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**Economic Commission for Europe**

Inland Transport Committee

**World Forum for Harmonization of Vehicle Regulations****Working Party on Passive Safety****Seventy-fifth session**

Geneva, 27–31 May 2024

Item 18 of the provisional agenda

**Collective Amendments to UN Regulations Nos. 14, 16,  
17, 21, 25, 29, 32, 33, 80, 94, 95, 114, 135, 137 and 145.****Proposal for Collective Amendments to UN Regulations Nos.  
14, 16, 17, 21, 25, 29, 32, 33, 80, 94, 95, 114, 135, 137 and 145****Submitted by the expert from the Netherlands \*,\*\***

The text reproduced below was prepared by the expert from the Netherlands, that updates the references to the three-dimensional "H" point measurement and calibration procedure, which will then be moved from the Consolidated Resolution on the Construction of Vehicles (R.E.3) to Mutual Resolution No. 1. The modifications to the current text of UN Regulations Nos. 14, 16, 17, 21, 25, 29, 32, 33, 80, 94, 95, 114, 135, 137 and 145 are marked in bold for new and strikethrough for deleted characters.

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\* This document was scheduled for publication after the standard publication date owing to circumstances beyond the submitter's control.

\*\* 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 for supplement 4 to the 09 series of amendments of UN Regulation No. 14 (Anchorages of safety-belts)

*Paragraph 1., footnote 1, amend to read:*

- "<sup>1</sup> As defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3), document ECE/TRANS/WP.29/78/Rev.67, para.2-  
~~www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29resolutions.html~~  
<https://unece.org/transport/vehicle-regulations/wp29/resolutions>"

*Paragraph 4.4.1., footnote 2, amend to read:*

- "<sup>2</sup> The distinguish numbers of the Contracting Parties to the 1958 Agreement are reproduced in Annex 3 to Consolidated Resolution on the Construction of Vehicles (R.E.3), document ECE/TRANS/WP.29/78/Rev.67, Annex 3 -  
~~https://unece.org/transport/standards/transport/vehicle-regulations-wp29/resolutions.~~  
<https://unece.org/transport/vehicle-regulations/wp29/resolutions>"

*Paragraphs 5.1.1. to 5.1.1.2., amend to read:*

- "5.1.1. The H point is a reference point as defined in ~~paragraph 2.3. of~~ Annex 4 of this Regulation, which must be determined in accordance with the procedure set out in that Annex.
- 5.1.1.1. Point H' is a reference point corresponding to H as defined in paragraph 5.1.1. which shall be determined for every normal position in which the seat is used.
- 5.1.1.2. The R point is the seating reference point defined in ~~paragraph 2.4. of~~ Annex 4 of this Regulation."

*Annex 4, footnote 1, amend to read:*

- "<sup>1</sup> The 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.6-~~  
~~https://unece.org/transport/standards/transport/vehicle-regulations-wp29/resolutions~~  
**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>"

## II. Proposal for supplement 1 to the [09] series of amendments to UN Regulation No. 16 (Safety-belts)

*Paragraph 1., footnote 1, amend to read:*

- "<sup>1</sup> As defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3), document ECE/TRANS/WP.29/78/Rev.67, para.2-  
~~www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29resolutions.html~~  
<https://unece.org/transport/vehicle-regulations/wp29/resolutions>"

*Paragraph 2.14.5., footnote 2, amend to read:*

- "<sup>2</sup> As defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3), document ECE/TRANS/WP.29/78/Rev.67, para. 2 -  
~~www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29resolutions.html~~  
<https://unece.org/transport/vehicle-regulations/wp29/resolutions>"

*Paragraph 5.2.4.1., footnote 3, amend to read:*

- "<sup>3</sup> 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.67, Annex 3 -  
~~www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29resolutions.html~~  
<https://unece.org/transport/vehicle-regulations/wp29/resolutions>"

*Paragraph 8.1.1., footnote 8, amend to read:*

<sup>8</sup> As defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3), document ECE/TRANS/WP.29/78/Rev.67, para. 2 - [www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29resolutions.html](http://www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29resolutions.html)

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

*Paragraph 8.4.1.1., footnote 10*, amend to read:

<sup>10</sup> As defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3), document ECE/TRANS/WP.29/78/Rev.67, para. 2 - [www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29resolutions.html](http://www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29resolutions.html)

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

*Annex 15, footnote 1*, amend to read:

<sup>1</sup> The procedure is described in ~~Annex 1 and its Appendices 1, 2 and 3 to the Consolidated Resolution on the Construction of Vehicles (R.E.3)~~ (document ECE/TRANS/WP.29/78/Rev.6 – [www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29resolutions.html](http://www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29resolutions.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>"

