Proposal for amendments to ECE/TRANS/WP.29/GRE/2016/20 on Regulation No. 6 (Direction indicators) and Regulation No. 50 (Position, stop, direction indicator lamps for mopeds and motorcycles)

The text reproduced below was prepared by the experts from FRANCE to amend ECE/TRANS/WP.29/GRE/2016/20. The modifications to the current text of Regulation No. 6 and 50 are marked in bold for new or strikethrough for deleted characters. The modifications to ECE/TRANS/WP.29/GRE/2016/20 are marked in red.

I.Proposal

A. Proposal for Supplement 27 to the 01 series of amendments to Regulation No. 6 (Direction indicators)

Paragraph 1.3., amend to read:

- "1.3. "Direction indicators of different types" means lamps which differ in such essential respects as:
 - (a) The trade name or mark;
 - (b) The characteristics of the optical system (levels of intensity, light distribution angles, category of light source, light source module, etc.);
 - (c) The category of direction indicator lamps;
 - (d) The variable intensity control, if any.;
 - (e) The sequential activation of light sources, if any.

Nevertheless, direction indicators capable of being activated in different modes (sequential or not) without any modification of the optical characteristics of the lamp do not constitute "Direction indicators of different types".

A change of the colour of the light source or the colour of any filter does not constitute a change of type."

Paragraph 5.6., amend 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 **produce a signal which** proceeds in a uniform progressive manner from inboard towards the outboard edge of the apparent surface the light emitting surface lamp when fitted on the vehicle;

- (c) It shall be one a continuous straightforward signal line not producing vertical oscillations with no repeating alternation in the vertical direction (e.g. no waves not more than one change of direction along the vertical axis). If the signal produce any visual interruption, The signal is considered continuous if the distance between the light emitting surfaces of two adjacent/tangential distinct parts of the direction indicator does not exceed [15] mm when measured perpendicularly to the reference axis. Such interruption of the signal shall not create any overlap in Y axis between the different parts of the signal from inboard towards the outboard of the vehicle. Any other lighting or signaling function shall not cover any interruption of the sequential signal;
- (d) The variation shall finish no more than 200 ms after the beginning of the ON cycle;
- (e) For the The orthogonal projection of the apparent surface of the direction indicator in the direction of the axis of reference of a rectangle, circumscribing the apparent surface of the direction indicator shall have shall be circumscribed by a rectangle on a plane normal to the axis of reference 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.
- (f) A direction indicator capable of being activated in different modes (sequential or not) shall not mixed both signal during the same period of time. If fitted, the two additional optional direction-indicator lamps shall not be activated in a different mode (sequential or not) than the one used for the two main direction-indicator lamps.

Compliance to the conditions mentioned above shall be verified in flashing mode."

B. Proposal for Supplement 19 to the original series of amendments to Regulation No. 50 (Position, stop, direction indicator lamps for mopeds and motorcycles)

Paragraph 6.8., amend to read:

- "6.8. For direction indicator lamps of categories 11, 11a, 11b, 11c or 12 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 **produce a signal which** proceeds in a uniform progressive manner from inboard towards the outboard edge of the apparent surface the light emitting surface lamp when fitted on the vehicle;;
 - (c) It shall be one a continuous straightforward signal line not producing vertical oscillations with no repeating alternation in the vertical direction (e.g. no waves not more than one change of direction along the vertical axis). If the signal produce any visual interruption, The signal is considered

continuous if the distance between the light emitting surfaces of two adjacent/tangential distinct parts of the direction indicator does not exceed [15] mm when measured perpendicularly to the reference axis. Such interruption of the signal shall not create any overlap in Y axis between the different parts of the signal from inboard towards the outboard of the vehicle. Any other lighting or signaling function shall not cover any interruption of the sequential signal;

- (d) The variation shall finish no more than 200 ms after the beginning of the ON cycle;
- (e) For the The orthogonal projection of the apparent surface of the direction indicator in the direction of the axis of reference of a rectangle, circumscribing the apparent surface of the direction indicator shall have shall be circumscribed by a rectangle on a plane normal to the axis of reference 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.
- (f) A direction indicator capable of being activated in different modes (sequential or not) shall not mixed both signal during the same period of time. If fitted, the two additional optional direction-indicator lamps shall not be activated in a different mode (sequential or not) than the one used for the two main direction-indicator lamps.

Compliance to the conditions mentioned above shall be verified in flashing mode."

II. Justification

- During the TF-SA meetings, it was obvious that the sequential direction indicators will be used as vehicle signature by the industry which will induce non uniform signal and risk of misinterpretation by the road users.
- 2. For safety reasons, such dynamic signal shall be simple and easy to understand to drivers and other road users as direction indicator signal.
- 3. In order to avoid interpretations of the existing and modified text, the modifications proposed by the French experts don't mention the terms "apparent surface" and "continuous" which will introduced discontinuities into the signal.

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