

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 11.7., 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 12.3., amend to read:

- "12.3. LPD may consist of a continuous flat surface, or of one or more horizontal rails, or a combination of surface and rails; when rails are used they shall be not more than **400 mm** apart and not less than:
- (a) 50 mm high in the case of vehicles of categories N₂ and O₃;
 - (b) 100 mm high and essentially flat in the case of vehicles of categories N₃ and O₄.

Combinations of surfaces and rails shall form a practically continuous LPD subject, however, to the provisions of paragraph 12.2."

Paragraph 12.8., amend to read:

"12.8. The lower edge of LPD shall be defined as follow: ~~at no point be more than: 550 mm above the ground.~~

- If $I \leq 350\text{mm}$ then the ground clearance can be 350mm max.
- If $350\text{mm} < I \leq 450\text{mm}$ then the ground clearance is I
- If $450\text{mm} < I$ then the ground clearance is 450mm max.

With point I defined as mentioned in figure 1.

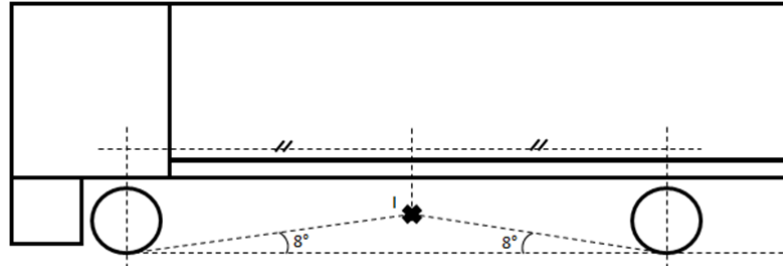


Figure 1."

Paragraphs 12.9. to 12.9.2., amend to read:

"12.9. The upper edge of LPD shall not be more than **450 mm** below that part of the structure of the vehicle, cut or contacted by a vertical plane tangential to the outer surface of the tyres, excluding any bulging close to the ground, except in the following cases:

12.9.1. Where the plane in paragraph 12.9. does not cut the structure of the vehicle, then the upper edge shall be level with the surface of the load-carrying platform, or **850 mm** from the ground, whichever is the less;

12.9.2. Where the plane in paragraph 12.9. cuts the structure of the vehicle at a level more than 1.3 m above the ground, then the upper edge of the device shall not be less than **850 mm** above the ground;"

PART II: APPROVAL OF LATERAL PROTECTION DEVICES (LPD)

Paragraph 14.2., amend to read:

"14.2. LPD may consist of a continuous flat surface, or of one or more horizontal rails, or a combination of surface and rails; when rails are used they shall be not more than **400 mm** apart and not less than:

- (a) 50 mm high in the case of vehicles of categories N_2 and O_3 ; or
- (b) 100 mm high and essentially flat in the case of vehicles of categories N_3 and O_4 .

Combinations of surfaces and rails shall form a practically continuous LPD subject, however, to the provisions of paragraph 14.1."

PART III: APPROVAL OF A VEHICLE WITH REGARD TO THE INSTALLATION OF LATERAL PROTECTION DEVICES (LPD) OF A TYPE APPROVED ACCORDING TO PART II OF THIS REGULATION

Paragraph 15.6., amend to read:

- "15.6. The lower edge of LPD shall be defined as follow: ~~at no point be more than 550 mm above the ground.~~
- If $I \leq 350$ mm then the ground clearance can be 350 mm maximum;
 - If $350 \text{ mm} < I \leq 450$ mm then the ground clearance is I;
 - If $450 \text{ mm} < I$ then the ground clearance is 450 mm maximum;
- with point I defined as mentioned in Figure 2.

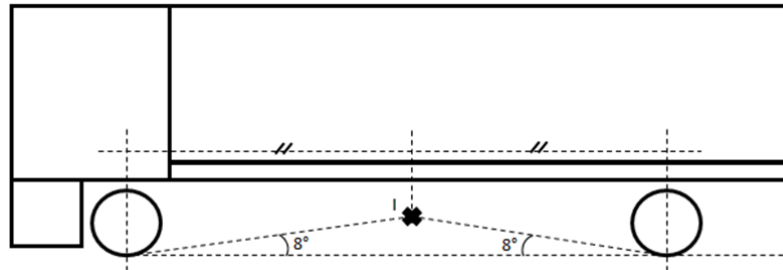


Figure 2."

Paragraphs 15.7. to 15.7.2., amend to read:

- "15.7. The upper edge of LPD shall not be more than **450 mm** below that part of the structure of the vehicle, cut or contacted by a vertical plane tangential to the outer surface of the tyres, excluding any bulging close to the ground, except in the following cases:
- 15.7.1. Where the plane in paragraph 15.7. does not cut the structure of the vehicle, then the upper edge shall be level with the surface of the load-carrying platform, or **850 mm** from the ground, whichever is the less;
- 15.7.2. Where the plane in paragraph 15.7. cuts the structure of the vehicle at a level more than 1.3 m above the ground, then the upper edge of the device shall not be less than **850 mm** above the ground;"

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 requirement:
 - (i) Geometrical criteria for the implantation of devices based on the ramp angle guaranteeing an easy road-use for the majority of vehicles and the standard dimensions of the chest of a hybrid HIII 50th pc dummy.
