Consolidated proposal for for amendments of ECE/TRANS.WP.29/GRE/2009/59 (Proposals to amend Regulation No. 48) (Encompassing GRE-62-13 (Netherlands) and GRE-62-16 (Germany))

GTB appreciates the helpful proposals for amendments submitted by the GRE experts and, in an attempt to simplify the discussion during the 62nd GRE session, has prepared this consolidation that provides a single document for review. The changes to ECE/TRANS.WP.29/GRE/2009/59 are in bold or strikethrough characters. Provisions requiring more discussion are shown in [square brackets].

A. PROPOSAL

Paragraph 6.1.7.1., amend to read:

- "6.1.7.1. The control of the main beam headlamps may be automatic with regard to its activation and deactivation, the control signals being produced by a sensor system which is capable of:
 - (a) detecting surroundings,
 - (b) detecting the position of other vehicles road-users
 - (c) reacting to the light emitted by the front lighting devices of an oncoming vehicle road-user $\underline{10}/$ and the rear lighting devices of a preceding vehicle road-user $\underline{10}/$.

However, it shall always be possible to switch the main beam ON and OFF manually."

10/ excluding pedestrians"

Paragraph 6.1.8.1., amend to read:

"6.1.8.1 If the vehicle is equipped with a system, as described in paragraph 6.1.7.2. above, visual information [ISO symbol (e.g. 2575:2004, symbol number Y.02) or to be mentioned in Regulation No. 121? Continuously displayed?] shall be provided to

its driver to indicate that the automatic operation of the main beam function is activated."

Paragraphs 6.1.9.3. to 6.1.9.4., amend to read:

- "6.1.9.3. Sensor(s) system for automatic operation of the main beam: Automatic operation of the main beam headlamps using sensor systems.
- 6.1.9.3.1. The main beam headlamps may only be activated or deactivated automatically using a sensor system that shall be capable to detect other vehicles road-users within a minimum field of $[\pm 12^{\circ} 15^{\circ}]$ horizontal and of $[\pm 5^{\circ}/-2^{\circ} \pm 10^{\circ}]$ vertical **relative to the longitudinal axis of the vehicle.**

The sensor(s) system may additionally derive data from a Global Positioning System (GPS).

- 6.1.9.3.2. [The correct reaction of the system shall be demonstrated by a test drive in clear atmosphere with a speed of 70 km/h ± 10 km/h.
 - (a) the applicant, by simulation or other means of verification accepted by the Technical Service responsible for type approval and
 - (b) a test drive in clear atmosphere */ with a speed of 70 80 km/h ±10 20 km/h.]

6.1.9.3.3. The sensor shall be able to detect on a straight flat road;

- (a) an oncoming power driven vehicle at ≥ a range extending to at least 200 m
- (b) a preceding power driven vehicle at \ge a range extending to at least 100 m.
- (c) an oncoming road-user, other than a vehicle, at \geq -a range extending to at least [100]m and
- d) a preceding road-user $\underline{10}$ /, other than a vehicle, at \geq -a range extending to at least 250]m
- [6.1.9.3.4. The main-beam headlamps may be switched on automatically when:

^{*}/ Good visibility (meteorological optical range MOR > 2, 000 m defined according to WMO, Guide to Meteorological Instruments and Methods of Observation, Sixth Edition, ISBN: 92-63-16008-2, pp 1. 9. 1/ 1. 9. 11, Geneva 1996) and clean lens."

	(b)]
[6.1.9.3.5.	In case the main-beam headlamps were automatically switched on, they shall switch off automatically when:
	(a)
	(b)]
6.1.9.3.6.	Furthermore, the main-beam headlamps shall not be switched on automatically under the following conditions:
	(a) during daytime;
	(b) in well lit areas;
	(c) in sharp curves;
	(d) when the vehicle speed is less than [70] km/h.
[6.1.9.3.7.	The system for automatic activation of the main-beam headlamps shall always be switched off when the engine (ignition) of the vehicle is switched off. The system shall remain off until deliberately switched on again.]
6.1.9.4.	[To verify that the automatic activation and deactivation of the main beam headlamps does not cause any discomfort (e.g. excessive glare) to oncoming and preceding drivers road-users the technical service shall perform a test drive which comprises any situation relevant to the system control on the basis of the

applicant's description. Obvious malfunctioning shall be contested.]"

(a)