references to the three-dimensional H-point (3-D "H"-point) measurement and calibration procedure, which is updated and moved from the Consolidated Resolution on the Construction of Vehicles (R.E.3) to Mutual Resolution No. 1 (M.R.1). The modifications made by this document to ECE/TRANS/WP.29/GRSG/2024/23 are marked in "(bold) blue" for new or strikethrough for deleted characters. Further editorial modifications are added with revision 1 of this document and marked in "Red".

<sup>\*</sup> In accordance with the programme of work of the Inland Transport Committee for 2024 as outlined in proposed programme budget for 2024 (A/78/6 (Sect. 20), table 20.5), 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

Contents, Annex 5, shall be deleted

"Regulation

...

Annexes

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5. Field of View Assistant"

paragraphs 2.3. to 2.10., amend to read:

- "2.3. "Three-dimensional reference grid" means a reference system which consists of a vertical longitudinal plane X-Z, a horizontal plane X-Y and a vertical transverse plane Y-Z-(see Annex 4, appendix, figure 6); the grid is used to determine the dimensional relationships between the position of design points on drawings and their positions on the actual vehicle. The procedure for situating the vehicle relative to the grid is specified in Annex 4 Addendum 6 of Mutual Resolution No. 1 (M.R.1) 1; all coordinates referred to ground zero shall be based on a vehicle in running order 2 plus one front-seat passenger, the mass of the passenger being 75 kg ±1 per cent.
- 2.3.1. Vehicles fitted with suspension enabling their ground clearance to be adjusted shall be tested under the normal conditions of use specified by the vehicle manufacturer.
- 2.4. "Primary reference marks" means holes, surfaces, marks and identification signs on the vehicle body. The type of reference mark used and the position of each mark relative to the X, Y and Z coordinates of the three-dimensional reference grid and to a design ground plane shall be specified by the vehicle manufacturer. These marks may be the control points used for body-assembly purposes.
- 2.5. "Seat-back angle" means the angle defined in the revised Consolidated Resolution on the Construction of Vehicles (R.E.3) 3, Annex 1, paragraph 2.6 or 2.7. Addendum 6 of Mutual Resolution No. 1 (M.R.1) paragraph 1.2.6. or paragraph 1.2.7.
- 2.6. "Actual seat-back angle" means the angle defined in the revised R.E.3, Annex 1, paragraph 2.6 Addendum 6 of M.R.1, paragraph 1.2.6.
- 2.7. "Design seat-back angle" means the angle defined in the revised R.E.3, Annex 1, paragraph 2.7. Addendum 6 of M.R.1, paragraph 1.2.7.
- 2.8. "V points" means points whose position in the passenger compartment is determined as a function of vertical longitudinal planes passing through the centres of the outermost designated seating positions on the front seat and in relation to the "R" point and the design angle of the seat-back, which points are used for verifying compliance with the field of vision requirements.
- 2.9. "R point or seating reference point" means the point defined in the revised R.E.3, Annex 1, paragraph 2.4. Addendum 6 of M.R.1, paragraph 1.2.4.
- 2.10. "H point" means the point defined in the revised R.E.3, Annex 1, paragraph 2.3. Addendum 6 of M.R.1, paragraph 1.2.3."

Addendum 6 of Mutual Resolution No. 1 (M.R.1) (document ECE/TRANS/WP.29/1101/Amend.5); see https://unece.org/transport/vehicle-regulations/wp29/resolutions

#### Paragraph 5.1.3.4., amend to read:

"5.1.3.4. An obstruction between a plane through V2, and declined at least 1° below the horizontal and a plane through V2 and declined 4° below the horizontal will be tolerated if the conical projection of this obstruction, starting from V2, on an area "S" as defined in paragraph 5.1.3.4.1. below does not exceed 20 per cent of this area. With regard to FVA, if applicable, potential obstructions in area "S" from opaque pixels as defined in paragraph 2.19. of UN Regulation XXX, 00 series of amendments, shall be considered."

Paragraph 5.1.3.5., amend to read:

"5.1.3.5. The transparent field of vision as defined in paragraph 5.1.1. may be overlaid by information of a Field of Vision Assistant, meeting the requirements of UN Regulation [XXX]."

Paragraphs 5.1.3.5.1. to 5.1.3.7. shall be deleted

Paragraphs 6.2.2. shall be deleted

Insert new paragraphs 12.12. to 12.16., to read:

- "12.12. 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 or refuse to accept type approvals under this Regulation as amended by the 03 series of amendments.
- 12.13. As from [1 September 2026], Contracting Parties applying this Regulation shall not be obliged to accept type approvals to the preceding series of amendments, first issued after [1 September 2026].
- 12.14. Until [1 September 2030] Contracting Parties applying this Regulation shall accept type approvals to the preceding series of amendments, first issued before [1 September 2026].
- 12.15. As from [1 September 2030], Contracting Parties applying this Regulation shall not be obliged to accept type approvals issued to the preceding series of amendments to this Regulation.
- 12.16. Notwithstanding paragraph 12.13. and 12.15., Contracting Parties applying this Regulation shall continue to accept type approvals issued according to the preceding series of amendments to this Regulation, for vehicles types which are not affected by the changes introduced by the 03 series of amendments (i.e. vehicles not equipped with FVA)"

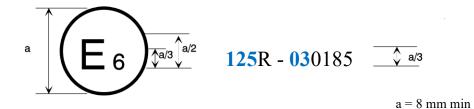
Renumber Paragraphs 12.12. and 12.13. (former), renumber as paragraphs 12.17. and 12.18.

Annex 2, amend to read:

### "Annex 2

## **Arrangements of the Approval Marks**

(see paragraphs 4.4. to 4.4.2. of this Regulation)



The above approval mark affixed to a vehicle shows that the vehicle type concerned has been approved in Belgium (E 6) with regard to the driver's forward field of vision pursuant to UN Regulation No. 125. The first two digits of the approval number indicate that the approval was granted in accordance with the requirements of UN Regulation No. 125 as amended by the **03** series of amendments."

Annex 3, footnote 1, amend to read:

"1 This procedure is described in Annex 1 to the Consolidated Resolution on The Construction of Vehicles (R.E.3) (document ECE/TRANS/WP.29/78/Rev.2)

www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29 resolutions.html Addendum 6 of Mutual Resolution No. 1 (M.R.1) (document ECE/TRANS/WP.29/1101/Amend.5); see https://unece.org/transport/vehicle-regulations/wp29/resolutions"

Annex 5, shall be deleted.

## II. Justification

- 1. IWG-FVA developed a new UN Regulation on Field of Vision Assistants, applicable to all vehicle categories M and N, and replacing the specific requirements introduced on FVA in UN Regulation 125, 02 series of Amendments for M1 and N1 vehicles. The transitional provisions in this Regulation are therefore aligned with the entry into force of the new UN Regulation and the specific FVA requirements in this Regulation are taken out. Since the provisions on FVA in the new Regulation are more specific and detailed, a transitional period is required for existing vehicle types.
- 2. The specifications of the 3-D "H"-point machine have been updated and transferred from R.E.3. to M.R.1. A calibration procedure has also been added to ensure that the 3-D "H" point machine used for all testing in UN Regulations and UN Global Technical Regulations is consistent and provides consistent test results across Regulations.