



Economic and Social Council

Distr.: General
7 August 2013

Original: English

Economic Commission for Europe

Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations

Working Party on Lighting and Light-Signalling

Seventieth session

Geneva, 21-23 October 2013

Item 5(f) of the provisional agenda

Collective amendments – Regulations Nos. 6 and 48

Proposal for Supplement 26 to the 01 series of amendments to Regulation No. 6 (Direction indicators)

Submitted by the experts from France and Germany*

The text reproduced below was prepared by the experts from France and Germany as a follow-up on the discussion at the sixty-ninth GRE session concerning a proposal for direction indicator lamps with a variable apparent surface. The modifications to the existing text of UN Regulation No. 6 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 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 1.3., amend to read:

- "1.3. "Direction indicators of different types" means lamps which ...
...
(e) **The sequential activation of light sources, if any.**
..."

Paragraph 2.2.4., amend to read:

- "2.2.4. For a direction indicator lamp of categories 1, 1a, 1b, 2a and 2b, information regarding **activation of the signals** according to paragraphs **5.6.** and **6.2.2.** below."

Insert new paragraph 5.6., to read:

- "5.6. **For direction indicator lamps of categories 1, 1a, 1b, 2a or 2b the flash may be produced by sequential activation of their light sources if the following conditions are met:**
- (a) **Each light source, after its activation, shall remain lit until the end of the ON cycle;**
 - (b) **The sequence of activation of the light sources shall proceed in the direction from the inboard edge towards the outboard edge of the apparent surface;**
 - (c) **The variation shall finish no more than 200 ms after the beginning of the ON cycle;**
 - (d) **For the orthogonal projection in the direction of the axis of reference of a rectangle, circumscribing the apparent surface of the direction indicator and having its longer sides parallel to the H-plane, the ratio of the horizontal to the vertical sides shall not be less than 1.7.**
- Compliance to the conditions mentioned above shall be verified in flashing mode."**

Annex 2, paragraph 9., amend to read:

- "9. Concise description:
...
Variable luminous intensityyes/no 2/
Sequential activation of light sources
(see paragraph 5.6. of this Regulation)yes/no 2/"

II. Justification

1. At its sixty-ninth session GRE considered a proposal from France and Germany which was intended to insert into Regulation No. 6 provisions concerning direction indicator lamps with variable apparent surface (ECE/TRANS/WP.29/GRE/2013/13). This proposal did not receive support from the majority of experts from Contracting Parties and GRE agreed to resume consideration on this issue on the basis of a revised proposal from the two countries (ECE/TRANS/WP.29/GRE/69, para. 26.).

2. After reviewing the comments made during the sixty-ninth GRE session France and Germany agreed to establish a new proposal which would cover the concerns noted by GRE experts. A revised text of amendments to Regulation No. 6 was prepared and discussed in a meeting in Karlsruhe on 18 July 2013 which was open to all GRE experts and attended by experts from several Contracting Parties. The proposal in this document reflects the outcome of this meeting. A parallel proposal regarding amendments to Regulation No. 48 is submitted as a separate document.
3. The principal aspects of the proposal are set out below:
 - (a) As regards regulatory language, the proposal refers to the concept of sequential activation which is defined in the revised proposal for Regulation No. 48. There is a close link to the new paragraph 5.9.3. in Regulation No. 48.
 - (b) The experts in automotive lighting reviewed detailed presentations and analyses of luminous intensity over time for various activation sequences of the light sources and the resultant optical performance of the device for an observer. An improvement of safety was seen, when the time a filament bulb needs for a stabilized intensity will be used for sequential activation of the direction indicator. A performance-based approach was favoured to allow existing and future concept of luminous sources. Therefore a general requirement of 200 ms at maximum for achieving the luminous intensity in a stable stage after the beginning of the ON time is sufficient. The road user can be informed about the intended turning in the first 200 ms of the ON time.
 - (c) The editorial presentation was modified for more clarity.
4. While amending paragraph 2.2.4., a misleading reference was corrected.