

Proposals from the Informal Working Group on AEBS

Series and Supplement amendment of UN Regulation
GRVA-2019-16 (New series)
GRVA-2019-17 (Supplement)

2nd GRVA in January 2019:

Working document (GRVA-2019-05) → WP29 in June 2019 (WP29-2019-61)

Requirement of 2nd step of Car to Pedestrian (C2P)

Informal document (GRVA-02-22)



IWG meetings 8th meeting in Tokyo (15-16 May 2019)
 9th meeting in Brussels (3-4 July 2019)



We proposed two documents in this GRVA

Requirement of 2nd step of C2P → **4th GRVA (GRVA-2019-16)**

Informal document (GRVA-02-22) → **4th GRVA (GRVA-2019-17)**

This presentation show the proposal for Series and Supplement amendment of Regulation (GRVA-2019-16 and 17)

Series: Upgrade the requirement of Car to Pedestrian based on the discussion of 2nd GRVA

Supplement: Based on the proposal of OICA (GRVA-02-22)

Documents:

Series: GRVA-2019-16

Supplement: GRVA-2019-17 and GRVA-04-11(OICA)

Supplement amendment of regulation

(GRVA-2019-17)

Informal Working Group on AEBS for Light Vehicles

Supplement amendment of regulation

- As requested by GRVA, the IWG on AEBS considered clarifications of the original version of the regulation proposed by OICA in GRVA-02-22.
- This document is the outcome of this discussion and it is proposed to include these changes as a supplement to the original version of the Regulation.
- However there is some text that needs particular consideration by GRVA and which is shown in square brackets. This concerns **paragraph 6.10. (new statistical approach for tests)** and **Appendix 2 to Annex 3 (false reaction scenarios in Annex 3)**.

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Supplement amendment of regulation

[6.10. Repeatability of test runs

- 6.10.1. [Any of the above test scenarios [,where a scenario describes one test setup at one subject vehicle speed at one load condition] shall be performed two times. If one of the two test runs fails to meet the required performance, the test may be repeated once. A test scenario shall be accounted as passed if the required performance is met in two test runs. [The total number of failed test runs shall not exceed [10%] of all performed test runs of all Car to Car and Car to Pedestrian scenarios in all load conditions.]]**
- 6.10.2. The root cause of any failed test run shall be analysed.**
- 6.10.3. During the assessment per Annex 3, the manufacturer shall demonstrate via appropriate documentation that the system is capable of reliably delivering the required performances.]**



OICA propose "Repeatability of test runs" in this GRVA (GRVA-04-11)

Annex 3 - Appendix 2

False Reaction scenarios for Vehicle Target and Pedestrian Target

Detail of discussion in IWG:

- The scenario was developed in the context of the R131 (trucks in highways), it does not fit this new R152.
- The test provisions (curve, speed, etc.) should be added



False reaction scenario for V2V and V2P are discussion issues in this GRVA

Series amendment of regulation

(GRVA-2019-16)

- 2nd GRVA agreed that the requirements of car to pedestrian will apply 42 km/h collision avoidance same as car to car requirements.
- GRVA also agreed to remove the particular provisions for small N₁ full cab vehicles.

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Series amendment of regulation

Details of proposal:

Car to Car requirements (Maximum relative Impact Speed) for N1 vehicles in Paragraph 5.2.1.4.

- *Remove the requirement of N1 full cab vehicles*

Car to Pedestrian requirements for M1 and N1 vehicles in Paragraph 5.2.2.4.

- *The requirements are applied 42 km/h as collision avoidance speed in condition of mass in running order.*
- *Remove the requirement of N1 full cab vehicles*

Proposal for transitional provisions of new series amendment:

- **The text also includes necessary transitional provisions. They envisage the possibility for contracting parties to mandate improved performance requirements as from 1 May 2024 for new type approvals and from 1 May 2026 for the approval existing vehicle types. The proposed transitional provisions are derived from the guidelines for transitional provisions laid down in document ECE/TRANS/WP.29/1044/Rev.2**

Car to Bicycle scenario

Informal Working Group on AEBS for Light Vehicles Specifications - Car to Bicycle scenario

The group still faces difficulty in agreeing on performance requirements for the car to bicycle collision given the lack of vehicles with this technology on the market. Consequently, the informal working group agreed to consider car-to-bicycle at a later stage, when more data is available.

Proposal to GRVA

GRVA agreed the extension of regulatory schedule about Car to Bicycle (e.g. 6th GRVA: September 2020), when more data is available.

**Thank you
for your attention**

**IWG meetings 10th meeting in Brussels
(28-29 November 2019)**