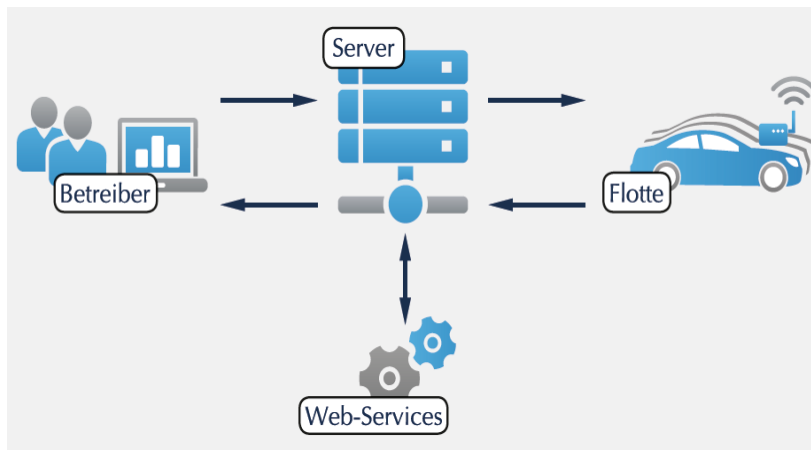


ELISE Promotes Electric Mobility

Leading-edge Cluster Electromobility South-West Starts Joint Project at KIT



ELISE project: Data gateway for electric vehicles. (Figure: RA Consulting)
(Inscriptions: Betreiber = Operator, Web-Services = Web services, Flotte = Fleet)



*KIT Mobility Systems Center:
Solutions for tomorrow's mobility*

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The **ELISE** joint project at Karlsruhe Institute of Technology (KIT) is aimed at making electric vehicles more reliable and economically efficient in order to establish electric mobility on the market. The project is funded by the Federal Ministry of Research under the leading-edge cluster Electromobility South-West. KIT researchers cooperate with the companies of RA Consulting and CarMediaLab. ELISE focuses on concepts for data processing in the vehicle, an independent charging unit as well as on studies of interactions of driver, vehicle, and the environment.

The question of which range can be covered with one battery charge, together with the anxiety that the battery runs empty while driving on a road, make many users hesitate to buy an electric vehicle. Up to now, recharging the empty battery depends on the availability of a public energy grid or a public charging station in the vicinity. To increase energy transmission options, e.g. from vehicle to vehicle, systems would have to act more independently. ELISE – this German acronym stands for Autonomous Charging Unit and System-integrated Data Gateway for Electric Vehicles – is aimed at providing the necessary products and functions, at improving operation safety, and soothing anxieties of users. ELISE covers a hard-

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ware and software unit integrated in the car, which acquires and processes data on the vehicle, its state of operation, and the environment in real time in order to allow for the location-independent use of services. This telematics platform (data gateway) can be configured for various applications and connected via an interface with a conventional mobile device, e.g. a smart phone, to display application-specific information. Secondly, ELISE is aimed at designing an autonomous charging and discharging unit that will be integrated in the vehicle. This unit is to facilitate emergency charging between two vehicles, similar to a jumper cable.

Thirdly, researchers will develop new concepts based on vehicle remote diagnosis, position determination, and user behavior for a more efficient and accelerated development of electric vehicles and their components. From a holistic perspective, scientists study the interaction of driver, vehicle, and the environment. IPEK, the Institute of Product Engineering of KIT, concentrates on the partial project "Methods Research and Validation (MeValdi)". It deals with market-oriented product ideas, specific requirements, product design, and client-oriented product validation. Research of IPEK under the ELISE project is part of the activities of the KIT Mobility Systems Center in the Leading-edge Cluster South-West.

ELISE is funded by the Federal Ministry of Education and Research (BMBF) for a period of three years. Partners of the interdisciplinary project are KIT and the companies RA Consulting GmbH and Car-MediaLab GmbH, which are both located in the Karlsruhe Technology Region.

The project is part of the Leading-edge Cluster Electromobility South-West which is considered one of the most important regional clusters in the field of electromobility with about 80 actors. The Landesagentur für Elektromobilität und Brennstoffzellentechnologie (e-mobil BW GmbH, State Agency for Electric Mobility and Fuel Cell Technology) coordinates all activities of the cluster and ensures optimum networking of the partners active in the fields of vehicle technology, energy technology, information and communication technology, and production engineering.

The Mobility Systems Center pools KIT activities relating to vehicle technology. Presently, 40 KIT institutes with about 800 employees are working on methodological and technical fundamentals for tomorrow's vehicles. It is their objective to develop concepts, technologies, methods, and processes for fu-

ture mobility considering the complex interactions of vehicle, driver, traffic, infrastructure, and society.

Karlsruhe Institute of Technology (KIT) is a public corporation according to the legislation of the state of Baden-Württemberg. It fulfills the mission of a university and the mission of a national research center of the Helmholtz Association. KIT focuses on a knowledge triangle that links the tasks of research, teaching, and innovation.

This press release is available on the internet at www.kit.edu.