Proposal for amendments to Regulation No. 53 (Installation of lighting and light-signalling devices for L3 vehicles)

Submitted by the expert from the International Motorcycle Manufacturers Association*

The text reproduced below has been submitted by the expert from the International Motorcycle Manufacturers Association (IMMA), allowing the use of different brake lamp activation methods for Powered Two Wheelers (PTWs). This amendment also introduces the concept of a high-mounted stop lamp to PTWs to improve the conspicuity of the vehicles during stopping. The modifications to the existing text of the 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 2012–2016 (ECE/TRANS/224, para. 94 and ECE/TRANS/2012/12, 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 5.14.4. amend to read:

"5.14.4. Stop lamp, S1 category device specified in Regulation No. 7 or stop lamp specified in Regulation No. 50 (paragraph 6.4.);

Insert new paragraph 5.15.4 to read:

"5.15.4. Stop lamp, S3 category device specified in Regulation No. 7 (paragraph 6.4.)."

Paragraphs 6.4. to 6.4.8. amend to read:

"6.4. Stop lamp

6.4.1. Number

One or two approved as a category S1 device according to Regulation No.7 or stop lamp according to Regulation No. 50.

Optional one approved as a category S3 device according to Regulation No. 7.

6.4.2. Arrangement

No special requirement.

6.4.3. Position

6.4.3.1. For category S1 device specified in Regulation No. 7 or stop lamp specified in Regulation No. 50

In height: not less than 250 mm nor more than 1,500 mm above the ground;

In length: at the rear of the vehicle.

6.4.3.2. For category S3 device specified in Regulation No. 7

In height: The horizontal plane tangential to the lower edge of the apparent surface shall not be less than 850 mm above the ground.

However, the horizontal plane tangential to the lower edge of the apparent surface shall be above the horizontal plane tangential to the upper edge of the apparent surface of stop lamp.

In length: at the rear of the vehicle.

6.4.4. Geometric visibility

For category S1 device specified in Regulation No. 7 or stop lamp specified in Regulation No. 50

Horizontal angle: 45 degrees to left and to right for a single lamp;

45 degrees outwards and 10 degrees inwards for each pair of lamps;

Vertical angle: 15 degrees above and below the horizontal.

The vertical angle below the horizontal may be reduced to 5 degrees, however, if the height of the lamp is less than 750 mm.

For category S3 device specified in Regulation No. 7
Horizontal angle: 10 degrees to the left and to the right of the longitudinal axis of the vehicle.

Vertical angle: 10 degrees above and 5 degrees below the horizontal.

6.4.5. Orientation
Towards the rear of the vehicle.

6.4.6. Electrical connections

All stop lamps shall light up simultaneously at any service brake application.

6.4.7. "Tell-tale"
Tell-tale optional; where fitted, this tell-tale shall be a tell-tale consisting of a non-flashing warning light which comes on in the event of the malfunctioning of the stop lamps.

6.4.8. Other requirements
None.”

II. Justification

1. This proposal clarifies the definition of "stop lamp":
   (a) it allows the use of different brake lamp activation methods for PTWs;
   (b) it introduces the concept of a high-mounted stop lamp to PTWs to improve the conspicuity of the vehicles during stopping;
   (c) it defines which category of lamps could be used as one of the two approved lamps or as the optional single lamp. The specification for the different category of lamps from Regulations Nos. 7 and 50 are also specified.