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Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations**Working Party on Lighting and Light-Signalling****Ninetieth session**

Geneva, 29 April – 3 May 2024

Item 6 (b) of the provisional agenda

Installation UN Regulations: UN Regulation No. 74 (Installation of lighting and light-signalling devices for mopeds)**Proposal for a Supplement to the 03 series of amendments to UN Regulation No. 74 and to the 01 series of amendments to the UN Regulation No. 148****Submitted by the experts from Germany***

The text reproduced below was prepared by the experts from Germany. The modifications to the existing text of the UN Regulations are marked bold for new and strikethrough for deleted character.

* In accordance with the programme of work of the Inland Transport Committee for 2024 as outlined in proposed programme budget for 2024 (A/78/6 (Sect. 20), table 20.5), the World Forum will develop, harmonize and update UN Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.



I. Proposal for a Supplement to the 03 series of amendment to UN Regulation No. 74

Paragraph 6.8.2., amend to read:

“6.8.2. Arrangement

Two front indicators, type-approved as category 1, 1a or 1b—according to the 01 or subsequent series of amendments to UN Regulation No. 6, or to the 00 or subsequent series of amendments to UN Regulation 148; or category 11, 11a, 11b or 11c according to the 00 or subsequent series of amendments to UN Regulation Nos. 50 or 148.

Two rear indicators, type-approved as category 2 according to the 01 or subsequent series of amendments to UN Regulation No. 6, or to the 00 or subsequent series of amendments to UN Regulation No. 148; or category 12 according to the 00 or subsequent series of amendments to UN Regulation Nos. 50 or 148.

Two optional front indicators of category 11 and two optional rear indicators of category 12 according to the 01 or subsequent series of amendments to UN Regulation No. 148.”

Paragraph 6.8.3.3., amend to read:

“6.8.3.3. in length: the forward distance between the centre of reference of the rear indicators and the transverse plane which constitutes the rearmost limit of the vehicle’s over-all length shall not exceed 300 mm. **This condition shall not apply to the optional rear indicators.**”

Paragraph 6.8.5., amend to read:

“6.8.5. Orientation

The front indicators **and the optional rear indicators** may move in line with the steering angle.”

Insert a new paragraph 6.8.8., to read:

“**6.8.8. The front indicator of category 11 may be grouped or combined with the optional rear indicator of category 12.¹**”

Insert a new footnote, to read:

“**¹ The minimum distance between the center of reference of the optional rear indicator installed in handelbars shall not be less than 550 mm.**”

Paragraph 6.8.8. and related sub-paragraphs, renumber to read:

“6.8.~~89~~. Electrical connections

Direction-indicator lamps shall light up independently of the other lamps. All the direction-indicator lamps on one side of a vehicle shall be switched on and off by means of one control.

6.8.~~910~~. Other requirements

The characteristics indicated below shall be measured with no other load on the electrical system except that which is required for the operation of the engine and lighting devices.

6.8.~~910~~.1. In the case of all vehicles which supply direct current to the direction indicators, the light flashing frequency shall be 90 ± 30 times per minute.

6.8.~~910~~.1.1. The flashing of the direction indicators on the same side of the vehicle may occur synchronously or alternately.

- 6.8.-910.1.2. Operation of the light-signal control shall be followed within not more than one second by the appearance of the light from any of the indicators and within not more than one-and-a-half seconds by the first extinction of the light.
- 6.8.-910.2. In the case of a vehicle which supplied alternating current to the direction indicators, where the speed of the engine is between 50 per cent and 100 per cent of the engine speed corresponding to the maximum design speed of the vehicle; the light flashing frequency shall be $90 + 30$ times per minute.
- 6.8.-910.2.1. The flashing of the direction indicators on the same side of the vehicle may occur synchronously or alternately.
- 6.8.-910.2.2. Operation of the lamp-signal control shall be followed within not more than one second by the appearance of the light from any of the indicators and within not more than one-and-one-half seconds by the first extinction of the light.
- 6.8.-910.3. In the case of a vehicle which supplies alternating current to the direction indicators, where the speed of the engine is between the idling speed indicated by the manufacturer and 50 per cent of the engine speed corresponding to the maximum speed of the vehicle, the lamp flashing frequency shall be between $90 + 30$ and $90 - 45$ times per minute;
- 6.8.-910.3.1. The flashing of the direction indicators on the same side of the vehicle may occur synchronously or alternately.
- 6.8.-910.3.2. Operation of the lamp-signal control shall be followed within not more than one second by the appearance of the light from any of the indicators and within not more than one-and-one-half seconds by the first extinction of the light.”

II. Proposal for a Supplement to the 01 series of amendment to UN Regulation No. 148

Insert a new paragraph 3.3.2.5.1.4., to read:

“3.3.2.5.1.4. For direction indicators of category 11 and 12 an indication “-” between the symbols prescribed in paragraph 3.3.2.4., indicating both categories can be activated simultaneously.”

III. Justification

1. This proposal to amend UN Regulation No. 74 (Installation of lighting and light-signalling devices for mopeds) is submitted by the expert from Germany with the aim to enable the approval of a front and rear indicator which can be activated simultaneously.
2. For reasons of safety and in order to be in line with the 02 series of amendment to UN Regulation No. 74, Germany sees the necessity to allow the installation of optional direction indicators at national level on bicycles (including vehicles with a maximum design speed not exceeding 25 km/h).
3. In some contracting parties to the 1958 Agreement category L₁ also includes bicycles with an electric auxiliary drive. Due to the general design of these vehicles, it is difficult to fit the rear direction indicators to the rear of the vehicle. At the same time, field tests show that such vehicles only achieve steering angles of maximum 3° during normal condition of use. Therefore, with appropriate consideration of road safety, it seems acceptable to install optional rear direction indicators at the end of the handlebars. In order to ensure geometric visibility, the minimum distance of 550 mm between the center of reference of the optional rear indicator installed in handelbars will become mandatory for this type of installation. In this way, recognition and visibility can be ensured.
4. The requirement contained in paragraph 6.8.3.3. of UN Regulation No. 74 does not allow the installation of a rear indicator if the distance from the centre of reference of this

device to the transvers plane, which constitutes the rearmost limit of the vehicle's overall length, exceeds 300 mm. As a consequence of this requirement the approval according to UN Regulation No. 148 of a device containing a front and rear indicator which can be activated simultaneously is not allowed. This is the reason why the requirement of paragraph 6.8.3.3. in this proposal is not mandatory for the optional rear indicators.

5. In order to differentiate a device which fulfils the requirement of a front indicator category 11 and a rear indicator category 12, but which cannot be activated simultaneously and those which can be activated simultaneously, the expert of Germany sees the need to introduce a new symbol “-“ between the symbols indicating the functions of the device and to submit the proposal to amend UN Regulation No. 148.
