



The Application Platform for Intelligent Mobility (AIM)

www.dlr.de/fs/desktopdefault.aspx/tabid-6422/10597_read-37397

AIM is a major facility for research and development activities in the area of intelligent mobility services:

- Test environment
- Simulation
- Traffic management and assistance systems



The Automotive Research Center of Niedersachsen (NFF)

www.tu-braunschweig.de/forschung/zentren/nff

The NFF is a cooperation platform for joint research activities carried out by industry and science in the following research areas:

- Intelligent vehicles
- Low-emission vehicles
- Flexible vehicle concepts and vehicle production
- Mobility management



The Showcase for Electromobility

www.metropolregion.de/mobil

The German State of Niedersachsen is one of the four national showcases for electromobility. Approximately 200 partners from the fields of economics and science and from states and municipalities are involved in about 30 projects:

- Energy
- Charging infrastructure, information and communication technology
- Vehicles, fleets, traffic
- Qualification, knowledge, cooperation, communication



The Niedersachsen State Initiative for Mobility

www.landesinitiative-mobilitaet.de

The Niedersachsen State Initiative for Mobility uses efficient business networking to combine the skills and expertise in the mobility sector:

- Initiating and supporting innovative projects
- Extending the knowledge transfer between business and science
- Strengthening Niedersachsen as a location for mobility and technology
- Organizing vocational training and further education activities in the mobility sector (e.g. the "Catch on Galileo" competition)

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Intelligent Mobility in Niedersachsen

Safety - Efficiency - Sustainability



Niedersachsen



Niedersachsen – A Location for Mobility Innovations

Mobility is a pivotal factor when it comes to achieving a high level of economic performance. This particularly applies to the German State of Niedersachsen, in which the mobility sector forms the major economic and technological part of the local industry.

Niedersachsen is home to a number of internationally recognized companies and research institutions and a multitude of innovative small and medium-sized enterprises that are all considered to be leaders and top achievers both in Germany and on an international level. Be it on land, in the air or by rail, road or water, all aspects of mobility and movement involve technology from Niedersachsen.

Changing framework conditions in the field of mobility are currently causing new technologies to come to the forefront, predominantly in connection with intelligent vehicles and intelligent infrastructures. Niedersachsen has been able to recognize these trends at an early stage and support and promote them on a long-term basis as part of its economic and technology policy. As one of Europe's most research-intensive regions, it is now already working on developing and testing concepts, solutions and applications for a wide variety of different modes of transportation for the mobility of the future.

Intelligent Vehicles for Private and Public Transport

More safety, fewer traffic jams and less environmental contamination are the main challenges facing us as we approach the issue of mobility of the future. The high-performance communication infrastructure and new sensor and actuator technology used in intelligent vehicles provide the ideal conditions for mastering these challenges.

Traffic Telematics

- Car-2-Car communication (using cooperative systems to exchange information and data between vehicles)
- Driver assistance systems (additional electronic systems that provide more safety and increases driving comfort)
- eCall (an automatic emergency call system)

Automated Driving

- Traffic jam assistants
- "Electric line" IT systems

Traffic Information Systems and New Mobility Concepts

- Flexible car-sharing models
- Infotainment
- Innovative/Web-based payment and accounting systems
- Accessible intermodality chains
- Intermodal traffic information
- Innovative mobility services for rural areas

Intelligent Infrastructures

Intelligent mobility not only requires intelligent vehicles, but also an intelligent infrastructure. The use of technical equipment such as sensors, video signaling systems and communication devices in the traffic infrastructure provides real-time traffic information and constitutes the basic set-up required for effective traffic management.

Traffic Management

- Traffic jam avoidance
- Management of road construction zones
- Route planning

Car 2 X Communication (using cooperative systems to exchange information and data between vehicles)

- Accident and hazard warning systems
- "green wave" traffic light systems

New Drive Technologies (e.g. electromobility/gas engines)

- Intelligent charging stations
- Comprehensive supply networks (LNG filling stations, hydrogen, etc.)
- Smart grid

Satellite Navigation

- Certification
- Safety-relevant applications
 - ➡ The Galileo Center for Safety-Critical Applications, Certifications and Services (GAUSS)
www.gauss-portal.de