ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

World Forum for Harmonization of Vehicle Regulations


Ninety-second session
Geneva, 16-20 April 2007
Item 3.4. of the provisional agenda

AMENDMENTS TO OTHER REGULATIONS UNDER THE 1958 AGREEMENT

Regulation No. 46 (Devices for indirect vision)

Proposal for draft amendments to Regulation No. 46

Submitted by the expert from the Netherlands

The text reproduced below was prepared by the expert from the Netherlands clarifying the determination of the required field of vision provided by a Class VI mirror on special purpose vehicles. The text is based on informal documents Nos. GRSG-91-25 and GRSG-91-38, distributed during the ninety-first session of the Working Party on General Safety Provisions (GRSG) (ECE/TRANS/WP.29/GRSG/70, para. 35). The modifications to the current text of the Regulation are marked in bold or strikethrough characters.

Note: This document is distributed to the Experts on General Safety Provisions only.
A. PROPOSAL

Paragraph 15.2.4.6.1., amend to read:

"15.2.4.6.1. The field of vision must be such that the driver can see at least a flat horizontal portion of the road, which is bounded by:

(a) one traverse vertical plane through the outermost point of the front of the vehicle-cab,
(b) one traverse vertical plane 2,000 mm in front of the vehicle, ...."

Insert a new paragraph 15.2.4.6.3., to read:

"15.2.4.6.3. For the purpose of paragraphs 15.2.4.6.1. and 15.2.4.6.2. parts permanently attached to the vehicle that are situated both above the drivers eye points and in front of the transverse vertical plane passing through the foremost surface of the vehicle's front bumper shall not be taken into account when defining the front of the vehicle."

Paragraph 15.2.4.8.2., amend to read:

"15.2.4.8.2. Exterior mirrors (Classes II, III, IV, V and VI)

In the fields of vision .... of the specified field of vision. In case of vehicles designed and constructed for special purposes where, due to its special features, it is not possible to meet this requirement, the obstruction of the required field of vision of a Class VI mirror caused by the special features may be more than 10 per cent but not more than necessary for its special function."

B. JUSTIFICATION

The required field of vision for a Class VI mirror, as specified in paragraph 15.2.4.6.1., is defined by four vertical planes. The most forward plane is situated at a distance of 2,000 mm in the front of the vehicle; a second transverse vertical plane is passing through the front of the vehicle cab.

Paragraph 15.2.4.6.2. gives a derogation for installation of a Class VI mirror when the driver can see a specified line in the front of the vehicle.

However, in special cases e.g. mobile cranes, concrete pumps etc., the front of the vehicle is situated far in front of the vehicle cabin or bumper. Even when construction parts of these vehicles are not relevant for the driver's field of vision, it would mean a required field of vision of many meters in the front of the cabin. It means that a line should be seen at a long distance when applying derogation in accordance with paragraph 15.2.4.6.2.
For this kind of vehicles, the Netherlands suggest to exclude these high-mounted parts "in front of the bumper" when determining the front of the vehicle.

Another problem that occurs when applying the Regulation for mobile cranes is the obstruction of the field of vision caused by construction parts of the lifting device. In such cases, the requirement of paragraph 15.2.4.8.2., limiting the obstruction to a maximum of 10 per cent can not be met. This can also be the case with other special purpose vehicles. Therefore, the Netherlands suggest permitting an extension of the permitted obstruction for such parts, provided that the obstruction is not more than necessary for the vehicle's special function.