



TRW have unveiled their Collision Mitigation Braking (CMB) system to give drivers braking support in the event of an imminent collision with a moving or stationary object. The system is primarily designed for urban driving conditions including heavy traffic. It uses a radar sensor to directly measure the distance and relative speed to objects ahead. If a potential collision is identified, a warning is triggered to alert the driver; this warning can be audible, visual, or haptic. If the driver does not react to the warning and the system determines a crash is imminent, brake pressure can be applied automatically to slow the vehicle and reduce the severity of the impact.

If the driver does respond to the warning and depresses the brake pedal, the brake system will automatically provide maximum brake boost to slow the vehicle as quickly as possible and mitigate the collision. With the development of TRW's 24GHz radar, this technology is now more affordable than ever.

Dr Alois Seewald, director engineering for integrated active and passive safety technologies at TRW, explained: "Radar has, until now, been regarded as a luxury option, but TRW's AC100 24GHz product is roughly half the price of 77GHz radar: bringing the benefits of advanced safety, such as Collision Mitigation Braking (CMB) for city driving to a wider vehicle market.

CMB technology has been designed with city traffic and traffic queues in mind. It is applied at close distance, 6-7m where a 20kph speed reduction by braking, with limited deceleration, can be achieved before the potential crash.