

INVENT Final Presentation in Munich, April 28, 2005

More intelligent and safer: Vehicles of the future will see, think, and inter-communicate

Traffic research initiative INVENT presents innovations for smoothing traffic flow and reducing accidents

After four years of research supported by the Federal Ministry for Research and Education (BMBF), on April 28 in Munich, the INVENT initiative (Intelligent traffic and user-oriented technology), is presenting its solutions and visions for traffic of the future. A new generation of vehicles equipped with intelligent sensors and communication technologies will soon “see” and “think” along with the driver, coordinating driving dynamics with other vehicles in the flow of traffic. The innovations are all designed with the goal of making driving safer and more user-friendly.

During the INVENT final presentation at the MAN Test track in Munich, visitors will experience the novel technologies in numerous demonstration vehicles, simulations, and talks: Examples include an intersection assistant in the vehicle, which detects and promptly alerts the driver to stop signs, opposing traffic during left turns, or cross-traffic -- such as cyclists -- at uncontrolled intersections. Novel techniques to be presented range from active pedestrian protection to vehicle-based, intelligent evaluation of the traffic state, which is relayed instantaneously to other vehicles and to traffic centers via communication networks. These vehicles can process the information and adjust their speeds imperceptibly to prevent or reduce congestion or modify their routes to avoid it. The road network is more efficiently utilized, because route guidance and navigation are based on current and forecasted traffic states, rather than static data. In combination with intelligent courier services, these technologies will contribute to minimizing the traffic burden on our roadway networks.

In a series of presentations, experts representing the research areas driver assistance, active safety, traffic management, and logistics will illustrate the feasibility of their ideas, demonstrate the potential benefits of the novel technologies to traffic, and provide recommendations for future research initiatives and for pro-active transportation planning and policy.