

## **Proposal for amendments to the draft regulation on Electronic Stability Control (ESC)**

This document is based on document ECE/TRANS/WP.29/GRRF/2014/12 presented at the 75<sup>th</sup> session of GRRF by CLEPA and OICA and proposing the elaboration of a new regulation on Electronic Stability System (ESC) as a consequence of the splitting of UN Regulation No. 13-H for the sake of IWVTA.

### **I. Proposal**

*Annex 6*

*Paragraph 1*, amend to read:

"1. General

This annex defines the special requirements for documentation, fault strategy and verification with respect to the safety aspects of Complex Electronic Vehicle Control Systems (definition 2.3. below) as far as **the braking system** ~~this Regulation~~ is concerned.

This annex may also be called, by special paragraphs in this Regulation, for safety related functions which are controlled by electronic system(s).

This annex does not specify the performance criteria for "The System" but covers the methodology applied to the design process and the information which must be disclosed to the Technical Service, for type approval purposes.

This information shall show that "The System" respects, under normal and fault conditions, **the performance of the braking system** ~~all the appropriate performance requirements specified elsewhere in this Regulation.~~

*Paragraph 3.3.4.*, amend to read:

"3.3.4. Signal flow and priorities

There shall be a clear correspondence between these transmission links and the signals carried between units.

Priorities of signals on multiplexed data paths shall be stated, wherever priority may be an issue affecting performance or safety as far as **the braking system** ~~this Regulation~~ is concerned."

*Paragraph 3.3.5.1.*, amend to read:

"3.3.5.1. The identification defines the hardware and software version and, where the latter changes such as to alter the function of the unit as far as **the braking system** ~~this Regulation~~ is concerned, this identification shall also be changed."

*Paragraph 3.4.1.*, amend to read:

"3.4.1. The manufacturer shall provide a statement which affirms that the strategy chosen to achieve "The System" objectives will not, under non-fault conditions, prejudice the safe operation of **the braking system** ~~systems which are subject to the prescriptions of this Regulation.~~"

## **II. Justification**

1. In Annex 8 of UN Regulation No. 13-H, the wording "this regulation" refers to the specifications related to the core of the regulation i.e. the braking system.
  2. When extracting the specifications for BAS or ESC into a new, separate regulation, the meaning of the wording "this regulation" unintentionally drifts to BAS or ESC specifications because they are addressed in the core of the regulation. For extracting the BAS/ESC specifications from UN Regulation No. 13-H without affecting the meaning, of the references to the braking regulation, there is a need to amend the wording accordingly.
  3. While a simple reference to UN Regulation No. 13-H might correctly address the problem, it is believed, in the context of IWVTA, that a more comprehensive reference to "the braking system", will better meet the target. It may happen indeed that a Contracting Party applying the future UN Regulation No. 0 does not apply UN Regulation No. 13-H, rather an equivalent national regulation on the braking system.
  4. Should the wording not be adapted, the reference to the braking system, originally prescribed per the paragraphs including the wording "this Regulation", would not be considered, and a wrong interpretation of the 4<sup>th</sup> section of paragraph 1 might lead the Approval Authority to require that the manufacturers equip their vehicles with a second, redundant, function (ESC or BAS).
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