

**LIST OF SOME AVAILABLE STUDIES ON EFFICIENCY OF  
BRAKE ASSIST SYSTEM IN TERMS OF SAFETY  
(Brake Assist Systems)**

**A. INTRODUCTION**

The introduction of a definition of Brake Assist System (BAS) in UNECE R13H is proposed by the European Commission through document ECE/TRANS/WP29/GRRF/2008/2.

OICA welcomes this initiative to improve road safety, in particular the safety of the vulnerable road users (e.g. pedestrians). The text proposed in this document is the result of some preliminary discussions between Industry and the European Authorities and can be considered as an improvement for all parties (Governments, Industry, but overall the vulnerable road users). OICA in addition appreciates the European proposal as being written in the form of an optional equipment, i.e. BAS is proposed as a definition, and its installation can be mandated via national legislations.

BAS is currently on the road for more than 10 years, which implies a collection of real world experience demonstrating the safety benefits of this technology. A non-exhaustive list of available studies showing the safety benefits of the Brake Assist System as defined in the EC proposal can be found here below. All these studies are based on real applications in the current and past production.

**B. REFERENCE TO SOME AVAILABLE STUDIES**

The list below is non-exhaustive. It gives the references of some research conducted by different bodies (UNECE Member States, technical services, test laboratories, vehicle manufacturers, etc.) to assess the safety benefits of the Brake Assist System equipping passenger cars in **current and past** production.

1. Y. Page, J.-Y. Foret-Bruno, S. Cuny. ARE EXPECTED AND OBSERVED EFFECTIVENESS OF EMERGENCY BRAKE ASSIST IN PREVENTING ROAD INJURY ACCIDENTS CONSISTENT? Laboratoire d'Accidentologie, de Biomécanique et d'études du comportement humain (LAB); Centre Européen d'Études de Sécurité et d'Analyse des Risques (CEESAR), France, 2005.
2. M. Kassaagi, W. Bouslimi, C. Val, J.-M. Bersac, M. Moessinger, Y. Page. EFFECTIVENESS OF EMERGENCY BRAKE ASSIST IN REAR-END ACCIDENT SCENARIOS. Laboratory of Accidentology, Biomechanics and studies of human behavior, (LAB), Ecole des mines de Paris, GIST, CEESAR, France, 2006
3. Mercedes-Benz. BAS EFFECTIVENESS. Germany, 2004
4. L. Hannawald, F. Kauer. EQUAL EFFECTIVENESS STUDY. Association of the European Automobile Manufacturers (ACEA), Technische Universität Dresden (TUD). Brussels-Dresden, 2004.
5. Commission of the European Communities. COMMISSION STAFF WORKING DOCUMENT - accompanying document to the Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the protection of pedestrians and other vulnerable road users - Impact Assessment {COM(2007) 560 final SEC(2007) 1245}. Brussels, 2007.