

Proposal for amendments to GRRF-85-01 of UN Regulation No. 79 (Steering equipment) - Requirements of Annex 6

I. Proposal

Insert a new paragraph (in red below) if paragraph 1., 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 (paragraph 2.34. below) as far as this Regulation is concerned.

This annex ~~may~~ **shall** also **apply** ~~be called, by special paragraphs in this Regulation, for~~ to safety related functions identified in this Regulation which are controlled by electronic system(s) (**paragraph 2.3.**) **as far as this Regulation is concerned.**

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 non-~~ **non-fault and fault** conditions, all the appropriate performance requirements specified elsewhere in this Regulation **and that it is designed to operate in such a way that it does not induce safety critical risks.**

Paragraph 4.1.1., amend to read (delete text in red bold below):

"4.1.1. Verification of the function of "The System"

~~As the means of establishing the normal operational levels, verification of the performance of the vehicle system shall be conducted against the manufacturer's basic benchmark specification unless this is subject to a specified performance test as part of the approval procedure of this or another Regulation.~~

The Technical Service shall verify "The System" under non-fault conditions by testing ~~at least 10%~~ of the functions declared by the manufacturer in paragraph 3.2. For complex electronic systems, these tests shall include scenarios whereby a declared function is overridden.

II. Justification

1. In paragraph 1 the current Annex has the inserted paragraph. It is a correction for the editorial error for the informal document GRRF-85-01.
 2. For amended paragraph 4.1.1. of informal document GRRF-85-01 it seems that this amendment has changed its meanings from current status.
 - (a) This provision is important to understand the system for the Technical Service, Japanese technical service already verify each declared function by the manufacturer according to current 4.1.1. in UN Regulation No. 79.
 - (b) By the wording "at least 10%", the number of test may significant decrease comparing with the current status. The number of test according to para. 4.1.1. should be decided by the Technical service considering which appropriate test is.
 - (c) Therefore "at least 10%" should be erased in the sentence.
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