### III. Proposal for supplement 1 to the 11 series of amendments to UN Regulation No. 17 (Strength of seats)

*Paragraph 1., footnote 1*, amend to read:

<sup>1</sup> As defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3.), document ECE/TRANS/WP.29/78/Rev.67, para. 2 - <https://unece.org/transport/standards/transport/vehicle-regulations/wp29/resolutions>  
<https://unece.org/transport/vehicle-regulations/wp29/resolutions>"

*Paragraph 4.4.1., footnote 2*, amend to read:

<sup>2</sup> 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.67, Annex 3 - <https://unece.org/transport/standards/transport/vehicle-regulations/wp29/resolutions>  
<https://unece.org/transport/vehicle-regulations/wp29/resolutions>"

*Annex 3, footnote 1*, amend to read:

<sup>1</sup> The procedure is described in ~~Annex 1 and its Appendices 1, 2 and 3 to the Consolidated Resolution on the Construction of Vehicles (R.E.3)~~ (document ECE/TRANS/WP.29/78/Rev.6 – [www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29resolutions.html](http://www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29resolutions.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>"

### IV. Proposal for supplement 5 to the 01 series of amendments to UN Regulation No. 21 (Interior Fittings)

*Paragraph 4.4.1., footnote 1*, amend to read:

<sup>1</sup> 1 for Germany, 2 for France, 3 for Italy, 4 for the Netherlands, 5 for Sweden, 6 for Belgium, 7 for Hungary, 8 for the Czech Republic, 9 for Spain, 10 for Yugoslavia, 11 for the United Kingdom, 12 for Austria, 13 for Luxembourg, 14 for Switzerland, 15 (vacant), 16 for Norway, 17 for Finland, 18 for Denmark, 19 for Romania, 20 for Poland, 21 for Portugal, 22 for the Russian Federation, 23 for Greece, 24 for Ireland (vacant), 25 for Croatia, 26 for Slovenia, 27 for Slovakia, 28 for Belarus, 29 for Estonia, 30 (vacant), 31 for Bosnia and Herzegovina, 32 for Latvia, 33 (vacant), 34 for Bulgaria, 35-36 (vacant), 37 for Turkey, 38-39 (vacant), 40 for The former Yugoslav Republic of Macedonia, 41 (vacant), 42 for the European Community (Approvals are granted by its Member States using their respective ECE symbol), 43 for Japan, 44 (vacant), 45 for Australia and 46 for Ukraine. Subsequent numbers shall be assigned to other countries in the chronological order in which they ratify or accede to the Agreement Concerning

~~the Adoption of Uniform Technical Prescriptions for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of these Prescriptions, and the numbers thus assigned shall be communicated by the Secretary General of the United Nations to the Contracting Parties to the Agreement.~~

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.7, Annex 3 - <https://unece.org/transport/vehicle-regulations/wp29/resolutions>"

*Annex 5, shall be deleted*

*Insert new Annex 5, to read:*

## **"Annex 5**

### **Procedure for determining the "H" point and the actual torso angle for seating positions in motor vehicles<sup>1</sup>**

**Appendix 1 - Description of the three dimensional "H" point machine<sup>1</sup>**

**Appendix 2 - Three-dimensional reference system<sup>1</sup>**

**Appendix 3 - Reference data concerning seating positions<sup>1</sup>**

<sup>1</sup> The procedure is described in 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>"

## **V. Proposal for supplement 2 to the 04 series of amendments to UN Regulation No. 25 (Head restraints)**

*Annex 3, shall be deleted*

*Insert new Annex 3, to read:*

## **"Annex 3**

### **Procedure for determining the "H" point and the actual torso angle for seating positions in motor vehicles<sup>1</sup>**

**Appendix 1 - Description of the three dimensional "H" point machine<sup>1</sup>**

**Appendix 2 - Three-dimensional reference system<sup>1</sup>**

**Appendix 3 - Reference data concerning seating positions<sup>1</sup>**

- <sup>1</sup> The procedure is described in 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>"

## VI. Proposal for supplement 6 to the 03 series of amendments to UN Regulation No. 29 (Cabs of commercial vehicles)

*Annex 4, shall be deleted*

*Insert new Annex 4, to read:*

### "Annex 4

#### Procedure for determining the "H" point and the actual torso angle for seating positions in motor vehicles<sup>1</sup>

Appendix 1 - Description of the three dimensional "H" point machine<sup>1</sup>

Appendix 2 - Three-dimensional reference system<sup>1</sup>

Appendix 3 - Reference data concerning seating positions<sup>1</sup>

- <sup>1</sup> The procedure is described in 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.*

