

New technology could help take the strain out of daily commute

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Autonomous Driving Support helps the driver to comfortably stay in the lane and follow the traffic flow in slow-moving queues. Radar sensors and a camera give input to the system, which automatically controls the speed, the brakes and the steering in order to follow the vehicle in front.

Volvo Car Corporation has taken another step on the journey towards autonomous driving - self-driving vehicles - by demonstrating a new traffic jam assistance system. The new system, whereby the car

automatically follows the vehicle in front in slow-moving queues up to 50 km/h, will be ready for production in 2014.

"This technology makes driving more relaxed in the kind of monotonous queuing that is a less attractive part of daily driving in urban areas. It offers you a safe, effortless drive in slow traffic," says Peter Mertens, Senior Vice President Research and Development of [Volvo](#) Car Corporation.

The traffic jam assistance function is an evolution of the current Adaptive Cruise Control and Lane Keeping Aid technology, which was introduced in the all-new Volvo V40 earlier in 2012.

The driver activates the traffic jam assistance function by pushing a button. When active, the engine, brakes and steering respond automatically. The Adaptive Cruise Control enables safe, comfortable driving by automatically maintaining a set gap to the vehicle in front, at the same time as the steering is also controlled.

"The car follows the vehicle in front in the same lane. However, it is always the driver who is in charge. He or she can take back control of the car at any time," says Peter Mertens.

Commuting lasts longer than the annual vacation

Slow-moving queues are part of urban commuting. Americans spend more than 100 hours a year commuting to work, according to the U.S. Census Bureau's American Community Survey. This is more than the average two weeks of vacation time (80 hours) many Americans have per year.

Drivers in major [metropolitan areas](#) such as New York, Chicago, Philadelphia and Los Angeles spend even longer times queuing to and

from work every day.

"The situation is of course similar, or even worse, in major urban areas all over the world. Our aim with the traffic jam assistance is to make commuting a bit less stressful for the driver," says Peter Mertens.

Aiming for leadership

Autonomous driving - with steering, acceleration and/or braking automatically controlled by a vehicle that requires very little human interaction - is a major focus area in Volvo Car Corporation's development work.

"Our aim is to gain leadership in the field of autonomous driving by moving beyond concepts and pioneering technologies that will reach actual customers. Making these features reliable and easy to use is crucial to boosting customer confidence in self-driving cars," says Peter Mertens.

The low-speed traffic jam assistance system is the second technology for autonomous driving recently presented by Volvo Car Corporation. A few weeks ago, the company demonstrated the SARTRE project (Safe Road Trains for the Environment), which focuses on platooning in highway and motorway traffic at speeds of up to 90 km/h.

Positive consumer response

Volvo Car Corporation's firm focus on designing cars around people includes investigating consumer attitudes towards self-driving cars.

In 2011, Volvo Car Corporation invited a number of premium car owners to evaluate future driver support technologies at the company's

test track, including an early traffic jam assistance prototype. One of the guests commented: "A perfect support for making commuting less stressful. It will take away the cramps and knee pain that I get when constantly having to adjust speed and distance in slow-moving queues. "

Introduced in 2014

The traffic jam assistance technology will be part of Volvo [Car](#) Corporation's new Scalable Product Architecture, SPA, which will be introduced in 2014.

"SPA is a stand-alone Volvo project that will enable us to take the company's technological future into our own hands. Most of our volume will be based on this new architecture. It will give us a high degree of commonality and the right scale of economy to be competitive in the future," says Peter Mertens.

Provided by Volvo Car Corporation

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