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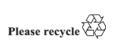
Geneva, 23-27 January 2023 Item 6(b) of the provisional agenda Advanced Driver Assistance Systems and UN Regulation No. 79: UN Regulation No. 79 (Steering equipment)

Proposal for amendments to the 03 and 04 series of amendments to UN Regulation No. 79 (steering equipment)

Submitted by the expert from the International Organization of Motor Vehicle Manufacturers*

The text reproduced below was prepared by the expert from the International Organization of Motor Vehicle Manufacturers. 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 2023 as outlined in proposed programme budget for 2023 (A/77/6 (part V sect. 20) para 20.6), 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 5.6.4.2.3., amend to read:

"5.6.4.2.3. The system shall only be activated (standby mode) after a deliberate action by the driver.

Activation by the driver shall only be possible on roads where pedestrians and cyclists are prohibited and which, by design, are equipped with a physical separation that divides the traffic moving in opposite directions and which have at least two lanes in the direction the vehicles are driving. These conditions shall be ensured by the use of at least two independent means.

In the case of a transition from a road type with a classification permitting an ACSF of Category C, to a type of road where an ACSF of Category C is not permitted, the system shall be deactivated automatically (off mode), unless a missing second lane in driving direction is the only condition not fulfilled from the above (e.g. a connector between two highways).

Notwithstanding the activation and transition criteria above and following an activation request on any type of road by a deliberate action with the same means as for ACSF of Category B1, the ACSF of Category C may switch automatically to standby mode when the system has verified that the road is of a valid type as described above."

Paragraph 5.6.4.5.2., amend to read:

- "5.6.4.5. Human Machine Interface (HMI)
- 5.6.4.5.1. Unless otherwise specified, the optical signals identified in paragraph 5.6.4.5. shall be easily distinguishable from each other (e.g. different symbol, colour, blinking, text).
- 5.6.4.5.2. When the system is in standby mode (i.e. ready to intervene), an optical signal shall be provided to the driver.

An automatic change in status as defined in paragraph 5.6.4.2.3 shall be indicated to the driver in a prominent and understandable way."

II. Justification

- 1. When the same means is used by the driver to simultaneously activate the Automatically Commanded Steering Function of Category B1 (ACSF B1) and of category C (ACSF C), both functions switch to standby mode when the vehicle enters an ACSF C eligible road. But if the road is non-eligible to ACSF C, then only the ACSF B1 is activated.
- 2. With the current text of the regulation, once the vehicle moves to an ACSF C eligible road, the driver must operate again the means to activate the ACSF C. This second deliberate action is confusing for the driver since it makes the manipulation more complex. The current wording actually discourages most drivers from using this assistance function.
- 3. The proposed wording permits the following, logical, cascade of actions:
 - (a) The driver has done a deliberate action to activate ACSF B1 and ACSF C (on a non-eligible road); then
 - (b) He drives into an eligible road, and is clearly informed thereof; then
 - (c) He initiates a lane change procedure by activating e.g. the direction indicator.

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