## VII. Proposal for supplement 2 to the original version of UN Regulation No. 32 (Rear-end collision)

*Paragraph 1., footnote 1, amend to read:*

- <sup>1</sup> ~~As defined in Annex 7 to the Consolidated Resolution on the Construction of vehicles (R.E.3), document TRANS/WP.29/78/Rev.1/Amend.2, as last amended by Amendment 4~~  
As defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3.), document ECE/TRANS/WP.29/78/Rev.7, para. 2 - <https://unece.org/transport/vehicle-regulations/wp29/resolutions>"

*Paragraph 4.4.1.1., footnote 2, amend to read:*

- <sup>2</sup> ~~1 for Germany, 2 for France, 3 for Italy, 4 for the Netherlands, 5 for Sweden, 6 for Belgium, 7 for Hungary, 8 for the Czech Republic, 9 for Spain, 10 for Serbia, 11 for the United Kingdom, 12 for Austria, 13 for Luxembourg, 14 for Switzerland, 15 (vacant), 16 for Norway, 17 for Finland, 18 for Denmark, 19 for Romania, 20 for Poland, 21 for Portugal, 22 for the Russian Federation, 23 for Greece, 24 for Ireland, 25 for Croatia, 26 for Slovenia, 27 for Slovakia, 28 for Belarus, 29 for Estonia, 30 (vacant), 31 for Bosnia and Herzegovina, 32 for Latvia, 33 (vacant), 34 for Bulgaria, 35 (vacant), 36 for Lithuania, 37 for Turkey, 38 (vacant), 39 for Azerbaijan, 40 for The former Yugoslav Republic of Macedonia, 41 (vacant), 42 for the European Community (Approvals are granted by its Member States using their respective ECE symbol), 43 for Japan, 44 (vacant), 45 for Australia, 46 for Ukraine, 47 for South Africa, 48 for New Zealand, 49 for Cyprus, 50 for Malta, 51 for the Republic of Korea, 52 for Malaysia, 53 for Thailand, 54 and 55 (vacant) and 56 for Montenegro. Subsequent numbers shall be assigned to other countries in the chronological order in which they ratify or accede to the Agreement Concerning the Adoption of Uniform~~

~~Technical Prescriptions for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of these Prescriptions, and the numbers thus assigned shall be communicated by the Secretary General of the United Nations to the Contracting Parties to the Agreement.~~

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.7, Annex 3 - <https://unece.org/transport/vehicle-regulations/wp29/resolutions>"

Annex 3, shall be deleted

Insert new Annex 3, to read:

## "Annex 3

### Procedure for determining the "H" point and the actual torso angle for seating positions in motor vehicles<sup>1</sup>

#### Appendix 1 - Description of the three dimensional "H" point machine<sup>1</sup>

#### Appendix 2 - Three-dimensional reference system<sup>1</sup>

#### Appendix 3 - Reference data concerning seating positions<sup>1</sup>

- <sup>1</sup> The procedure is described in 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>"

## VIII. Proposal for Supplement 3 to the original version of UN Regulation No. 33 (Head-on collision)

Paragraph 1., footnote 1, amend to read:

- <sup>1</sup> ~~As defined in Annex 7 to the Consolidated Resolution on the Construction of vehicles (R.E.3), document TRANS/WP.29/78/Rev.1/Amend.2, as last amended by Amendment 4~~  
As defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3), document ECE/TRANS/WP.29/78/Rev.7, para. 2 - <https://unece.org/transport/vehicle-regulations/wp29/resolutions>"

Paragraph 4.4.1.1., footnote 2, amend to read:

- <sup>2</sup> 1 for Germany, 2 for France, 3 for Italy, 4 for the Netherlands, 5 for Sweden, 6 for Belgium, 7 for Hungary, 8 for the Czech Republic, 9 for Spain, 10 for Serbia, 11 for the United Kingdom, 12 for Austria, 13 for Luxembourg, 14 for Switzerland, 15 (vacant), 16 for Norway, 17 for Finland, 18 for Denmark, 19 for Romania, 20 for Poland, 21 for Portugal, 22 for the Russian Federation, 23 for Greece, 24 for Ireland, 25 for Croatia, 26 for Slovenia, 27 for Slovakia, 28 for Belarus, 29 for Estonia, 30 (vacant), 31 for Bosnia and Herzegovina, 32 for Latvia, 33 (vacant), 34 for Bulgaria, 35 (vacant), 36 for Lithuania, 37 for Turkey, 38 (vacant), 39 for Azerbaijan, 40 for The former Yugoslav Republic of Macedonia, 41 (vacant), 42 for the European Community (Approvals are granted by its Member States using their respective ECE symbol), 43 for Japan, 44 (vacant), 45 for Australia, 46 for Ukraine, 47 for South Africa, 48 for New Zealand, 49 for Cyprus, 50 for Malta, 51 for the Republic of Korea, 52 for Malaysia, 53 for Thailand, 54 and 55 (vacant) and 56 for Montenegro. Subsequent numbers shall be assigned to other countries in the chronological order in which they ratify or accede to the Agreement Concerning the Adoption of Uniform Technical Prescriptions for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or

