Proposal for a new supplement to the 01 series of amendments and to the 02 series of amendments to UN Regulation No. 53 (Installation of lighting and light-signalling devices for L₃ category vehicles)

Submitted by the expert from the International Motorcycle Manufacturers Association (IMMA) *

The text reproduced below was prepared by the expert from IMMA with the aim to clarify the use of direction indicators to show the status of the device for protection of a vehicle against unauthorised use. The modifications to the current text of UN Regulation No. 53 are marked in bold for new or strikethrough for deleted characters.

* In accordance with the programme of work of the Inland Transport Committee for 2018–2019 (ECE/TRANS/274, para. 123 and ECE/TRANS/2018/21/Add.1, cluster 3.1), 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

Paragraph 6.3.6., amend to read:

“6.3.6. Electrical connections

6.3.6.1. The direction indicator lamps shall switch on independently of the other lamps. All direction indicator lamps on one side of a vehicle shall be switched on and off by means of one control.

6.3.6.2. The direction indicator lamps may be switched ON to indicate the status of the device for protection of vehicles against unauthorised use.

6.3.6.3. The indication described in paragraph 6.3.6.2. shall be produced by the simultaneous operation of the direction indicator lamps and shall be in accordance to the following conditions.

In case of single indication: 3 seconds maximum

In case of continuous indication:

Duration: 5 minutes maximum
Frequency: (2 ± 1) Hz
On time: Off time ± 10 per cent

This indication shall be allowed only when the device which starts and/or stops the engine (propulsion system) is set in a position which makes it impossible for the engine (propulsion system) to operate.”

II. Justification

1. This proposal aims to clarify that direction indicator lamps may be switched ON to indicate the status of the device to prevent unauthorised use.

2. This kind of use of the direction indicator lamps is already allowed in UN Regulation No. 53 in association with UN Regulation No. 97 (for alarm system and immobilizer):

“2.5.8. "Direction indicator lamp" means …

A direction indicator lamp or lamps may also be used according to provisions of UN Regulation No. 97.”

3. This is in line with the definition in UN Regulation No. 48, which further refers to UN Regulation No. 116 (for the device for protection of vehicles against unauthorised use, including alarm system and immobilizer):

“2.7.11. "Direction-indicator lamp" means …

A direction-indicator lamp or lamps may also be used according to the provisions of UN Regulation No. 97 or No. 116.”

4. Such use of the direction indicator lamps to indicate the status of the device to prevent unauthorised use has been widely accepted in the road traffic, and this will not have any adverse effect on the traffic safety.

5. However, it is not entirely appropriate to apply UN Regulation Nos. 97 and 116 directly to vehicles of category L3, since:
(a) Both UN Regulations specify their scope as categories M₁ and N₁, and
(b) In both UN Regulations, there are some specific provisions not applicable to vehicles of category L₃. For example, there is a requirement for the detection of any door and engine bonnet as a minimum, but in most cases, vehicles of category L₃ do not have such equipment:

"18.1.1. Specific requirements

The AS shall at least detect and signal the opening of any vehicle door, engine bonnet and luggage compartment. …"

Therefore, to effectively implement the intention that UN Regulation No. 53 states in its paragraph 2.5.8., some additional wording would be helpful.

6. On the other hand, UN Regulation No. 62 (for the device to prevent unauthorised use) sets its scope on vehicles of category L. However, it is also not necessarily appropriate to refer to UN Regulation No. 62 in this context, since:

(a) UN Regulation No. 62 only stipulates provisions for the mechanical locking system and does not cover electronic devices such as alarm system and immobilizer which are covered by UN Regulation No. 97/No. 116.

(b) Nonetheless, there was a proposal submitted to the 114th session of the Working Party on General Safety (GRSG) in April 2018 whether to include electromechanical/electronic devices into UN Regulation No. 62 (informal document GRSG-114-02). This proposal is still under discussion and not yet codified into the UN Regulation. Furthermore, even by this proposal, alarm system and immobilizer are still not yet covered.

Therefore, by only adding a reference to UN Regulation No. 62 in UN Regulation No. 53, the above-mentioned purpose is not sufficiently fulfilled.

7. Considering these factors, this proposal explicitly appends the status indication of the device to prevent unauthorised use as a usage of direction indicator lamps. By this additional wording, it is clarified that such devices which are applicable to vehicles of category L₃ are fully covered from UN Regulation No. 53.

8. In parallel, this proposal defines the concrete provisions for the indication condition of direction indicator lamps (duration, frequency and on/off ratio), which is in line with the provisions for an indication of short-term dynamic process and for an optical alarm in UN Regulations Nos. 97 and 116, to limit the indication within the currently accepted manner.