Proposal for amendments to ECE/TRANS/WP.29/2024/154

The document ECE/TRANS/WP.29/2024/154 proposes a text for a new regulation on Acceleration Control for Pedal Error (ACPE) prepared by a dedicated informal working group under chairmanship of Germany and Japan. This informal document proposes amendments to the draft regulation text. The changes compared to document WP.29/2024/154 are indicated in bold for new and strikethrough for deleted characters.

I. Proposal for amendments to document .../WP.29/2024/154

Paragraph 5.1.2., amend to read:

"5.1.2. An accelerator control application having a velocity of at least 400 per cent per second over a travel distance of at least 70 per cent of the total travel distance of the accelerator control, and reaching a maximum position of the accelerator control of at least 90 per cent, with that velocity within the above 70 per cent travel shall be regarded as an accelerator control misapplication in the context of the paragraph 5.1.1."

Paragraph 5.2.2., amend to read:

"5.2.2. Long term deactivation

Notwithstanding paragraph 5.2.1., a vehicle may be equipped with a long term deactivation means to manually deactivate the ACPE, in that case, the system is not required to be reinstated at the initiation of each engine start (or run cycle, as relevant). However, the system shall provide information to the driver by either (a), (b) or (c):

- (a) A constant optical warning signal shall inform the driver that the ACPE has been deactivated. The yellow warning signal specified in paragraph 5.4.3. may be used for this purpose;
- (b) The driver shall be periodically informed that the ACPE has been deactivated. In this case this information shall be given for a minimum of 10 seconds or until driver confirmation.

This information shall be given at least either every 7 days or every 10 engine starts (or run cycles, as relevant), not counting when a new engine start (or run cycle, as relevant) is performed automatically, e.g. the operation of a stop/start system. This information shall be distinct from the failure warning signal specified in paragraph 5.4.3.;

or

(c) If deactivation is only for one direction of operation (forward or rearwards), as an alternative to (a) or (b), a constant optical warning shall be given when the corresponding driving direction is selected for the first time following each initiation of the powertrain. The warning shall remain at least until the driving direction is changed. in the engine start cycle (or run cycle, as relevant).

The long-term deactivation process shall be designed in such a way that deactivation shall not be possible with less than 2 deliberate actions."

Paragraph 5.2.3.1.3.1., amend to read:

"5.2.3.1.3.1. While an Automated Driving System is in control of the vehicle, or an Advanced Driver Assistance System is in active mode (e.g. ALKS or ACSF eategory A is active), the ACPE may be suspended or its control strategies adapted without indication to the driver, as long as the risks of pedal misapplication remain mitigated to the same degree as provided by ACPE. it remains ensured that the vehicle provides at least the same acceleration suppression capabilities as the ACPE. The suspension of the ACPE or the adapted control strategies shall be documented and demonstrated by the manufacturer to the Approval Authority during the inspection of the safety concept as part of the assessment to Annex 3."

II. Justification

1. Paragraph 5.1.2.:

This is a clarification of the text. The original text was ambiguous and could lead to false interpretations of the definition of a pedal misapplication.

2. Paragraph 5.2.2.:

To avoid design restriction, it should be possible to use also (a) or (b) as an alternative to (c) when there is only one direction of travel for which ACPE is deactivated.

3. Paragraph 5.2.3.1.3.1.:

Clarification of the text to avoid misunderstanding. The possibility to suspend ACPE without indication to the driver does not apply to situations where an ADAS is in control of the vehicle, but only to situations where an ADS is in control.

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