

Proposal for amendments to ECE/TRANS/WP.29/GRRF/2008/22
(Regulation No. 13-H regarding the illumination of the stop lamps)

A. PROPOSAL

Paragraph 5.2.22.4., amend to read (inserting also a reference to the existing footnote 6/):

"5.2.22.4. Electric regenerative braking systems **as defined in paragraph 2.21.**, which produce a retarding force upon release of the throttle pedal, ~~shall not generate a signal mentioned above.~~ **may generate the signal mentioned above at decelerations above 1.3 m/s². However, when the retardation generated is less than 0.7 m/s² the signal shall be suppressed 6/.**

6/ At the time of type approval, compliance with this requirement shall be confirmed by the vehicle manufacturer."

B. JUSTIFICATION

Electric regenerative braking systems on electric vehicles and hybrid/electric vehicles allow substantial improvement of fuel economy. There are hence some benefits in increasing the efficiency of the electric regenerative braking process.

However, the regenerative braking system may induce higher retardations than most conventional engine/gearbox associations on current vehicles can do. This is the reason why it appears opportune to allow the generation of the "signal that will be used to illuminate the stop lamps" **at decelerations above 1.3 m/s² produced by the electric regenerative braking activated by the driver.**

The value of 1.3 m/s² is considered as a reasonable trigger value sufficiently different to the extinguishing value of 0.7 m/ s², in order to avoid flickering of the stop lamps in case of slow decelerations.

The value of 0.7 m/s² is considered representative of the "natural" deceleration due to conventional engine/gearbox association (see paragraph 5.2.22.2. of Regulation No. 13-H and paragraph 5.2.1.30. of Regulation No. 13). It is consistent to propose the same value in the present proposal as it covers similar situations.

Finally, the promotion of electric regenerative braking systems facilitates the vehicle manufacturer's efforts to improve the fuel economy of the production.

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