1958 AGREEMENT

Consideration of draft amendments to existing Regulations

Proposal for Supplement 5 to the 03 series of amendments to Regulation No. 48
(Installation of lighting and light-signalling devices)

Submitted by the Working Party on Lighting and Light-Signalling */

The text reproduced below was adopted by the Working Party on Lighting and Light-Signalling (GRE) at its sixty-second session. It is based on informal document GRE-62-38/Rev. 2, as reproduced in Annex III to the report. It is submitted to the World Forum for Harmonization of Vehicle Regulations (WP.29) and to the Administrative Committee (AC.1) for consideration (ECE/TRANS/WP.29/GRE/62, para. 12).

*/ 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 performance of vehicles. The present document is submitted in conformity with that mandate.
Paragraphs 6.21.1.2.1. to 6.21.1.2.3., amend to read:

"6.21.1.2.1. to the rear:

…

(b) O₃ and O₄ (with the exception of incomplete vehicles)

6.21.1.2.2. to the side:

6.21.1.2.2.1. partial contour marking on vehicles exceeding 6,000 mm in length (including the drawbar for trailers) of the following categories:

…

(b) O₃ and O₄ (with the exception of incomplete vehicles)

6.21.1.2.3. A line marking may be installed instead of the mandatory contour marking if the shape, structure, design or operational requirements of the vehicle make it impossible to install the mandatory contour marking."

Insert new paragraphs 6.21.1.2.4. and 6.21.1.2.5., to read:

"6.21.1.2.4. If the exterior surfaces of the bodywork are partially constituted of flexible material, this line marking shall be installed on (a) rigid part(s) of the vehicle. The remaining portion of conspicuity markings may be fitted on the flexible material. However, if the exterior surfaces of the bodywork are fully constituted of flexible material, requirements of paragraph 6.21. shall be met.

6.21.1.2.5. In cases where the manufacturer, after verification by the Technical Service, can prove to the satisfaction of the authority responsible for type approval that it is impossible, due to the operational requirements which may require special shape, structure or design of the vehicle, to comply with the requirements contained in paragraphs 6.21.2. to 6.21.7.5., then partial fulfillment of some of these requirements is acceptable. This is conditional upon a portion of the requirements being met where possible, and the application of conspicuity markings that partially meet requirements maximised on the vehicle structure. This may include fitting of additional brackets or plates containing material compliant with Regulation No. 104 where structure is available to ensure clear and uniform signalling compatible with the objective of conspicuity.

Where partial fulfillment is deemed acceptable, retro-reflective devices like retro-reflectors of class IV of Regulation No. 3 or brackets containing retro-reflecting material compliant with photometric requirements of Class C of Regulation No. 104 may substitute part of the required conspicuity markings. In this case, at least one of these retroreflective devices shall be installed per 1500 mm.

The necessary information shall be indicated in the communication form."
Paragraph 6.21.3., amend to read:

"6.21.3. Arrangement

The conspicuity markings shall be as close as practicable to horizontal and vertical, compatible with the shape, structure, design and operational requirements of the vehicle; if this is not possible, the full or partial contour markings, when fitted, shall follow as close as practicable the contour of the outer shape of the vehicle.

Furthermore, the conspicuity markings shall be spaced as evenly as possible over the horizontal dimensions of the vehicle such that the total length and/or width of the vehicle can be identified."

Paragraph 6.21.4.3.1., amend to read:

"6.21.4.3.1. Line markings and contour markings lower element(s)

As low as practicable within the range:

Minimum: not less than 250 mm above the ground.

Maximum: not more than 1,500 mm above the ground.

However, a maximum mounting height of 2,500 mm may be accepted where the shape, structure, design or operational conditions of the vehicle prevent compliance with the maximum value of 1,500 mm or, if necessary, to fulfil the requirements of paragraphs 6.21.4.1.2., 6.21.4.1.3., 6.21.4.2.2. and 6.21.4.2.3., or the horizontal positioning of the line marking or the lower element(s) of the contour marking.

The necessary justification for installation of conspicuity material higher than 1500 mm shall be indicated in the communication form."

Paragraphs 6.21.5., amend to read:

"6.21.5. Visibility

The conspicuity marking shall be considered visible, if at least 80 per cent of the illuminating surface of the installed marking is visible when viewed by an observer positioned at any point within the observation planes defined below:

Paragraph 6.21.5.1.2., amend to read:

"6.21.5.1.2. in width, by two vertical planes which form an angle of 4° outwards from the vehicle's median longitudinal plane and which pass through the intersection of the
vertical planes parallel to the vehicle's median longitudinal plane delimiting the vehicle's overall width, and the plane perpendicular to the longitudinal axis of the vehicle that delimits the end of the vehicle."

Paragraphs 6.21.5.2.1 and 6.21.5.2.2., amend to read:

"6.21.5.2.1. in height, by two horizontal planes 1.0 m and 1.5 m respectively above the ground,

6.21.5.2.2. in width, by two vertical planes which form an angle of 4° outwards from a plane perpendicular to the vehicle's longitudinal axis and which pass through the intersection of the vertical planes perpendicular to the vehicle's longitudinal axis delimiting the vehicle's overall length and the extreme outer edge of the vehicle."

Paragraphs 6.21.6.1. and 6.21.6.2., amend to read:

"6.21.6.1. To the side: As close as practicable to being parallel to the median longitudinal plane of the vehicle, compatible with the shape, structure, design and operation requirements of the vehicle; if this is not possible, it shall follow as close as practicable the contour of the outer shape of the vehicle.

6.21.6.2. To the rear: As close as practicable to being parallel to the transverse plane of the vehicle, compatible with the shape, structure, design and operation requirements of the vehicle, if this is not possible, it shall follow as close as practicable the contour of the outer shape of the vehicle."

Paragraph 6.21.7.2., amend to read:

"6.21.7.2. In the case of a partial contour marking, each upper corner shall be described by two lines at 90°, to each other and each at least 250 mm in length; if this is not possible, the marking shall follow as close as practicable the contour of the outer shape of the vehicle."
Annex 1.

Insert a new paragraph 9.24.4., to read:

"9.24.4. Exemption regarding conspicuity marking according to paragraph 6.21.1.2.5.  

Rear  
yes/no 2/ .................................................. ....  
Comments: ..................................................  
Side  
yes/no 2/ .................................................. ....  
Comments: ..................................................  

Insert new paragraphs 10.7. and 10.8., to read:

"10.7. Comments regarding conspicuity marking (according to paragraphs 6.21.1.2.5., and 6.21.4.3.1. of this Regulation)………………………........... .....................................  

10.8. Comments regarding conspicuity marking (Incomplete vehicle or Complete Vehicles according to paragraphs 6.21.1.2.1. and 6.21.1.2.1.1.):  
Incomplete vehicles: yes/no  
Complete vehicles: yes/no  
Completed vehicles: yes/no"
Annex 11, amend to read:

"Annex 11

VISIBILITY OF CONSPICUITY MARKINGS TO THE REAR, FRONT AND SIDE OF A VEHICLE

(see paragraph 6.21.5. of this Regulation)