

**Proposal for amendments to ECE/TRANS/WP.29/GRRF/2008/2
(Brake Assist Systems)**

This document is a proposal for amendment to the Brake Assist proposal of document ECE/TRANS/WP.29/GRRF/2008/2 and concerns the definition of Brake Assist Systems and the performance characteristics of Category A. The proposed amendments are identified by being highlighted in bold of strikethrough.

A. PROPOSAL

New paragraph 2.33. (Brake Assist System (BAS)), amend to read:

"2.33. Emergency Brake Assist" means a function of the braking system that deduces an emergency braking event from a characteristic of the driver's brake demand and, independent of the magnitude of the demand, delivers a braking output equivalent to a full force demand at the control"

Annex 10

Paragraph 1.1., amend to read:

"1.1. GENERAL PERFORMANCE CHARACTERISTICS FOR CATEGORY 'A' BAS SYSTEMS

When an emergency condition has been sensed, the required ~~pedal braking~~ force to achieve a vehicle deceleration **equivalent to a full force application** shall be reduced by between **[40]** per cent and **[80]** per cent compared to the braking force required without the BAS system in operation.

Compliance with this requirement is demonstrated if the provisions of paragraphs 3.1. to 3.3. of this annex are met."

General Note: PTI Requirement

It shall be possible to verify easily the readiness of the emergency brake assist system. This verification may be achieved by a functional check suitable for use as part of the periodic technical inspection or by the means of a diagnostic facility.

Emergency Brake Assist is a redundant function and as such its readiness cannot be ensured until such times as an emergency event (or simulation) occurs. To reduce the risk that this function becomes unavailable it is necessary to provide a routine method to assess its readiness.

B. JUSTIFICATION

“Brake Assist” or “Emergency Brake Assist” is promoted as a technology that can make significant reductions in deaths and serious injuries to pedestrians and other vulnerable road users. Within the European Community, it is intended that this technology will be required to be fitted to both M₁ and N₁ vehicles and, as a consequence, requirements for passive safety measures on those vehicles will be reduced.

At present there are some differences in opinion as to what constitutes a “brake assist” system. Nevertheless, it is clear that if this technology is to deliver the benefits to this particular casualty group that have been suggested, the vehicle will have to achieve the maximum available deceleration in the shortest possible time after driver reaction.
