

30 November 2021

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 7

Supplement 9 to the 04 series of amendments – Date of entry into force: 30 September 2021

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.29/2021/19.



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).

Paragraphs 2.1.1.7. to 2.1.1.9., amend to read:

- 2.1.1.7. "Spherical surface" means a convex surface, which has, in both horizontal and vertical direction, measured radii of curvature compliant with the provisions given in paragraphs 6.1.2.2.2 and 6.1.2.2.4.
- 2.1.1.8. "Aspherical surface" means a convex surface, which may have variable radii of curvature both in the horizontal and vertical direction.
- 2.1.1.9. "Aspherical mirror" means a mirror composed of a spherical and an aspherical part, defined in 2.1.1.7 and 2.1.1.8 respectively, in which the transition of the reflecting surface from the spherical to the aspherical part has to be marked. As an example, the curvature of the main axis of the mirrors may be defined in the x/y coordinate system defined by the radius of the spherical primary calotte with:

$$y = R - \sqrt{(R^2 - x^2)} + k(x - a)^3$$

Where:

R: nominal radius in the spherical part

k: constant for the change of curvature

a: constant for the spherical size of the spherical primary calotte"

Paragraph 6.1.2.2.1., amend to read:

- "6.1.2.2.1. The reflecting surface of a mirror shall be either flat or convex. Exterior mirrors may be equipped with an additional aspherical part provided that the main mirror fulfils the requirements of the indirect field of vision."
