

## **Proposal on Introduction for AEBS regulatory text**

### ***I. PROPOSAL***

#### **0. Introduction**

**The intention of this regulation is to establish uniform provisions for the performance of automatic emergency braking systems fitted to motor vehicles of the category M<sub>2</sub>; M<sub>3</sub>; N<sub>2</sub> and N<sub>3</sub> used on the road.**

**AEBS is an advanced driver assist system which should be used on condition that the driver has the duty to pay the same attention to all the traffic conditions as in the driving without AEBS.**

**The system shall automatically detect a potential forward collision, provide the driver with a warning and activate the vehicle braking system to decelerate the vehicle with the purpose of avoiding or mitigating the severity of a collision in the event that the driver does not respond to the warning.**

**The system shall only operate in driving situations where braking will avoid or mitigate the severity of an accident, and shall take no action in normal driving situations.**

**In the case of a failure in the system, the safe operation of the vehicle shall not be endangered**

**The system shall provide a means for the driver to override the emergency braking.**

**The regulation cannot include all the traffic conditions and infrastructure features in the type-approval process. Actual conditions and features in the real field should not result in false warnings or false braking to the extent that they encourage the driver to switch the system off.**

### ***II. Justification***

**The purpose of the preamble is to explain the general concept of the system. Therefore it will be appropriate to prescribe the specific requirement in the main body, not the preamble.**

(Reference) The document of history-based from AEBS-LDWS-10-05

0. Introduction

The intention of this regulation is to establish uniform provisions for the ~~layout and~~ performance of automatic emergency braking systems fitted to motor vehicles of the category M<sub>2</sub>; M<sub>3</sub>; N<sub>2</sub> and N<sub>3</sub> used on the road.

**AEBS is an advanced driver assist system which should be used on condition that the driver has the duty to pay the same attention to all the traffic conditions as in the driving without AEBS.**

The system shall automatically detect a potential forward collision, provide the driver with a warning and activate the vehicle braking system to decelerate the vehicle with the purpose of avoiding or mitigating the severity of a collision in the event that the driver does not respond to the warning.

The system shall only operate in driving situations where braking will avoid or mitigate the severity of an accident, and ~~should~~ **shall** take no action in normal driving situations.

In the case of a ~~defect or~~ failure in the system, the safe operation of the vehicle shall not be endangered. ~~and the full functionality of all other vehicle systems maintained~~

~~The driver may have the possibility to switch off the system. In such a case, the driver shall receive an indication when the system is inactive. So as to ensure the long term benefit for traffic safety, the system shall be automatically re-activated on each start-up.~~

The system shall provide ~~an acoustic or haptic warning, which may also be a sharp deceleration, so that a driver who is inattentive—has been driving for a long period of time without, e.g. actively using the brakes—is made aware of a critical situation.~~ **a means for the driver to override the emergency braking.**

~~During any action taken by the system (the warning and emergency braking phases) the driver can, at any time through a conscious action, e.g. by a steering action or an accelerator kick-down, take control and override the system to avoid the accident.~~

~~Because of the fact that the emergency braking is done when an accident can not be avoided by an active intervention of the driver, the responsibility for the vehicle etc clearly lies with the driver.~~

~~As the system is only active in an emergency situation, there is also no connection with the subject “autonomous driving or braking”. The responsibility for the vehicle, as with active operation of the automatic emergency braking system, rests with the driver~~

~~While~~ **T**he regulation can not, due to the complexity of road traffic conditions—overtaking, oncoming traffic, traffic travelling in the same direction to the right and left, crossing traffic, moving and stationary traffic—and road infrastructure features—curves, junctions, bridges, roadside guardrails, roadside signs, manholes—include all such **the traffic** conditions and **infrastructure** features in the type-approval process, they are part of an automatic emergency braking system. Such **Actual** conditions and features **in the real field** should not result in false warnings **or false braking** to the extent that they encourage the driver to switch the system off.

Transmitted by the expert from Japan

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~~To only fulfil the type approval conditions is not sufficient; the vehicle manufacturer has to ensure the overall suitability of the vehicle for use on the road.~~