Proposal for Supplement 19 to the 02 series of amendments to Regulation No. 7 (Front and rear position lamps, stop lamps and end-outline marker lamps)

Submitted by the experts from the Working Party “Brussels 1952”*

The text reproduced below was prepared by the expert from the Working Party “Brussels 1952” (GTB) in order to introduce, into Regulation No. 7, revised requirements concerning the inboard geometric visibility angles related to devices mounted on the rear of the vehicle. The modifications to the existing text of the Regulation are marked in bold for new or strikethrough for deleted characters.

* In accordance with the programme of work of the Inland Transport Committee for 2006–2010 (ECE/TRANS/166/Add.1, programme activity 02.4), the World Forum will develop, harmonize and update Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.
I. Proposal

*Annex 1.*, amend to read:

“...

*Minimum horizontal angles of light distribution in space*

......

*Rear position lamps*

On and above the *H plane* for all lamps,

*Under the H plane* for rear position lamps intended for *M₂*, *M₃* or *N₂* category of vehicles or end-outline marker lamps for all categories of vehicles

Under the *H plane* only for rear position lamps intended for *M₁* and *N₁* category of vehicles, and being installed at a mounting height less than 750mm above ground.

*H plane*: “*horizontal plane going through the reference centre of the lamp*”
Stop-lamps (S1 and S2)

On and above the H plane for all lamps.
Under the H plane for lamps intended for M₂, M₃ or N₂ category of vehicles

Under the H plane for lamps intended for M₁ and N₁ category of vehicles, and being installed at a mounting height less than 750mm above ground.

H plane: “horizontal plane going through the reference centre of the lamp.”

Stop-lamps (S3):...."
II. Justification

1. At the fifty-eighth session of the Working Party on Lighting and Light-Signalling (GRE), the expert from France introduced proposals to reduce the inboard geometric visibility requirements on direction indicator lamps and position lamps mounted on the front of M₁ and N₁ category vehicles. Taking into account the proposals from India, the Netherlands and the United Kingdom of Great Britain and Northern Ireland, GRE adopted the final collective amendment for Regulations Nos. 6, 7 and 48 at its sixtieth session.

2. Although priority was given to the lamps on the front of the vehicle, there is a similar problem to achieve the inboard geometric visibility requirements at the rear of the vehicle where styling trends based on better aerodynamics lead to contoured shapes making the fulfilment of the 15 down and 45 inward visibility requirement impossible. In view of this, the GTB Signal lighting Working Group has carefully considered the safety implications of extending the reduction of the inboard visibility requirements when the stop lamp, direction indicator and position lamps are mounted below 750mm. The conclusion is that the same safety principles that were debated in GRE for the front mounted devices will also apply to rear mounted lamps with the condition that the angles are only reduced below the horizontal plane.

3. No modification is proposed for the visibility angles of the end-outline marker lamps.