ITEA project results enhancing people's lives

Mitigate the stress of traffic jams

A Traffic Jam Assist (TJA) is a partially autonomous driving (AD) system that can reduce the stress and fatigue of a driver in traffic congestions. The TJA system controls the vehicle's steering, acceleration and braking. It keeps the vehicle within its lane and at a safe distance from the vehicle in front. In addition, it monitors the surrounding environment for any obstacle within its immediate trajectory.

The DANGUN solution implements a TJA system using commercially-ready sensors, namely, a front camera, around view monitor cameras and radars. These are integrated on a Renault Zoe electric vehicle which was converted into a computer-controlled robotic platform. The core technologies include lane detection, vehicle recognition and vehicle control for safe driving. The innovation in this system reduces a driver's workload in traffic jams and prevents car accidents triggered by carelessness. The TJA system is validated both in Korea and France, on public roads. The DANGUN working groups were formed in each country, for evaluation purposes.

This solution presents safe and comfortable driving that avoid drivers to perform repeated and tedious operations, whilst at the same time improving traffic flow and reducing accidents. When the system is activated, the driver can relax, it thus reduces the stress experienced in traffic jams.

ITEA 3 project
DANGUN