



## New regulation to improve pedestrian safety EU makes brake assist mandatory

December 2009

- New EU regulation aims to 'improve protection of pedestrians and other vulnerable road users'
- Brake assist systems reduce braking distance
- Further EU directive will make the anti-skid ESP® system mandatory from November 2014
- Bosch to roll out predictive emergency braking system in 2010

Since November 24, 2009, brake assist systems have become mandatory for all newly launched car and light commercial vehicle types in the EU. The regulation will apply to all new vehicles from February 24, 2011. These requirements are part of a new EU regulation that aims to improve pedestrian safety. The brake assist supports drivers in emergency braking situations. If the driver brakes suddenly, the system assumes that there is an emergency situation. It then rapidly increases braking pressure, thus increasing deceleration. This reduces the braking distance and helps prevent collisions. According to EU studies, up to 1,100 fatal accidents involving pedestrians could be prevented in Europe each year if all cars were equipped with braking assistance systems.

The industry is already working to develop predictive systems that will be able to detect traffic ahead of the vehicle via additional radar sensors and, in some cases, video sensors. "In the future, emergency braking systems will be able to interpret the traffic situation and offer drivers intelligent braking support," says Dr. Werner Struth, president of the Bosch Chassis Systems Control division. "In the years to come, these systems will be featured in a growing number of vehicle models. In 2010, a Bosch system is set to go into series production for the first time at Audi."

Braking assistance systems not only reduce the risk of injury for pedestrians, they also help prevent rear-end collisions. Bosch analyses of the GIDAS (German In-Depth Accident Study) database show that in rear-end collisions resulting in injury in Germany, a third of drivers did not hit the brakes at all before the collision, and half of them did not use the car's full braking capacity. The Bosch predictive emergency braking system provides drivers support on three levels. The system's collision warning function detects potential obstacles and warns the driver - first with an acoustic or visual warning, then by briefly jerking the brakes. If the driver then reacts and hits the brakes, the system uses the

emergency braking assistant to increase braking pressure so that the car does not hit the obstacle. However, if the driver does not respond and a collision can no longer be avoided, the system brakes at maximum force shortly before impact. A Bosch study of the GIDAS data shows that a predictive emergency braking system could prevent almost three out of four rear-end collisions resulting in injury.

The EU directive to improve “protection of pedestrians and other vulnerable road users” will not only make brake assist systems mandatory, it also foresees stricter regulations with regard to additional bumpers and frontal protection systems. The aim is to reduce the risk of injury for accidents involving pedestrians and cyclists. Improving traffic safety is also the aim of another directive which has been in effect since August 2009. Step by step, it will make the ESP® system mandatory for all vehicles by November 2014. Moreover, from November 2015 commercial vehicles will also have to be equipped with advanced emergency braking systems as well as lane departure warning systems.

**Bosch media enquiries:**

Chris Wakley/Tom Callow  
Automotive PR  
Tel: +44 (0) 20 7494 8050  
Email: [cwakley@automotivepr.com](mailto:cwakley@automotivepr.com)

**Bosch OE enquiries:**

Nik Armistead  
Robert Bosch Limited  
Tel: +44 (0) 1895 838545  
Email: [nik.armistead@uk.bosch.com](mailto:nik.armistead@uk.bosch.com)

*The Bosch Group is a leading global supplier of technology and services. In the areas of automotive and industrial technology, consumer goods, and building technology, some 280,000 associates generated sales of 45.1 billion euros in fiscal 2008. The Bosch Group comprises Robert Bosch GmbH and its more than 300 subsidiaries and regional companies in over 60 countries. If its sales and service partners are included, then Bosch is represented in roughly 150 countries. This worldwide development, manufacturing, and sales network is the foundation for further growth. Each year, Bosch spends more than 3.5 billion euros, or eight percent of its sales revenue, for research and development, and applies for over 3,000 patents worldwide. With all its products and services, Bosch enhances the quality of life by providing solutions which are both innovative and beneficial.*

*The company was set up in Stuttgart in 1886 by Robert Bosch (1861-1942) as “Workshop for Precision Mechanics and Electrical Engineering.” The special ownership structure of Robert Bosch GmbH guarantees the entrepreneurial freedom of the Bosch Group, making it possible for the company to plan over the long term and to undertake significant up-front investments in the safeguarding of its future. Ninety-two percent of the share capital of Robert Bosch GmbH is held by Robert Bosch Stiftung GmbH, a charitable foundation. The majority of voting rights are held by Robert Bosch Industrietreuhand KG, an industrial trust. The entrepreneurial ownership functions are carried out by the trust. The remaining shares are held by the Bosch family and by Robert Bosch GmbH.*

Additional information can be accessed at [www.bosch.com](http://www.bosch.com).