~~be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of these Prescriptions, and the numbers thus assigned shall be communicated by the Secretary General of the United Nations to the Contracting Parties to the Agreement.~~

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.7, Annex 3 - <https://unece.org/transport/vehicle-regulations/wp29/resolutions>"

*Annex 3*, shall be deleted

*Insert new Annex 3*, to read:

## "Annex 3

### **Procedure for determining the "H" point and the actual torso angle for seating positions in motor vehicles<sup>1</sup>**

#### **Appendix 1 - Description of the three dimensional "H" point machine<sup>1</sup>**

#### **Appendix 2 - Three-dimensional reference system<sup>1</sup>**

#### **Appendix 3 - Reference data concerning seating positions<sup>1</sup>**

<sup>1</sup> The procedure is described in 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>"

## **IX. Proposal for Supplement 1 to the 04 series of amendments to UN Regulation No. 80 (Strength of seats and their anchorages (buses))**

*Paragraph 1.1., footnote 1*, amend to read:

<sup>1</sup> As defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3.), document ECE/TRANS/WP.29/78/Rev.67, para. 2 - <https://unece.org/transport/vehicle-regulations/wp29/resolutions>"

*Paragraph 4.5.1., footnote 3*, amend to read:

<sup>2</sup> 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.6Amendment 17, Annex 3 - <https://unece.org/transport/vehicle-regulations/wp29/resolutions>"

*Annex 4, footnote 1*, amend to read:

<sup>1</sup> The 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.6);~~ [www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29resolutions.html](http://www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29resolutions.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 4, footnote 2*, shall be deleted.

## X. Proposal for supplement 1 to the [05] series of amendments to UN Regulation No. 94 (Frontal collision protection)

*Annex 6, footnote 1*, amend to read:

- <sup>1</sup> The 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.7)~~ –  
<https://unece.org/transport/standards/transport/vehicle-regulations-wp29/resolutions>  
**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>"

## XI. Proposal for supplement 1 to the [06] series of amendments to UN Regulation No. 95 (Lateral collision protection)

*Annex 3, footnote 1*, amend to read:

- <sup>1</sup> The 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.7)~~ –  
<https://unece.org/transport/standards/transport/vehicle-regulations-wp29/resolutions>  
**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>"

## XII. Proposal for supplement 1 to the original version of UN Regulation No. 114 (Airbag module for a replacement airbag system)

*Paragraph 4.1.4.1., footnote 1*, amend to read:

- <sup>1</sup> 1 for Germany, 2 for France, 3 for Italy, 4 for the Netherlands, 5 for Sweden, 6 for Belgium, 7 for Hungary, 8 for the Czech Republic, 9 for Spain, 10 for Serbia and Montenegro, 11 for the United Kingdom, 12 for Austria, 13 for Luxembourg, 14 for Switzerland, 15 (vacant), 16 for Norway, 17 for Finland, 18 for Denmark, 19 for Romania, 20 for Poland, 21 for Portugal, 22 for the Russian Federation, 23 for Greece, 24 for Ireland, 25 for Croatia, 26 for Slovenia, 27 for Slovakia, 28 for Belarus, 29 for Estonia, 30 (vacant), 31 for Bosnia and Herzegovina, 32 for Latvia, 33 (vacant), 34 for Bulgaria, 35 (vacant), 36 for Lithuania, 37 for Turkey, 38 (vacant), 39 for Azerbaijan, 40 for The former Yugoslav Republic of Macedonia, 41 (vacant), 42 for the European Community (Approvals are granted by its Member States using their respective ECE symbol), 43 for Japan, 44 (vacant), 45 for Australia, 46 for Ukraine, 47 for South Africa and 48 for New Zealand. Subsequent numbers shall be assigned to other countries in the chronological order in which they ratify or accede to the Agreement Concerning the Adoption of Uniform Technical Prescriptions for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of these Prescriptions, and the numbers thus assigned shall be communicated by the Secretary-General of the United Nations to the Contracting Parties to the Agreement. The distinguish numbers of the Contracting Parties to the 1958 Agreement are reproduced in Annex 3 to Consolidated Resolution on the Construction of Vehicles (R.E.3), document ECE/TRANS/WP.29/78/Rev.7 -  
<https://unece.org/transport/vehicle-regulations/wp29/resolutions>"

