Proposal for amendments to Regulation No. 46 (Devices for indirect vision)

Submitted by the expert from Germany *

The text reproduced below was prepared by the expert from Germany to introduce a clarification for the introduction of the extended field of vision on heavy goods vehicles that may be covered using different mirror classes. The modifications to the current text of the Regulation are marked in bold characters.

---

* In accordance with the programme of work of the Inland Transport Committee for 2010–2014 (ECE/TRANS/208, para. 106 and ECE/TRANS/2010/8, 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

Paragraph 15.2.4.5.11., amend to read:
"15.2.4.5.11. The area prescribed in … indirect vision devices (of Class IV, V, VI)."

Insert new paragraphs 15.2.4.5.11.1. to 15.2.4.5.11.3., to read:

"15.2.4.5.11.1. If an indirect vision device of Class IV is used to provide a part of the field of vision prescribed in paragraphs 15.2.4.5.6. to 15.2.4.5.9., it shall be adjusted in a way that it provides the field of vision prescribed in paragraph 15.2.4.4.2.

15.2.4.5.11.2. If an indirect vision device of Class V is used to provide a part of the field of vision prescribed in paragraphs 15.2.4.5.6. to 15.2.4.5.9., it shall be adjusted in a way that it provides the field of vision prescribed in paragraphs 15.2.4.5.1. to 15.2.4.5.4.

15.2.4.5.11.3. If an indirect vision device of Class VI is used to provide a part of the field of vision prescribed in paragraphs 15.2.4.5.6. to 15.2.4.5.9., it shall be adjusted in a way that it provides the field of vision prescribed in paragraph 15.2.4.6.1."

Insert a new paragraph 15.2.4.5.12., to read:

"15.2.4.5.12. The field of vision prescribed in paragraphs 15.2.4.5.1. to 15.2.4.5.4. may be viewed using a combination of a close-proximity exterior mirror (Class V) and a "wide-angle" exterior mirror (Class IV). However, in that case the close-proximity exterior mirror (Class V) shall provide at least 90 per cent of the field of vision prescribed in paragraphs 15.2.4.5.1 to 15.2.4.5.4. and the Class IV mirror shall be adjusted in a way that it provides the field of vision prescribed in paragraph 15.2.4.4.2.""

Paragraphs 15.2.4.5.12. and 15.2.4.5.13. (former), renumber as paragraphs 15.2.4.5.13. and 15.2.4.5.14., and amend to read:

"15.2.4.5.13. Paragraphs 15.2.4.5.6. to 15.2.4.5.12. shall not apply … after adjustment.

15.2.4.5.14. Paragraphs 15.2.4.5.6. to 15.2.4.5.12. shall not apply … M₂ or M₃."

II. Justification

1. The current provisions for the extended field of vision for heavy goods vehicles are not clear enough and would allow the re-adjustment of the mirrors during type approval to fulfil the extended field of vision. Therefore, it is proposed to clarify the situation for vehicles which have to cover the extended field of vision in a way that both fields of vision (normal and extended) are fulfilled with one mirror adjustment.

2. During the review of the new provisions of UN Regulation No. 46 on the extended field of vision, it was recognized that some small areas at the edges of the field of vision of the normal field of vision cannot be covered without modification of the complete mirror. Therefore, it is proposed in terms of practicability and cost-benefit ratio to allow a certain range of coverage (up to 10 per cent) of the former field of view as for the extended field of view by using the wide-angle-mirror (Class IV) in combination with the mirror for "close-proximity" (Class V). A loss in safety is not expected by this combination as the curvature of the Class IV mirror is less than for the Class V mirror.