

Proposal for amendments to ECE/TRANS/WP.29/GRRF/2014/12 (Draft ESC Regulation)

This amends document ECE/TRANS/WP.29/GRRF/2014/12. The changes to the current text of the draft regulation are marked in **bold** and ~~striketrough~~ characters.

I. Proposal

Contents, delete the reference to Annexes 6 and 7, to read:

"Annexes

1 Communication

...

~~6 Special requirements to be applied to the safety aspects of complex
electronic vehicle control systems~~

~~7 Determination of the coefficient of adhesion (k)"~~

Paragraphs 2.8.1. to 2.16, re-number as 2.7.1. to 2.15.

Paragraph 5.4., amend to read:

"5.4. The effectiveness of the ESC shall not be adversely affected by magnetic or electrical fields. This shall be demonstrated by fulfilling the technical requirements and **respecting the** transitional provisions of Regulation No. 10 by applying..."

Paragraph 5.5., amend to read:

~~"5.5. The requirements of Annex 6 shall be applied to the safety aspects of the ESC system."~~

The assessment of the safety aspects of ESC, with respect to its direct effect on the braking system, shall be included in the overall safety assessment of the braking system as specified in Regulation No. 13-H requirements associated with complex electronic control systems. This is deemed to be fulfilled on the presentation of a Regulation No. 13-H certificate which includes the ESC to be approved."

Paragraph 8.2.2.2., amend to read:

"8.2.2.2. The k-test method specified in ~~Annex 7 of this Regulation~~ **Appendix 2 to Annex 6 of Regulation No. 13-H.**"

Annex 3. Paragraph 1.3., amend to read:

"1.3. The simulation shall be carried out with a validated modelling and simulation tool and using the dynamic manoeuvres of paragraph 9.9. of this Regulation under the test conditions of paragraph 8. of this Regulation.

The method by which the simulation tool is validated is given in Annex ~~2~~ **4** to this Regulation"

Annex 4, paragraph 2.5., amend to read:

"2.5. A simulator test report shall be produced, a model of which is defined in Annex 3 5 to this Regulation, and a copy attached to the vehicle approval report."

Annex 5,

Paragraph 3.3., amend to read:

"3.3. Results with the vehicle stability function switched on and off, including the motion variables referred to in Annex 2 4, paragraph 2.1. as appropriate:"

Paragraph 5., amend to read:

"5. This test has been carried out and the results reported in accordance with Annex 2 4 to Regulation No. [??], as last amended by [??]."

Annexes 6 and 7, delete

II. Justification

1. This document amends ECE/TRANS/WP.29/GRRF/2014/12 and addresses the new regulation on ESC necessary when splitting UN Regulation No. 13-H in the frame IWVTA.

2. According to the comments received at the 76th GRRF meeting by a majority of Contracting Parties, Industry amends the proposals related to UN Regulation No. 13-H split to switch them to "option 2" as described in document GRRF-76-40, Slide 3. This item was further discussed at the 78th GRRF meeting and GRRF adopted the text as proposed in document GRRF-78-50, introducing a link toward the braking regulation (UN R13H) in the independent regulations (BAS and ESC).

This in turn provokes the deletion of Annex 6 (CEL Annex) from the draft regulation, as well as the relevant numbering.

3. Paragraphs 2.7.1. to 2.15 were erroneously referred to as 2.8.1. to 2.16.

4. Amendments to paragraph 8.2.2.2. and deletion of Annex 7:

UN GTR No.8 (ESC) specifies that the road test surface should be a nominal peak braking coefficient of 0.9 when it is measured by either the relevant ASTM method or the k-test method prescribed in Annex 6, Appendix 2 of UN Regulation No. 13-H.

On the other hand, the draft of ESC Regulation (GRRF/2014/12) prescribes the road test surface condition similar to that in GTR 8. However, its k-test method prescribed in Annex 7 has a simpler calculation process (arithmetic average) than the Regulation No.13-H method (weighting with the dynamic axle load), also specified in GTR 8.

There is indeed no need that the ESC regulation deviates from the existing reference regulations (UN R13H and GTR8).

5. Annex 3 paragraph 1.3., Annex 4 paragraph 2.5. and Annex 5 paragraph 5. contained erroneous references that need to be corrected.
