Transmitted by the expert from CLEPA

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PROPOSAL FOR DRAFT AMENDMENTS TO REGULATION No. 13-H

Note: The text reproduced below was prepared by the experts from CLEPA in order to insert a further amendment to Regulation No. 13-H regarding special requirements for the electric transmission of the parking braking system.

A. PROPOSAL

Paragraph 5.2.19.2., amend to read:

"5.2.19.2. In the case of an electrical failure in the control or a break in the wiring within the electric control transmission between the control and the ECU directly connected with it, excluding the energy supply, it shall remain possible to apply the parking braking system from the driver's seat and thereby be capable of holding the laden vehicle stationary on an 8 per cent up or down gradient. Alternatively, in this case, an automatic actuation of the parking brake is allowed when the vehicle is stationary, provided that the above performance is achieved and, once applied, the parking brake remains engaged independently of the status of the ignition (start) switch. In this alternative, the parking brake shall be automatically released as soon as the driver starts to set the vehicle in motion again. The engine/manual transmission or the automatic transmission (park position) may be used to achieve or assist in achieving the above performance."

Paragraph 5.2.19.2.1., amend to read:

"5.2.19.2.1. A break in the wiring within the electrical transmission, or an electrical failure in the control of the parking braking system shall be signalled to the driver by the yellow warning signal specified in paragraph 5.2.21.1.2. When caused by a break in the wiring within the electrical control transmission of the parking braking system, this yellow warning signal shall be signalled as soon as soon as the break occurs. In addition, such an electrical failure in the control or break in the wiring external to the electronic control unit(s) and excluding the energy supply, shall be signalled to the driver by flashing the red warning signal specified in paragraph 5.2.21.1.1. as long as the ignition (start) switch is in the ON (run) position including a period of not less than 10 seconds thereafter and the control is in the ON (activated) position.

However, if the parking braking system detects correct actuation of the parking brake, the flashing of the red warning signal may be suppressed and the non-flashing red warning signal for 'Parking Brake Applied' shall be used.

Where actuation of the parking brake is normally indicated by a separate ……."

B. JUSTIFICATION

This amendment to ECE Regulation No. 13-H stems from the current system provisions which prevent a simple wiring or switch contact fault from disabling the Electronic Parking Braking system by using a more complex switch. This allows not only the detection of a single failure but also provides, through suitable electronic control unit logic, the ability to generate the required command input and to apply the parking brake despite the fault. These parking braking systems also detect correct actuation of the parking brake in order to switch off the actuation element(s) and receipt of the 'actuation complete' signal is used to switch on the red 'Parking Brake Applied' signal in circumstances where the flashing red signal would be operationally incorrect and misleading to the driver.

This strategy will be more effective than the current rule in that the driver will not be given a flashing warning when correct parking performance has been achieved. The yellow signal will continue to warn the driver that an electrical fault exists.
