

Proposal for the 02 series of amendment to UN Regulation No. 73 (Lateral Protection Devices)

The text reproduced below was prepared by the experts from France. It proposes an amendment to UN Regulation No. 73 to improve the level of performance of lateral protection devices with regards to vulnerable road users' protection. The modifications to the current text of UN Regulation No. 73 are marked in bold for new characters and strikethrough for deleted characters.

I. Proposal

Text of the Regulation,

Insert new paragraphs 11.5. to 11.6., to read:

- "11.5. **As from the official date of entry into force of the 02 series of amendments, no Contracting Party applying this Regulation shall refuse to grant ECE approval under this Regulation as amended by the 02 series of amendments.**
- 11.6. **As from [XX] months after the date of entry into force of the 02 series of amendments, Contracting Parties applying this Regulation shall grant approvals only if the type of vehicle or LPD to be approved meets the requirements of this Regulation as amended by the 02 series of amendments.**
- 11.7. **As from [XX] months after the date of entry into force of the 02 series of amendments, Contracting Parties applying this Regulation shall not be obliged to accept, for the purpose of national or regional type approval, a vehicle or LPD which is not type approved under the 02 series of amendments to this Regulation."**

PART I : APPROVAL OF VEHICLES WITH REGARD TO THEIR LATERAL PROTECTION DEVICES (LPD)

Paragraph 12.10., amend to read:

- "12.10. LPD shall be essentially rigid, securely mounted (they shall not be liable to loosening due to vibration in normal use of the vehicle) and, except as regards the parts listed in paragraph 12.11., made of metal or any other suitable material. LPD shall be considered suitable if they are capable of withstanding a horizontal static force of **[3 kN]** applied perpendicularly to any part of their external surface by the centre of a ram the face of which is circular and flat, with a diameter of 220 mm ± 10 mm, and if the deflection of the device under load measured at the centre of the ram is then not more than:
- (a) **[90]** mm over the rearmost 250 mm of the device; and
 - (b) **[450]** mm over the remainder of the device.

At the request of the manufacturer, compliance with this requirement may be demonstrated by calculation. The validity of the calculation method shall be established to the satisfaction of the Technical Service."

Paragraph 14.4., amend to read:

- "14.4. LPD shall be essentially rigid and, except as regards the parts listed in paragraph 14.5., made of metal or any other suitable material. LPD shall be considered suitable if they are capable of withstanding a horizontal static force of [3 kN] applied perpendicularly to any part of their external surface by the centre of a ram the face of which is circular and flat, with a diameter of 220 mm + 10 mm, and if the deflection of the device under load measured at the centre of the ram is then not more than:
- (a) [90] mm over the rearmost 250 mm of the device; and
 - (b) [450] mm over the remainder of the device.

At the request of the manufacturer, compliance with this requirement may be demonstrated by calculation. The validity of the calculation method shall be established to the satisfaction of the Technical Service."

II. Justification

1. The analysis of international practices, road safety devices suitable for motorcyclists, other regulations in force and vehicles outside the scope of UN Regulation No. 73 brought a base to adapt and supplement the current requirements of this Regulation.
 2. These adaptations and additions are aimed at ensuring adequate protection of the vehicles and preventing a disconnected motorcycle driver from his vehicle from slipping under the axles of the vehicle.
 3. They are based on the following requirements:
 - (i) Resistance to a loading based on the design of the road devices for which the maximum allowable force on the dummy's chest is 3 kN for an impact at 60 km/h;
 - (ii) Target is to encourage a device behavior still in the material elastic area, including linear strains (keep the same protection level for low and for high loadings).
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