Proposal for amendments to Regulation No. 121 (Identification of controls)

The text reproduced below was prepared by the experts from the International Organization of Motor Vehicle Manufacturers (OICA) to adapt the provisions for multi-function display to the progress of technology. The modifications to the current text of the Regulation are marked in bold or strikethrough characters.

I. Proposal

Paragraph 5.5.1.2., amend to read (addition of two sub-paragraphs):

- "5.5.1.2. When the underlying condition exists for actuation of two or more tell-tales, the information shall be either
- 5.5.1.2.1. repeated automatically in sequence, or
- 5.5.1.2.2. indicated by visible means and capable of being selected for viewing by the driver under the conditions of paragraph 5.6.2.,
- 5.5.1.2.3. indicating the most safety-relevant failure, or
- 5.5.1.2.4. when two or more functions are integrated as a single function, or when functions are related to each other such as to be considered as a single function, the information relative to that single function may be indicated by one tell-tale."

Paragraphs 5.5.1.3. to 5.5.1.6., amend to read:

- "5.5.1.3. The tell-tales for the brake system malfunction, **when required to be red**, headlamp driving beam, direction indicator and **driver** seat safety belt shall not be shown in the same common space.
- 5.5.1.4. If **the** tell-tale for the brake system malfunction, **when required to be red,** headlamp driving beam, direction indicator and **driver** seat **safety** belt is displayed in a common space it must displace any other symbol in such common space if the underlying condition exists for its activation.
- 5.5.1.5. With the exception of tell-tales for the brake system malfunction, when required to be red, headlamp driving beam, direction indicator and driver seat safety belt, the information may be cancellable automatically or by the driver.
- 5.5.1.5.1 This requirement does not preclude replacing the display of errors by the display of more severe errors.
- 5.5.1.6. Unless prescribed in a specific Regulation, the colour requirements regarding telltales do not apply when tell-tales appear in a common space."

II. Justification

- The progress in the display technology is such that some paragraphs currently in the regulation become inappropriate because they were obviously written with obsolete technology in mind, whilst new technologies nowadays permit improved multi-function display.
- 2. With the use of updated LCD screens ("TFT" "Thin-Film Transistor" technology) the technical restrictions of conventional tell-tales like their lack of flexibility in terms of position, symbol and colour are no longer relevant.
- 3. On the other hand, new regulations and new vehicle functions (e.g. Automatic Frontlighting System) require increasing driver information. Yet the display area can't be indefinitely extended and the relevant information must still be presented in an easily visible, recognizable and clear manner for the driver in all driving conditions.
- 4. Current provisions regarding multi-function displays allow already today to display telltales in a common space. Yet these provisions should be updated to allow also the replacement of tell-tales.
- 5. There are two main areas where the replacement of tell-tales can be useful to prevent unnecessary driver confusion:
 - (a) Information to be displayed when severe errors must replace less severe errors.

As an example, it is already allowed to replace the yellow "Brake lining wearout condition" (item 37) tell-tale by the red "Brake system malfunction" (item 25). Moreover this replacement can be used for advanced driver assistance systems or safety systems to indicate that different assistance levels are no longer available.

- (b) Information to be displayed when high-level or integrated functions must replace related or lower-level functions. As an example, it should be allowed to replace the side marker lamps tell-tale (item 19) by the dipped beam headlamps tell-tale (item 2) when the dipped beam headlamps are activated. Moreover this tell-tale should itself be replaced by the high beam headlamps tell-tale (item 3) when the high beam headlamps are activated.
- 6. Paragraphs 5.5.1.3 to 5.5.1.5. need also to be updated because they currently prohibit the use, in a same common space, of a yellow tell-tale for indicating an electrical brake failure. This is also requested for the sake of global harmonization because FMVSS 101 and EU Directive 78/316/EEC (Annex II) only regulate red tell-tales. Similarly, some safety belt reminders are voluntarily fitted to vehicles e.g. for the passengers, whilst the restrictions for their location within a common space only aims the **driver's** safety belt reminder.





Finally, an editorial amendment is proposed, replacing the wording "seat belt" by "safety belt", which makes the text of the regulation more consistent.

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