



Economic and Social Council

Distr.: General
1 April 2011

English only

Economic Commission for Europe

Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations

Working Party on Brakes and Running Gear

Seventieth session

Geneva, 12–13 May 2011

Item 2 of the provisional agenda

Advanced Emergency Braking Systems

Proposal for a Regulation on advanced emergency braking systems

Submitted by the experts from the European Association of Automotive Suppliers and the International Organization of Motor Vehicle Manufacturers *

The text reproduced below was prepared by the experts from the European Association of Automotive Suppliers (CLEPA) and the International Organization of Motor Vehicle Manufacturers (OICA) to request exclusion of certain special vehicles from the scope of the draft Regulation on AEBS, based on technico-economic reasons.

* In accordance with the programme of work of the Inland Transport Committee for 2010–2014 (ECE/TRANS/208/, para. 106 and ECE/TRANS/2010/8, programme activity 02.4), the World Forum will develop, harmonize and update Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.

I. Proposal

Annex 3, *the title*, insert a reference to footnote 1 and a new footnote 1, to read:

"Warning and activation test requirements – pass/fail values¹

¹ **These requirements do not apply to:**
- vehicles of Classes I, II and A (categories M₂ and M₃);
- vehicles of category G;
- special purpose vehicles.
as defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3)."

II. Justification

1. While Industry is well aware that proposing exemptions directly in the respective UNECE regulations somewhat restraints the national sovereignty of the Contracting Parties, it is considered reasonable to provide guidance within the regulations with regard to exemptions. Without such guidance within the regulations, industry would have to respond on an individual basis to any Government request for advice, when Governments would consider it necessary to seek advice - and it is not certain they always would. Therefore, it is very probable that any exemptions would be un-harmonised.

2. The preamble of the draft text specifies that the Regulations should address vehicles "*[primarily/especially] used under highway conditions*" and that "*the system (...) shall take no action in normal driving situations*". It also acknowledges the limitation of such Regulation which cannot cover all the traffic conditions, and specifies that "*actual conditions and features in the real world should not result in false warnings or false braking to the extent that they encourage the driver to switch the system off.*"

3. The justifications below have the purpose of explaining why the fitment of AEBS on the vehicles cited for exemptions is not justified with regard to the purpose of AEBS.

4. Additional exemptions from a mandatory installation of AEBS will be necessary in order to take into account the current state of the art, development time and costs as well as the safety benefits of AEBS on certain vehicle types which are not excluded from this UNECE regulation. These could be discussed bilaterally between the vehicle manufacturers and the relevant Contracting Parties that will apply the new UNECE regulation on AEBS.

Category M₂ and M₃, Classes I, II and A

5. These buses can carry standing passengers and they operate predominantly in a city environment. The very wide range of operating conditions – varied roadside infrastructure, driving through small gaps and other vehicles pulling-out very late and cutting-in very early, etc. – could result in the driver switching off the AEBS due to the number of false warnings. The performance requirements currently in the draft Regulations are not adapted to the city driving situation. Also, an emergency braking at relatively low speeds could result in more severe injuries to the standing passengers than to the seated car occupants. Therefore, as it is most unlikely that the driver is inattentive, due to the city environment, it is considered that there is very little actual benefit to be gained in equipping such buses with AEBS. Should those vehicles be included in the scope of the Regulation, the test

conditions and performance requirements would have to be adapted to better fit the city driving environment.

Category G

6. Category G vehicles are off-road vehicles and, as such, typically operate for the majority of the time at low speeds in extreme adverse conditions and only spend a small amount of time on public roads at a significant speed. Therefore, due to the complexity of ensuring the long term durability of the sensor under adverse conditions without impacting upon other important features of such vehicles, e.g. bumper robustness, and the likelihood that the sensor will be covered in mud for considerable periods of time unless fitted with an automatic clearing system that itself needs to be unaffected by mud and dirt, it is considered that these vehicles do not fulfil the criteria making AEBS relevant as per the preamble. In addition, the possible benefits of an AEBS are not supported by the costs of equipping category G vehicles with AEBS.

Special purpose vehicles

7. Special purpose vehicles are wide variety of vehicle types (e.g. road sweeper, crane, truck) used for a wide range of purposes (e.g. concrete pump with telescopic arm, heavy duty transport towing vehicle) with the result that build numbers per vehicle type/purpose and per vehicle manufacturer are very small. As these vehicles spend very little time travelling at a significant speed on a public road, there is very little potential benefit in equipping such vehicles with AEBS.
