

## Proposal for changes to Regulation No. 121 (Identification of controls, tell-tales and indicators)

Changes to the current text of the Regulation are indicated in bold and strike-through characters.

### I. Proposal

Add a new paragraph 12., to read:



**“12. Transitional provisions**

**12.1. As from the official date of entry into force of the Supplement 6 to the original text of this Regulation, no Contracting Party applying this Regulation shall refuse national or regional type approval of a vehicle type approved to the Supplement 6 to the original text of this Regulation.**

**12.2. Contracting Parties applying this Regulation shall not refuse to grant extensions of approval according to this Regulation as amended by Supplement 1, Supplement 2, Supplement 3 and Supplement 5 to the original text of this Regulation.**

**12.3. Until 24 months after the date of entry into force of the Supplement 6 to the original text of this Regulation, no Contracting Party applying this Regulation shall refuse national or regional type approval of a vehicle type approved to the original text of this Regulation.”**

Table 1, amend to read:

| No. | Column 1   | Column 2   | Column 3        | Column 4            | Column 5  |
|-----|--|--|-----------------|---------------------|---|
|     | <b>ITEM</b>  | <b>SYMBOL <u>2/</u></b>  | <b>FUNCTION</b> | <b>ILLUMINATION</b> | <b>COLOUR</b>   |
| ... | ...  | ...  | ...             | ...                 | ...   |
| 43. | Electronic stability control<br>( <del>including malfunction</del> ) | <br>or ESC<br>17/         | Tell-tale       | Yes                 | <del>see Regs 13-H and 13 as appropriate</del><br><b>Yellow</b> |
| 44. | Electronic stability control system “OFF”                            | <br>or ESC OFF<br>17/ 20/ | Control         | Yes                 |   |
|     |  |  | Tell-tale       | Yes                 | <b>Yellow</b>   |

Footnote N°17, for reference (remains unchanged):

“17/ The vehicle outline shown is not intended to be restrictive, but is the recommended outline. Alternative vehicle outlines may be used in order to better represent the actual outline of a given vehicle.”

Add a new footnote N°20, to read:

“20/ The supplementary letter(s) "OFF" may be positioned on or adjacent to the outline of the symbol of item No. 43. The font of the letters ‘OFF’ or ‘ESC OFF’ is not intended to be restrictive.”

## II. Justification

GRRF tasked OICA to present a draft proposal in order to transfer the ESC control and tell-tale requirements from Regulations No. 13 and 13H to Regulation No. 121.

The same principle has been applied by the United States of America who transposed the functional requirements of the GTR N°8 into regulation FMVSS 126 and the requirements on controls and telltales into regulation FMVSS 101.

In addition, the present proposal harmonises the ESC control and telltale requirements for vehicles with braking systems type approved according to Regulation No. 13 or 13H.

The text of new footnote 20 to Table 1 is derived from gtr N°8 and ISO 2575:2010, paragraph 4.8.

Concerning vehicles with a braking system type approval according to Regulation No. 13H, the transfer of the requirements into Regulation No. 121 is neutral. However, for vehicles type approved according to Regulation No. 13, the amendments to Regulation No. 121 add new requirements as Regulation N°13 currently does not require any ESC OFF indication.

Transitional provisions, as defined under the new paragraph 12, are necessary in Regulation No. 121 in particular for vehicles to be approved to Regulation N°13 (HCVs). While the sensors and tell-tale wiring do exist on vehicles in current production, this additional symbol for “ESC-OFF” implies that the logic signal must be now brought to two different lighting devices, hence bringing a revision of the manufacturer’s HMI, some changes in the ECU and the necessary subsequent validations to ensure reliability.

As this new proposed symbol is primarily intended to harmonise ESC control and tell-tale requirements, and in view of the industrial efforts for re-designing the vehicles currently in production or whose design is not compatible with the new requirements, it appears reasonable to limit the upgrade to the new types of vehicle. Especially the vehicles in current production, type approved to the 11 series of amendments to Regulation N°13 and not equipped with the new proposed tell-tale, should be allowed to still get approval to the preceding supplements to the Regulation N°121, until the end of their production. This is the reason why the new paragraph 12.2 is proposed (reference to Supplement 4 was voluntarily omitted as considered not relevant).

Item 43, column 5 (colour) is now suggested to be indicated in the Regulation N°121 in yellow only, as a harmonisation with the requirements of the braking regulations, where yellow only is permitted (Regulation N°13H, paragraph 3.4.1.4. of Annex 9 and Regulation N°13, paragraphs 2.1.1.(d)(iii), 2.1.4. and 2.1.5 of Annex 21).

Item 44 is added to the table in order to cover the case of vehicle stability disabling as foreseen in the braking regulations. This addresses both the ESC control, whose colour is not regulated, and its tell-tale, whose colour is required to be yellow in the current text of the braking regulations. The symbol itself can have other shapes for covering e.g. the case of the HCVs, and this is the reason why a reference to Footnote N°17 was added.

The addition of a new footnote N°20 is considered necessary for permitting best consistency of the symbol outline with the manufacturer’s HMI principles and then avoiding driver’s misinterpretations. The proposal is in line with the current wording of the gtr N°8 (ESC), leading to best harmonisation, and with the text proposed for the driving beam headlamps tell-tale (document GRSG/2011/06). Similarly to the symbol itself, the font should not be limited to the font currently prescribed in the United Nations documentation system.

The deletion of several sub-paragraphs in Regulations No. 13H and N°13 is necessary in order to prevent double-requirements in R13H and R121. The following table recalls this transfer of requirements:

|                        | <b><u>Relevant paragraphs in Regulation N°13, Annex 21</u></b> | <b><u>Deleted paragraph in Regulation No. 13H, Annex 9</u></b> | <b><u>Equivalent paragraph in Regulation No. 121</u></b> |
|------------------------|--|--|--|
| <b>ESC malfunction</b> | 2.1.5.   | 3.4.1.2.   | 5.2.6.   |
|                        |  | 3.4.1.3. and 3.4.1.4.  | Table 1  |
|                        | 2.1.4. (ESC intervention)                                      | 3.4.1.5  | 5.1.2. and 5.3.6.  |
| <b>ESC OFF</b>         | 2.1.4. (ESC intervention)                                      | 3.6.2.1.   | 5.6.2.   |
|                        | 2.1.1.(d)(iii) and 2.1.5.                                      | 3.6.2.2.   | 5.2.6  |
|                        | 2.1.1.(d)(iii)   | 3.6.2.3. and 3.6.2.4.  | Table 1  |
|                        | 2.1.1.(d)(iii) and 2.1.5.                                      | 3.6.2.5.   | 5.1.2. and 5.3.6.  |