

## Reducing the number of traffic accidents in the EU

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Research has shown that human error is the main factor in 90 % of traffic accidents. With more than 40,000 deaths every year and over 1.2 million injuries, increasing traffic safety so as to reduce these figures is a priority for the European Commission.



The EUROFOT project (European Field Operational Test on active safety functions in vehicles) aims to do just that, with funding of almost EUR 14 million from the European Union's Seventh Framework Programme (FP7). The project has brought together car manufacturers, suppliers, universities, research institutes and other stakeholders - 28 organisations in all, to test intelligent vehicle systems (IVS) across Europe. The aim is to make road transport safer, more efficient and also more pleasant.

The project has already carried out the first-ever Europe-wide field operational test to assess the benefits of intelligent vehicle systems (IVSs) on traffic safety and efficiency. A thousand cars and trucks equipped with advanced systems travelled 35 million kilometres on Europe's roads for more than a year while the EUROFOT team gathered data from in-vehicle sensors, cameras and driver questionnaires.

Eight IVS technologies were tested, including adaptive cruise control (ACC), which uses radar to maintain a preset distance from the vehicle in front, and collision warning systems that alert drivers to potential front-end collisions. Curve-speed warning systems, blind-spot detectors, fuel efficiency monitors and navigation systems were also tested.

As a result of this testing, a range of new smart technologies are starting to be fitted into cars. If these technologies are widely used, they have the ability to reduce the number of accidents, and in the process save on fuel, cut emissions and reduce traffic jams.

Aria Etemad, senior research coordinator at Ford Research & Advanced Engineering Europe in Germany, says, 'When a new technology is developed, it is usually tested individually, but a field operational trial using real drivers in real vehicles in real traffic conditions allows us to assess how these systems perform in the real world and how ordinary drivers interact with them.'

The team found, for example, that cars equipped with both ACC and forward-collision warning (FCW) systems could have a positive impact of up to 5.7 % on the number of accidents on motorways that result in injury or death.

Fewer accidents, in turn, could lead to less motorway congestion, and reduce the total

amount of time drivers spend sitting in traffic jams across the EU by more than 3 million hours.

Aria Etemad adds: "The data shows that there are widespread social and economic benefits from IVS technologies, in addition to avoiding potential accidents. We also noted that the use of these systems has a positive impact on drivers' experiences; they felt safer, more supported and more comfortable."

In the long run, it is believed that increasing awareness of the benefits of IVSs will lead to increasing demand and lead to more widespread deployment, safer roads, fewer accidents and a range of other social and economic benefits -fulfilling key goals of the EU's 2011-20 road-safety action plan that aims to halve the number of road deaths within a decade.

For more information, please visit:

EUROFOT:

<http://www.eurofot-ip.eu/>

European Commission - Mobility and Transport:

[http://ec.europa.eu/transport/index\\_en.htm](http://ec.europa.eu/transport/index_en.htm)