



Economic and Social Council

Distr.: General
22 February 2010

Original: English
English and French only

Economic Commission for Europe

Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations

Working Party on General Safety Provisions

Ninety-eighth session

Geneva, 3–7 May 2010

Item 6 of the provisional agenda

Regulation No. 46 (Devices for indirect vision)

Proposal for amendments to Regulation No. 46

Submitted by the expert from the United Kingdom of Great Britain and Northern Ireland*

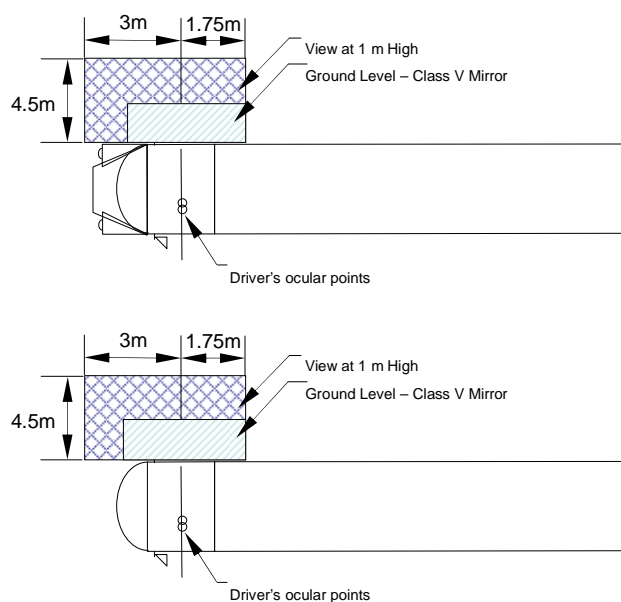
The text reproduced below was prepared by the expert from the United Kingdom of Great Britain and Northern Ireland (United Kingdom) in order to reduce the blind spot on the passenger side of N₂ and N₃ vehicles. This document follows document ECE/TRANS/WP.29/GRSG/2009/19 submitted by the expert from the United Kingdom during the ninety-seventh session of the Working Party on General Safety Provisions. The modifications to the current text of the Regulation are marked in bold or strikethrough 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.

A. Proposal

Insert new paragraphs 15.2.4.5.6. to 15.2.4.5.9. (including new Figures 8c, 8d and 8e), to read:

- “15.2.4.5.6. on the passenger side only, the field of vision shall also be such that the driver can see [part of] an object 1m high and 30cm in diameter which is outside the field defined in 15.2.4.5.1. to 15.2.4.5.4. but within the field bounded by the following vertical planes (see Figures 8c and 8d):
- 15.2.4.5.7. in the transverse direction, the parallel plane passing at a distance of 4.5 m in front of the plane mentioned in paragraph 15.2.4.5.1.
- 15.2.4.5.8. to the rear, the plane parallel to the vertical plane passing through the driver's ocular points and situated at a distance of 1.75 m behind that plane.
- 15.2.4.5.9. to the front, the plane parallel to the vertical plane passing through the driver's ocular points and situated at a distance of 3 m in front of that plane. This field of vision may be partially provided by a front mirror (see figure 8e).
- 15.2.4.5.10. In cases where the described field of vision prescribed in paragraphs 15.2.4.5.6. to 15.2.4.5.9. can be obtained without the use of devices for indirect vision then, in relation to these paragraphs, the installation of such devices is not required.



Figures 8c and 8d: Additional field of vision at 1 m high

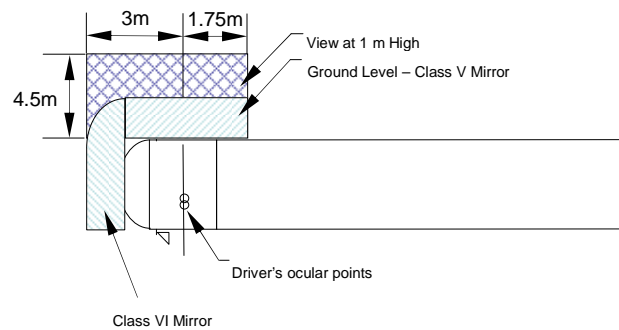


Figure 8e: Class VI mirror partially covering additional field of vision at 1 m high”

B. Justification

1. The United Kingdom would like to reduce the occurrence of side-swipe incidents when these large vehicles are changing lanes on motorways and to better enable the driver to see vulnerable road users when maneuvering or turning at junctions. The alternative would be to improve the driver's direct field of vision.
2. As discussed in informal document GRSG-95-21, research in United Kingdom has shown that there is still a significant blind spot adjacent to the passenger side of the cab, despite the requirements for improved class V devices. Depending on the size of the vehicle, there is potential for a passenger car, traveling in the centre or far side of the adjacent lane, to disappear from the driver's view from 1 m behind his eye-line and not be visible again until it is in the driver's direct view 4 m in front of his eye-line. As an average small passenger car is approximately 3 m long, this blind spot provides a high risk of sides-wipe accidents occurring. It is also of significant concern that vulnerable road users such as pedestrians or cyclists can easily remain unseen in this blind spot on the passenger side of the cab.
3. By requiring the driver to have an additional field of vision on the passenger side of the vehicle, which covers an area measuring 4.75 m (long) x 4.5 m (out from the cab), this would extend fully along the front edge of the class IV device field of vision and overlap a class VI device field of vision (if fitted). This is beyond the ability of a current mirror system but is within the capabilities of an additional camera/monitor system or other devices for indirect vision (as defined in paragraph 2.1. of Regulation No. 46).