Transmitted by the expert from the European Association of Automotive Suppliers (CLEPA)

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## Proposal for draft amendments to Regulation No. 13-H:

## Advanced Emergency Braking Systems (AEBS)

The text reproduced below was prepared by the experts from CLEPA to add Annex xx to Regulation No. $13-\mathrm{H}$ to include the requirements for advanced emergency braking systems (AEBS).

The proposal only shows the differences to those proposed for commercial vehicles as an amendment to ECE Regulation No. 13 (informal document GRRF-S08-04). The basic idea is to finalise first the requirements for Regulation No. 13, before making a detailed proposal for Regulation No. 13-H.

## A. PROPOSAL

In addition to the possible need for different numerical values due to the difference in speed, mass and braking performance between cars and trucks/buses, the following specific differences are proposed.

New general requirement:
x.x.x. If the driver reacts by braking but it is insufficient to prevent the collision, the advanced emergency braking system shall react in such away as to apply the appropriate amount of braking so as to prevent the collision.

General requirement 2.2.4 amended to read:
2.2.4. If the driver has not reacted to the warning specified in paragraph 2.2.3. and a collision is inevitable, the brakes shall/may be autonomously applied.

Test requirements amended by adding a new test "target braking" between the braking vehicle test and the slowing to a stop test.

## x.x.x. Target braking test



The advanced emergency braking system shall provide the driver with the warning specified in paragraph 2.2.3., and with the driver applying the brakes insufficiently to prevent the collision the braking performance shall be autonomously increased to an appropriate level to prevent the collision.

In this case the target vehicle shall be a 'soft target' representative of a M1 AA saloon category vehicle 1 .

The test vehicle and the target vehicle shall travel in a straight line one behind the other with a vehicle centreline offset of not more than 0.5 m ., and with both vehicles at a constant speed of [ $80 \mathrm{~km} / \mathrm{h}$ ]. The test vehicle shall come to a standstill without striking the target vehicle when the target vehicle decelerates at [ $5 \mathrm{~m} / \mathrm{s}^{2}$ ] and a driver initiated braking of $\left[3 \mathrm{~m} / \mathrm{s}^{2}\right]$ occurs when the gap between the test vehicle and the target vehicle is $[<T B D>m]$.

## B. JUSTIFICATION

TBD

