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In automotive industry vehicle safety is given much time and investments to. Often the result of the company's business is not quite noticeable. However in the case of emergency when quick and clear decisions are necessary all the resources spent are justified as the life chance increases. Lately the system of safety are being developed increasingly.

At first the term Active Safety, mainly used in the US, refers to safety systems that help avoid accidents, such as good steering and brakes.

However, Active Safety is increasingly being used to describe systems that use an understanding of the state of the vehicle to both avoid and minimize the effects of a crash. These include braking systems, like brake assist, traction control systems and electronic stability control systems, that interpret signals from various sensors to help the driver control the vehicle. Additionally forward-looking sensor-based systems such as Advanced Driver Assistance Systems including adaptive cruise control and collision warning/avoidance/mitigation systems are also considered as active safety systems under this definition.

Brake Assist (BA or BAS) is a generic term for an automobile braking technology that increases braking pressure in an emergency situation.

The first application was developed jointly by Daimler-Benz and LucasVarity. Research conducted in 1992 at the Mercedes-Benz driving simulator in Berlin revealed that more than 90 % of drivers fail to brake with enough force in emergency situations. Brake Assist detects circumstances in which emergency braking is required by measuring the speed with which the brake pedal is depressed.

Autonomous cruise control is an optional cruise control system appearing on some more upscale vehicles. These systems use either a radar or laser setup allowing the vehicle to slow when approaching another vehicle and accelerate again to the preset speed when traffic allows. ACC technology is widely regarded as a key component of any future generations of intelligent cars.

An anti-lock braking system, or ABS is a safety system which prevents the wheels on a motor vehicle from locking up while braking.

A rotating road wheel allows the driver to maintain steering control under heavy braking. ABS offers improved vehicle control and decreases stopping distances on dry and especially slippery surfaces. However, on loose surfaces like gravel and snow-on-pavement, it can slightly increase braking distance while still improving vehicle control.