Proposal for amendments to ECE/TRANS/WP.29/GRE/2013/57
Regulation No. 48

I. Proposal

Para. 6.2.6.1.3., Figure , delete and replace by:

Annex 9, paragraph 1.3.2., amend to read: (text in bold red)

1.3.2. Variation of inclination with load

... (b) In the case the values used for the downward inclination of the cut-off of the dipped-beam are in accordance with paragraph 6.2.6.1.3 the variation of the dipped-beam downward inclination as a function of the loading conditions specified within this section shall remain within the range prescribed in 6.2.6.1.3, including a tolerance of ± 0.3%
II. Justification

The tolerance bands in Figure in 6.2.6.1.3 of GRE/2013/57 must cover all parameters that influence the static pitch angle under vehicle loading conditions, and achieve common settings for the manual leveling system on all variants of a vehicle type.

From a technical and practical perspective it is not feasible for this option to reduce the tolerance range for dipped-beam initial aim on very low mounted headlamps, i.e. <600mm. Therefore the tolerance specified in paragraph 6.2.6.1.3 requires expanding as proposed in the revised diagram.

Also, it is not practical in a mass production environment to maintain the variation of the dipped-beam downward inclination as specified in paragraph Annex 9 §1.3.2.(b) A tolerance of ±0.3% is required (see illustration below).