

**Draft Final Report on the Development of Amendment 4 to UN Global Technical Regulation No. 6 (Safety Glazing), Amendment 2 to UN Global Technical Regulation No. 7 (Head Restraints) and Amendment 1 to UN Global Technical Regulation No. 14 (Pole side impact) \***

**Submitted by the expert from the Netherlands**

The text reproduced below was prepared by the expert from the Netherlands, pursuant to article 6, paragraph 6.2.7. of the Agreement.

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\* 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.

# Final Status Report on the on the Development of Amendment 4 to UN Global Technical Regulation No. 6 (Safety Glazing), Amendment 2 to UN Global Technical Regulation No. 7 (Head Restraints) and Amendment 1 to UN Global Technical Regulation No. 14 (Pole side impact)

## I. Introduction

1. The Kingdom of the Netherlands requested GRSP, as well as WP.29 and the Executive Committee of the 1998 Agreement (AC.3), to authorise alignment of the specifications, the installation procedure and calibration procedure of the 3-D "H"-point machine and to include them in Mutual Resolution No. 1 (M.R.1). To consequently update the affected UN Regulations and Global Technical Regulations by adding a new reference to Addendum 6 in M.R.1 and by removing the existing references to the 3D "H"-point machine.
2. During the 192<sup>nd</sup> session of WP.29 in March 2024, WP.29 and AC.3 endorsed the request.

## II. Objectives

1. The three Dimensional (3-D) "H" point machine is used in several UN Regulations and GTRs to verify the Seat Reference Point (SRP, R-point) and Torso Angle of a seat or to set the H-point and Torso Angle in order to e.g. install a dummy (ATD) in a certain position. Depending on the moment in time those Regulations were developed, the measurement procedure, the setting and the version of the 3-D "H"-point machine that shall be used, is not consistent in these Regulations and sometimes refers to versions of the 3-D "H"-point machine that no longer exist or can be calibrated according to the referenced protocol.
2. Therefore, the expert of the Netherlands proposes a new Addendum 6 on provisions for the specifications and calibration procedure of the 3-D "H"-point machine and the procedure for determining the "H"-point and the actual torso angle for seating positions in motor vehicles, to be used in all referenced UN Regulations and GTRs, into MR.1.

## III. Summary

1. An Ad-Hoc group was established after the 72<sup>nd</sup> session of GRSP sponsored by the Netherlands.
2. Amendment 5, Addendum 6 to M.R.1 has been prepared (GRSP-74-09Rev.1 superseding GRSP/2023/37)
3. Proposals to update UN Global Technical Regulations 6, 7 and 14 have been prepared
4. Proposals to update UN Regulations No's. 14, 16, 17, 21, 25, 29, 32, 33, 35, 43, 46, 61, 80, 94, 95, 114, 125, 135, 137, 145, 158, 166 and 167 have been prepared
5. The Kingdom of the Netherlands submitted the following reports and proposals to GRSG and GRSP

<i>Reference</i>	<i>Title</i>
GRSP-72-33	Three dimensional H-point machine State of Play
GRSP-73-20	Status Report Ad-Hoc Group 3D H-point machine
GRSP/2023/37 as amended by GRSP-74-09Rev.1 (GRSG-127-37)	Amendment 5, Addendum 6 to M.R.1
GRSG/2024/18	UN R35 – Foot Controls

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<i>Reference</i>	<i>Title</i>
GRSG/2024/19 as amended by GRSG-127-16	UN R43 – Safety glazing
GRSG/2024/20	GTR-6 – Safety glazing
GRSG/2024/21 as amended by GRSG-127-17	UN R46 – indirect vision
GRSG/2024/22	UN R61 – External Projections cab cat. N
GRSG/2024/23 as amended by GRSG-127-22r1	UN R125 – Forward field of vision
GRSG/2024/24 as amended by GRSG-127-18	UN R158 – Devices for reversion motion
GRSG/2024/25 as amended by GRSG-127-19	UN R166 – Driver Awareness of VRUs in Close Proximity
GRSG/2024/26	UN R167 – Direct vision
GRSG-127-37 and ECE/TRANS/WP.29/2024/32	Request for Authorisation
GRSP/2024/7 as amended by GRSP-75-21	Collective amendment to UN R14, 16, 17, 21, 25, 29, 32, 33, 80, 94, 95, 114, 135, 137 and 145
GRSP/2024/8	GTR-7 – Head Restraints
GRSP/2024/9	GTR-14 – Pole side impact

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