

# Living Labs

What decisions should cyber-physical systems be allowed to make and how do we deal with the consequences? These are just two of the questions that Oldenburg computer scientists are researching together with psychologists, philosophers, sociologists, political scientists and jurists at the University. Their work covers the full spectrum from basic research to strongly application-oriented solutions. To assist them in their research the experts have recourse to an infrastructure that is unique in northern Germany, the so-called "Living Labs" which were set up by the Oldenburg OFFIS Institute for Information Technology and the German Aerospace Center (DLR) in Oldenburg and Braunschweig. New technologies – for use in the home, on the roads, on ship's bridges or in patient simulators – are tested here at the early stages of development under real-life conditions. An overview:



Institut für Informatik



Institut für Vernetzte Energiesysteme



Institut für Verkehrssystemtechnik



The colour code indicates which partners are involved in the Living Labs

## German Bight



Living Lab

### eMIR

Continuous co-simulation environment and test field installations on land and water in the German Bight for developing maritime navigation and assistance systems



Living Lab

### Smart City

Demonstrator and test field for multiple applications in urban environments integrating energy supply, healthcare and traffic systems (under construction)



Living Lab

### Health

Simulators and test environments for "Ambient Assisted Living" for the elderly as well as the emergency care and operating theatres of the future



Living Lab

### SESA

Simulation and analysis environments as well as tools for studying large-scale, intelligent power grids under real-life conditions



Living Lab

### RTP

Methods and toolkits for the cost-effective development of safe cyber-physical systems, primarily with applications in transport, energy and healthcare

## Oldenburg

## Braunschweig



Living Lab

### AIM

Virtual test environments, special test labs, driving simulators, analytic technology, test tracks in real-traffic situations and server systems for research into intelligent mobility solutions are at the core of the DLR's Living Lab in Braunschweig. The test and simulation environments at the University of Oldenburg were designed to harmonise with it.