Proposal for Supplement 11 to the 04 series of amendments to Regulation No. 48 (Installation of lighting and light-signalling devices)

Submitted by the expert from Japan*

The text reproduced below was prepared by the expert from Japan suppressing the mandatory fitting of sensors for the adaptive main beam and Adaptive Front-lighting System (AFS) to detect retro-reflectors. It is a revised version of a document without symbol (GRE-67-13) distributed during the sixty-seventh session of the Working Party on Lighting and Light-Signalling (GRE). The modifications to the existing text of the UN 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 2010–2014 (ECE/TRANS/208, para. 106, 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 6.1.9.3.1.1., amend to read:

"6.1.9.3.1.1. The boundaries of the minimum fields in which the sensor is able to detect light emitted or retro-reflected from other vehicles defined in paragraph 6.1.7.1. are defined by the angles indicated below."

Paragraph 6.22.9.3.1.1., amend to read:

"6.22.9.3.1.1. The boundaries of the minimum fields in which the sensor is able to detect light emitted or retro-reflected from other vehicles as defined in paragraph 6.22.7.1.2. are given by the angles indicated in paragraph 6.1.9.3.1.1. to this Regulation."

II. Justification

1. At the sixty-fourth session of GRE, the amendment below was proposed in GRE-64-23:

"6.1.7.1. The control of the main-beam headlamps may be automatic regarding their activation and deactivation, the control signals being produced by a sensor system which is capable of detecting and reacting to each of the following inputs:

(a) ambient lighting conditions;

(b) the light emitted by the front lighting devices and front light-signalling devices of oncoming vehicles or the light reflected from front retro-reflecting device of oncoming vehicles;

(c) the light emitted by the rear light-signalling of preceding vehicles or the light reflected from rear retro-reflecting devices of preceding vehicles.

......"

2. After the discussion, GRE decided to delete descriptions of retro-reflecting devices. (see ECE/TRANS/WP.29/GRE/64, para. 19). Some descriptions of retro-reflecting devices were, however, not deleted. Japan proposes to delete the descriptions and clarify that the capability of detecting and reacting of retro-reflecting devices do not need to be tested.

3. In GRE-67-13, the descriptions of retro-reflecting devices in "vehicle” definition for automatic/adaptive driving beam (ADB) in paragraphs 6.1.7.1. and 6.22.7.1.2. are deleted. However, during the sixty-seventh session, some Contracting Parties pointed out that the amendment might cause confusion. Therefore, Japan did not amend these paragraphs at that time.