Informal Document No. **GRRF-67-21** (67th GRRF, 2 - 5 February 2010, agenda item 3(e))

Proposal for amendments to Regulations Nos. 13, 13-H and gtr No. 8

ESC malfunction tell-tale

The text reproduced below was prepared by the expert from the International Organization of Motor Vehicle Manufacturers (OICA) in order to reach full harmonization between gtr No. 8 and UNECE Regulations No. 13 and No. 13-H. The modifications to the existing text of the Regulations are marked in bold characters or as strikethrough.

A. PROPOSAL

Gtr No. 8

Paragraphs 5.4. to 5.4.3., amend to read:

- "5.4 <u>ESC Malfunction Detection</u>. The vehicle shall be equipped with a tell-tale that provides a warning to the driver of the occurrence of any malfunction that affects the generation or transmission of control or response signals in the vehicle's electronic stability control system. The ESC malfunction tell-tale:
 - (a) Shall be displayed in direct and..

• • •

(i) May also be used to indicate the malfunction of related systems/functions, including traction control, trailer stability assist, corner brake control, and other similar functions that use throttle and/or individual torque control to operate and share common components with ESC.

. . . .

5.4.3. The manufacturer may use the ESC malfunction tell-tale in a flashing mode to indicate ESC operation intervention and/or the intervention of ESC-related systems (as listed in paragraph 5.4 (i))."

Regulation No. 13-H

Paragraphs 3.4.1. to 3.4.4., amend to read:

- "3.4.1. The ESC malfunction tell-tale:
- 3.4.1.1. Shall be displayed in direct and clear view of the driver, while in the driver's designated ...

. . .

3.4.1.9. May also be used to indicate the malfunction of related systems/functions, including traction control, trailer stability assist, corner brake control, and other similar functions that use throttle and/or individual torque control to operate and share common components with ESC.

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. . .

3.4.4. The manufacturer may use the ESC malfunction tell-tale in a flashing mode to indicate ESC operation intervention and/or the intervention of ESC-related systems (as listed in paragraph 3.4.1.9.)."

Regulation No. 13

Annex 21, Paragraph 2.1.4., amend to read:

"2.1.4. Interventions of the vehicle stability function shall be indicated to the driver by a flashing optical warning signal. The indication shall be present as long as the vehicle stability function is in an intervention mode. The yellow warning signal specified in paragraph 2.1.5. below may be used for this purpose.

Additionally, interventions by systems related to the vehicle stability function may also be indicated to the driver by this flashing optical warning signal.

Interventions of the vehicle stability function used in any learning process ..."

B. JUSTIFICATION

The proposals above aim at improving the harmonization of the requirements to indicate the intervention of ESC-related systems in the main braking regulations, i.e. FMVSS 126, GTR 8, UNECE R13H and R13.

FMVSS 126 indeed is the clearest regulation in this respect because it indicates in paragraph S5.3.10 that manufacturers "...may use the ESC malfunction telltale in a flashing mode to indicate operation of these ESC-related systems".

GTR 8 does state in its preamble paragraphs 126 and 127 that the manufacturers may use the ESC malfunction tell-tale "to indicate interventions by additional related systems at their discretion". OICA and CLEPA believe that amending the text of the regulation (part B) paragraph 5.4.3, accordingly is consistent with the preamble. In addition, we believe it is appropriate to change the wording "ESC operation" to "ESC intervention", because the ESC will only **intervene when it is necessary**, for example by selective braking in order to assure the dynamic stability of the vehicle, whereas the ESC is **always operative** and monitors the current vehicle parameters even without a loss of stability.

Similarly, an alignment of UNECE R13H is proposed both to allow the possibility of using the ESC malfunction tell-tale to indicate interventions by ESC-related systems, and for the editorial improvement.

Regarding UNECE R13 (HCV braking), an alignment with the other braking regulations above is proposed on the basis of document GRRF/2009/35, which was adopted at the last GRRF session (66th, September 2009) in order to clarify the EVSC Human Machine Interface.
