

Proposal for amendments to ECE/TRANS/WP.29/GRRF/2017/24**Proposal for amendments to UN Regulation No. 131
(Advanced Emergency Braking Systems (AEBS))**

The text reproduced below was prepared by the expert from Germany to adapt the requirements for the deactivation of the Advanced Emergency Braking Systems (AEBS) function. The modifications to the existing text of the Regulation are marked in bold for new or strikethrough for deleted characters. The amendments to the text proposed by OICA is noted as follow:

Proposal from OICA

	Black text	Purple text
Normal	R131 original text	R131 original text
Bold	Proposed added text to R131 by Germany in GRRF/2017/24	Proposed added text to R131 by OICA
Strikethrough Normal	Proposed deleted text from R131 by D in GRRF/2017/24	Proposed deleted text from R131 by OICA
Strikethrough bold	NA	Proposed deleted text from GRRF/2017/24 by OICA

I. Proposal

Paragraph 5.4., amend to read

- "5.4. When a vehicle is equipped with a means to deactivate the AEBS function, the following conditions shall apply ~~as appropriate~~:
- 5.4.1. The AEBS function shall be automatically **reactivated** ~~reinstated~~ at the initiation of each new ignition cycle.
- 5.4.2. After a manual deactivation, the system shall be automatically reactivated if the vehicle is driven above [70] km/h for more than 15 minutes in a row.**
- ~~5.4.2. The AEBS function shall be automatically and instantaneously reactivated if the vehicle speed exceeds 30 km/h.~~
- ~~5.4.3. The deactivation of the AEBS function shall not be possible at vehicle speeds greater than 30 km/h.~~
- 5.4.3. 5.4.4.** A constant optical warning signal shall inform the driver that the AEBS function has been deactivated. The yellow warning signal specified in paragraph 5.5.4. below may be used for this purpose."

Insert new paragraph 6.7.2., to read:

- ~~6.7.1.~~ For vehicles equipped with means to deactivate the AEBS,
- 6.7.1.** turn the ignition (start) switch to the "on" (run) position and deactivate the AEBS. The warning signal mentioned in paragraph ~~5.4.3. 5.4.2.~~ above shall be activated. Turn the ignition (start) switch to the "off" position. Again, turn the ignition (start) switch to the "on" (run) position and verify that the previously activated warning signal is not reactivated, thereby indicating that the AEBS has been **reactivated** ~~reinstated~~ as specified in paragraph 5.4.1. above. If the ignition system is activated by means of a "key", the above requirement shall be fulfilled without removing the key.

6.7.2. ~~For vehicles equipped with means to deactivate the AEBS, Turn the ignition (start) switch to the "off" position. Again, turn the ignition (start) switch to the "on" (run) position and deactivate the AEBS. The warning signal mentioned in paragraph 5.4.3. above shall be activated. Drive the vehicle at a speed above [70] km/h for more than 15 minutes. Verify that the previously activated warning signal is deactivated after latest 15 minutes, thereby indicating that the AEBS has been automatically reactivated.~~

~~The warning signal mentioned in paragraph 5.4.2. above shall be activated. Accelerate the vehicle to a vehicle speed of greater than 30 km/h. The test is passed if the AEBS function is automatically reactivated and the warning signal mentioned in paragraph 5.4.2. above is automatically deactivated when the vehicle speed of 30 km/h is exceeded.~~

~~**6.7.3.** For vehicles equipped with means to deactivate the AEBS, turn the ignition (start) switch to the "on" (run) position. Drive the vehicle at a vehicle speed greater than 30 km/h and try to deactivate the AEBS function. The test is passed if the AEBS function is not deactivated after the deliberate action to deactivate the AEBS function has been carried out."~~

[Proposal for Transitional Provisions – *forthcoming*]

II. Justification of the OICA proposals

- Paragraph 5.4.2 (new):

The automatic AEBS reactivation above [70km/h] is an improvement compared to the current text of the regulation that achieves in a much better way the intention of UN R131 regulation, which is "*to establish uniform provisions for AEBS fitted to motor vehicles [...] primarily used under monotonous highway driving conditions.*".

At the same time, the [70] km/h threshold preserves a good compromise with specific use cases / usages, by making unlikely that the system provoke inadequate warnings on rural roads (see document GRRF-84-21).

Additionally, the proposed wording specifies that the re-activation of the AEBS shall be done automatically when the vehicle is driven in highway conditions for more than 15 minutes in a row. While this value preserves specific use cases where inadequate warnings may occur (e.g. while driving in a long construction area), the proposal still guarantees automatic reactivation at "cruise speed" on highway.

- Paragraph 6.7.1: Adaptation of the structure of the text and update of the references following the re-numbering of the paragraphs in section 5.
- Paragraph 6.7.2: the proposed approach in paragraph 5.4.2 implies a new pass/fail criterion at a threshold of 70 km/h and a new test procedure, reflecting the new requirement of paragraph 5.4.2. (new).