Proposal for amendments to ECE/TRANS/WP.29/GRVA/2019/17 Proposal for amendments to false reaction avoidance of UN Regulation 152 from the IWG on AEBS

I. Proposal

Paragraph 5.1.6., amend to read:

5.1.6. False reaction avoidance

The system shall be designed to minimise the generation of collision warning signals and to avoid advanced emergency braking in situations where the driver would not recognise an impending collision. This shall be demonstrated in the assessment carried out under Annex 3‡, and this assessement shall include in particular scenarios listed in Appendix 2 of Annex 3‡.

Appendix 2 in Annex 3, amend to read:

Annex 3 - Appendix 2

False Reaction scenarios

- 1. Vehicle Target
- 1.1. Two stationary vehicles. of Category M₁ AA saloon shall be positioned:
 - (a) So as to face in the same direction of travel as the subject vehicle;
 - (b) With a distance of 4.5m {(with a tolerance of +0.2/-0.0 m)} between them;
 - (c) With the rear of each vehicle aligned with the other.
- 1.2. The subject vehicle shall travel for a distance of at least 60 m. at a constant speed in the range of speeds listed in the Table of paragraph 5.2.1.4. of this Regulation to pass centrally between the two stationary vehicles.

During the test there shall be no adjustment of any subject vehicle control other than slight steering adjustments to counteract any drifting.

1.3. The AEBS [shall not provide a collision warning and] shall not initiate the emergency braking.

2. Pedestrian Target

- 2.1. A pedestrian target as prescribed in 6.3.2. shall be positioned:
 - (a) So as to face in the same direction of travel as the subject vehicle.
 - (b) With a distance of 1 m (with a tolerance of +0.2/-0.0 m) from the subject vehicle side closest to the target toward the side in the direction of traffic.
- 2.2. The subject vehicle shall travel in a straight line for a distance of at least 60 m. at a constant speed in the range of speeds listed in the Table of paragraph 5.2.2.4. to pass the stationary pedestrian target.

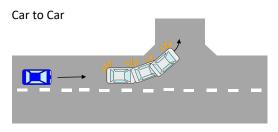
During the test there shall be no adjustment of any subject vehicle control other than slight steering adjustments to counteract any drifting.

2.3. The AEBS [shall not provide a collision warning and] shall not initiate the emergency braking.

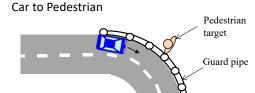
II. Justification

1. The False Reaction scenarios in Annex 3-Appendix 2 were based on R131 (trucks in highways), and it was not verified sufficiently whether they are appropriate for passenger cars. Therefore, Japan has started the study of some additional or amendment scenarios as follow figure in the Appendix, . Japan would like to keep the current scenarios to amend their contents as the base text in the near future.

Examples of the scenario under study



 The test vehicle is running on a straight road, and approaches a frontal vehicle which is turning left at low speed.



- The test vehicle enters a narrow radius carve.
- A pedestrian target is standing outside of the guard pipe.
- 2. Tolerance is necessary for each scenario.
- 3. In some cases, providing a collision warning is effective for safer driving even if it is not in a case of imminent collision risk. It should be considered carefully whether "the AEBS shall not provide a collision warning" is necessary as the criteria or not.