

Brake assist systems have become mandatory for all new cars and light commercial vehicles sold in the EU from February 24, 2011. The new mandate is part of an EU drive to improve pedestrian safety.



The brake assist system supports drivers in emergency braking situations. If the driver brakes suddenly, the system assumes there is an emergency situation. It then rapidly increases braking pressure, thus increasing deceleration. This reduces the braking distance and helps prevent collisions.

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.

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. Braking assistance systems not only reduce the risk of injury for pedestrians, they also help prevent rear-end collisions. Even in an emergency panic stop, an unaided driver often fails to apply enough brake pressure to maximise deceleration. 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 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.