

2 November 2020

---

## **Agreement**

### **Concerning the Adoption of Harmonized Technical United Nations Regulations 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 United Nations Regulations\***

(Revision 3, including the amendments which entered into force on 14 September 2017)

---

#### **Addendum 45 – UN Regulation No. 46**

#### **Revision 6 - Amendment 5**

Supplement 7 to the 04 series of amendments – Date of entry into force: 25 September 2020

#### **Uniform provisions concerning the approval of devices for indirect vision and of motor vehicles with regard to the installation of these devices**

This document is meant purely as documentation tool. The authentic and legal binding texts is: ECE/TRANS/WP.29/2020/16.



**UNITED NATIONS**

---

\* Former titles of the Agreement:

Agreement concerning the Adoption of Uniform Conditions of Approval and Reciprocal Recognition of Approval for Motor Vehicle Equipment and Parts, done at Geneva on 20 March 1958 (original version); 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, done at Geneva on 5 October 1995 (Revision 2).

*Paragraph 13.5.*, amend to read:

- "13.5. The CMS shall be provided by the applicant with the following documents:
- (a) Technical specification of the CMS;
  - (b) Operator's manual;
  - (c) Documentation referred to in Annex 12, paragraph 2.3.;
  - (d) Documentation referred to in paragraph 16.1.1.1.1., if applicable."

*Paragraph 15.2.1.1.2.*, amend to read:

- "15.2.1.1.2. In the case a camera-monitor system is used for rendering (the) field(s) of vision, the relevant field(s) of vision shall be permanently visible to the driver when the ignition is on or the vehicle master control switch is activated (whichever is applicable) and not used for other information. However, when the vehicle is moving forward at a speed above 10 km/h or backwards, the monitor or the part of the monitor intended for rendering the Class VI field of vision may be used for other information. Multiple images may be used or displayed provided that the monitor has been approved in this mode."

*After paragraph 16.1.1.1.*, insert a new paragraph 16.1.1.1.1., to read:

- "16.1.1.1.1. Temporarily modified view

To enable an improved view in special manoeuvres (e.g. where in the case of conventional mirrors the field of view is usually changed by the driver moving their head to achieve incident angle to the mirror), it shall be permitted to change temporarily the field of view, so that the requirements laid down in paragraphs 15.2.4. (field of vision) and 16.1.3. (magnification and resolution) may not be fulfilled during this temporarily modified view.

The operation of this function shall be intuitive to the driver and not cause additional safety risks such as additional blind spots. In the case of articulated vehicles, this includes an adaptation of the modified view to cover the full length of the vehicle combination. The operation of the function shall cease, when the maneuver has been completed and the CMS shall return to the default view.

It shall be indicated to the driver, that a temporarily modified view is displayed. At any time, the driver shall be able to deactivate the function. The operator's manual shall inform the driver accordingly."

The vehicle manufacturer shall demonstrate the improvement of the view by an analysis to the satisfaction of the Technical Service and the Type Approval Authority."

*Annex 2*, after item 12.1.2.2.8. insert a new item 12.1.2.2.9., to read:

- "12.1.2.2.9. Documentation referred to in paragraph 16.1.1.1.1., if applicable:  
....."

