

22 June 2015

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## 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\***

(Revision 2, including the amendments which entered into force on 16 October 1995)

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#### **Addendum 47 – Regulation No. 48**

#### **Revision 10 - Amendment 1**

Supplement 14 to the 04 series of amendments – Date of entry into force: 15 June 2015

#### **Uniform provisions concerning the approval of vehicles with regard to the installation of lighting and light-signalling devices**

This document is meant purely as documentation tool. The authentic and legal binding text is: ECE/TRANS/WP.29/2014/57.



**UNITED NATIONS**

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\* Former title 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.

*Paragraph 2.7.16.4.*, amend to read:

"2.7.16.4. Retro-reflecting materials approved as Class D or E or F according to Regulation No. 104 and used for other purposes in compliance with national requirements."

*Paragraph 2.7.30.1.*, amend to read:

"2.7.30.1. *"Interdependent lamp marked "Y" means a device operating as part of an interdependent lamp system. Interdependent lamps operate together when activated, have separate apparent surfaces in the direction of the reference axis and separate lamp bodies, and may have separate light source(s)."*

*Insert a new paragraph 2.7.32.*, to read:

"2.7.32. *"Lamps marked "D" means independent lamps, approved as separate devices in such a way that they are allowed to be used either independently or in an assembly of two lamps to be considered as a "single lamp"."*

*Paragraph 2.16.1.*, amend to read:

"2.16.1. *"A single lamp" means:*

- (a) A device or part of a device having one lighting or light-signalling function, one or more light source(s) and one apparent surface in the direction of the reference axis, which may be a continuous surface or composed of two or more distinct parts; or
- (b) Any assembly of two lamps marked "D", whether identical or not, having the same function; or
- (c) Any assembly of two independent retro-reflectors, whether identical or not, that have been approved separately; or
- (d) Any interdependent lamp system composed of two or three interdependent lamps marked "Y" approved together and providing the same function."

*Paragraph 2.16.2.*, amend to read:

"2.16.2. *"Two lamps" or "an even number of lamps" in the shape of a band or strip, means two lamps with a single light emitting surface, providing such a band or strip is placed symmetrically in relation to the median longitudinal plane of the vehicle."*

*Paragraph 5.7.*, amend to read:

"5.7. Grouped, combined or reciprocally incorporated or single lamps"

*Paragraph 5.7.2.*, amend to read:

"5.7.2. Single lamps"

*Paragraph 5.7.2.1.*, amend to read:

"5.7.2.1. Single lamps as defined in paragraph 2.16.1., subparagraph (a), composed of two or more distinct parts, shall be installed in such a way that:

- (a) Either the total area of the projection of the distinct parts on a plane tangent to the exterior surface of the outer lens and perpendicular to

the reference axis shall occupy not less than 60 per cent of the smallest quadrilateral circumscribing the said projection; or

- (b) The minimum distance between the facing edges of two adjacent/tangential distinct parts shall not exceed 75 mm when measured perpendicularly to the reference axis.

These requirements shall not apply to a single retro-reflector."

*Paragraph 5.7.2.2., amend to read:*

"5.7.2.2. Single lamps as defined in paragraph 2.16.1., subparagraph (b) or (c), composed of two lamps marked "D" or two independent retro reflectors, shall be installed in such a way that:

- (a) Either the projection of the apparent surfaces in the direction of the reference axis of the two lamps or retro reflectors occupies not less than 60 per cent of the smallest quadrilateral circumscribing the projections of the said apparent surfaces in the direction of the reference axis; or
- (b) The minimum distance between the facing edges of the apparent surfaces in the direction of the reference axis of two lamps or two independent retro reflectors does not exceed 75 mm when measured perpendicularly to the reference axis."

*Insert new paragraphs 5.7.2.3. and 5.7.2.4., to read:*

"5.7.2.3. Single lamps as defined in paragraph 2.16.1., subparagraph (d) shall fulfil the requirements of paragraph 5.7.2.1.

Where two or more lamps and/or two or more separate apparent surfaces are included into the same lamp body and/or have a common outer lens these shall not be considered as an interdependent lamp system.

However, a lamp in the shape of a band or strip may be part of an interdependent lamp system. 5.7.2.4. Two lamps or an even number of lamps in the shape of a band or strip shall be placed symmetrically in relation to the median longitudinal plane of the vehicle, extending on both sides to within at least 0.4 m of the extreme outer edge of the vehicle, and are not less than 0.8 m long; the illumination of such a surface shall be provided by not less than two light sources placed as close as possible to the ends; the light-emitting surface may be constituted by a number of juxtaposed elements on condition that these individual light-emitting surfaces, when projected on a transverse plane fulfil the requirements of paragraph 5.7.2.1."

*Paragraph 5.18.4., subparagraph (b), amend to read:*

"5.18.4. ...

- (b) Should the interdependent lamp system be partly mounted on the fixed component and partly mounted on a movable component, with the exception of direction indicator lamps, the interdependent lamp(s) specified by the applicant during the device approval procedure shall meet all the position, outwards geometric visibility, colorimetric and photometric requirements for those lamps, at all fixed positions of the movable component(s). The inwards geometric visibility requirement(s) is(are) deemed to be satisfied if this(these) interdependent lamp(s) still conform(s) to the photometric values

prescribed in the field of light distribution for the approval of the device, at all fixed positions of the movable component(s).

For direction indicator lamps, the interdependent lamp(s) specified by the applicant during the device approval procedure shall meet all the position, geometric visibility, photometric and colorimetric requirements at all fixed positions of the movable component(s). This does not apply where, to fulfil or complete the geometric visibility angle, additional lamps are activated when the movable component is in any fixed open position, provided that these additional lamps satisfy all the position, photometric and colorimetric requirements applicable to the direction indicator lamps installed on the movable component."

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