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I. Amendment proposal EC/TRANS/WP.29/GRRF/2015/41 and GRRF/2015/40

Insert new paragraph 5.1.14., to read:

- "5.1.14. Vehicles that are equipped with an antilock brake system may be fitted with a single means (e.g. switch, lever, button, menu option) to temporarily reduce or disable the antilock brake system function, which is only permitted under the following conditions:**
- (a) the vehicle is stationary; and**
 - (b) the temporary reduction or disablement of the antilock brake system function shall be the result of a deliberate action by the rider according to one of the following methods:**
 - (i) simultaneous actuation of the antilock brake system on/off switch and the front, rear or combined brake system actuator (brake lever or pedal); or**
 - (ii) the actuation of the antilock brake system on/off switch for a minimum of 2 seconds; or**
 - (iii) the progression through at least 2 successive steps or levels of actuation of a rotating knob, a touch panel switch or a menu option selector;**
 - (c) if the motorcycle is equipped with a riding mode selector switch feature allowing an "off-road", "all terrain mode" or any other riding mode electronically preparing the vehicle for off-road use, temporarily reduction or disabling of the antilock brake system function shall only be allowed in this particular riding mode; and**
 - (d) the antilock brake system function shall be automatically activated after each start-up of the vehicle, except for restarts after unintentional stalling of the engine; and**
 - (e) the temporary reduction or disablement of the antilock brake system function shall be indicated by the activation of symbol B.18 as specified in ISO 2575:2010/Amd1:2011 (ISO 7000-2623) or any other equivalent unequivocal indication of the disabled antilock brake system state. Alternatively the warning lamp referred to in paragraph 3.1.13. shall be continuously activated (i.e. lit or flashing); and**

(f) if the antilock brake system is switched-off permanently an anti-lock brake system off-state bit shall be set to 1 and frequently (1 Hz) be stored in non-volatile memory on-board of the vehicle within the active key cycle. Only the last occurring bit state information (0 or 1) before engine stall or power-off may be stored and made available as single bit snapshot information. This binary state information shall be readable through a reading method made available free of charge and within the shortest possible delays by the vehicle manufacturer to the certification authority; and

(g) prohibition of any software and/or hardware defeat device compromising or allowing to circumnavigate one or more of the requirements set out in points (a) to (f); and

(h) simple and instantaneous re-enablement of a functional stage of the antilock brake system under all operation modes and driving conditions shall be warranted and shall be demonstrated to the satisfaction of the certification authority (e.g. simple press of a button)."

II. IMMA proposals amending EC/TRANS/WP.29/GRRF/2015/41 and GRRF/2015/40

1. Need to clarify and improve Point b)

Justification

- a. The definition of "temporary reduction" needs to be clarified.

2. Delete point c).

Justification:

- a. In terms of safety, point c) does not bring any added value in comparison with the other sections.
- b. There remains a lack of clarity regarding the wording: "*off-road*", "*all terrain mode*" or '*any other riding mode electronically preparing the vehicle for off-road use*'

3. Delete point f).

Justification:

- a. There is a practical problem to ensure appropriate 'keep live' conditions. How to avoid unintended overwriting or erasing by a new key sequence after an accident?
- b. There is also no guarantee that data will be available after a serious crash as, e.g., the ECU may be damaged.
- c. There is no other precedent so far in type approval legislation (EC/ECE) (e.g. no such requirement for ESC off). The UNECE Regulation No. 78 and UN GTR No. 3 are specifying vehicle braking performance requirements rather than accident research requirements.

4. Replace point (h) with:

“(h) ~~simple and~~ instantaneous re-enablement of a functional stage **which complies with anti-lock brake system approval requirements** of the antilock brake system under all operation modes ~~and driving conditions~~ shall be warranted and shall be demonstrated to the satisfaction of the certification authority (e.g. simple press of a button).”

Justification

- a. More technology neutral wording.
 - b. It is technically not feasible to warrant the possibility of the instantaneous reactivation under all driving conditions, especially not when the ABS function had been deactivated completely.
 - c. The ABS system requires a certain driving condition of the vehicle in order to perform a system verification/calibration procedure before starting up the ABS function.
5. The proposed changes are significant. Transitional provisions will be needed given the necessary lead time for adaptation.
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