*Annex 8*, shall be deleted

*Insert new Annex 8*, to read:



## "Annex 8

### Procedure for determining the "H" point and the actual torso angle for seating positions in motor vehicles<sup>1</sup>

Appendix 1 - Description of the three dimensional "H" point machine<sup>1</sup>

Appendix 2 - Three-dimensional reference system<sup>1</sup>

Appendix 3 - Reference data concerning seating positions<sup>1</sup>

<sup>1</sup> The procedure is described in 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>"

## XIII. Proposal for supplement 3 to the 02 series of amendments to UN Regulation No. 135 (Pole Side Impact (PSI))

Paragraph 1.1., footnote 2, amend to read:

<sup>2</sup> As defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3.), document ECE/TRANS/WP.29/78/Rev.67, para. 2 - ~~www.unece.org/transport/standards/transport/vehicle-regulations/wp29/resolution~~ <https://unece.org/transport/vehicle-regulations/wp29/resolutions>"

Paragraph 2.19., amend to read:

- "2.19. "R-point" means a design reference point, which:
- (a) Has coordinates determined in relation to the designed vehicle structure; and
  - (b) Shall be established, where relevant for the purpose of this Regulation, in accordance with Annex 1 of the Consolidated Resolution on the Construction of Vehicles - ~~(R.E.3)~~ Addendum 6 of Mutual Resolution No. 1 (M.R.1).<sup>3</sup>

Paragraph 2.19., footnote 3, amend to read:

<sup>3</sup> ~~Document ECE/TRANS/WP.29/78/Rev.3, Annex 1 -~~ [www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29resolutions.html](http://www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29resolutions.html) document ECE/TRANS/WP.29/1101/Amend.5; see <https://unece.org/transport/vehicle-regulations/wp29/resolutions>"

Paragraph 4.5.1., footnote 4, amend to read:

<sup>4</sup> 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.37, Annex 3 - [www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29resolutions.html](http://www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29resolutions.html) <https://unece.org/transport/vehicle-regulations/wp29/resolutions>"

Paragraphs 7.12.2. and 7.13., amend to read:

- "7.12.2. If the 3-D H machine does not tend to slide rearward, use the following procedure. Slide the 3-D H machine rearwards by applying a horizontal rearward load to the T-bar until the seat pan contacts the seat back (see Figure 5-2 of Annex 5A.2 of Addendum 6 of Mutual Resolution No. 1 (M.R.1)).

- 7.13. Apply a 100 N ± 10 N load to the back and pan assembly of the 3-D H machine at the intersection of the hip angle quadrant and the T-bar housing. The direction of load application is maintained along a line passing by the above intersection to a point just above the thigh bar housing (see Figure 5-2 of ~~Annex 5A.2 of Addendum 6 of Mutual Resolution No. 1 (M.R.1)~~). Then carefully return the back pan to the seat back. Care must be exercised throughout the remainder of the procedure to prevent the 3-D H machine from sliding forward."

#### **XIV. Proposal for supplement 1 to the [03] series of amendments to UN Regulation No. 137 (Frontal impact with focus on restraint systems)**

*Annex 6, footnote 1*, amend to read:

- <sup>1</sup> The 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.7)~~  
<https://unece.org/transport/standards/transport/vehicle-regulations-wp29/resolutions>  
**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>"

#### **XV. Proposal for supplement 1 to the [01] series of amendments of UN Regulation No. 145 (ISOFIX anchorage systems, ISOFIX top tether anchorages and i-Size)**

*Annex 4, footnote 1*, amend to read:

- <sup>1</sup> The 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.7)~~  
<https://unece.org/transport/standards/transport/vehicle-regulations-wp29/resolutions>  
**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*, amend to read:

### **"Annex 5**

#### **Description of the three-dimensional H-point machine (3-D H machine)**

**The three-dimensional H-point machine is described in 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>"

## **II. Justification**

1. Update to latest amendment (revision 7) of Consolidated Resolution on the Construction of Vehicles (R.E.3).
2. The specifications of the three-dimensional "H" (3-D "H")-point machine have been updated and transferred from R.E.3. to M.R.1. Also, a calibration procedure was added, assuring that the 3-D "H"-point machine used for all testing in UN Regulations and UN Global Technical Regulations is consistent and gives consistent test results among all Regulations.