

PRESS RELEASE

Politics / Technology / Society

Silicon Saxony to provide smart technologies for the city of future

- **High-tech industrial network Silicon Saxony e.V. lays basis for Smart Cities with highly innovative micro- and nanoelectronics**
- **According to the Saxon Minister of Internal Affairs Ulbig: "We do need Silicon Saxony as a powerful and reliable partner for a smart and safe city development of tomorrow."**

Dresden, 21 June 2013. Dresden is on its way to becoming a "Smart City". The most significant location for micro- and nanoelectronics scrutinizes smart technologies for the city of future. Here, the Free State of Saxony and the trade association particularly envision smart infrastructure solutions – the "Internet of matters and services" means a vision for our daily life to come: by means of sensors and smart electronics, traffic flow is registered and optimized automatically; information flow is prepared and channeled. According to Heinz Martin Esser, head of Silicon Saxony e.V.: "It is all about intermedial communication. Whereas cyber-physical systems form the technological basis, we in Silicon Saxony contribute with highly innovative micro- and nanoelectronics and software."

Cross linking for smart infrastructure solutions in the Free State

In the future, cities and metropolitan regions will be dependent on smart solutions for a cross-linked infrastructure to a great deal. Advancing urbanization, demographic change and climatic changes call for rethinking and trigger the development of novel systems enabling stable nets and a smooth integration of renewable energies.

With regard to Markus Ulbig, Saxon Minister of Internal Affairs: "We are aiming at maintaining our high living standard in Saxony". According to him, Smart City technologies represent a key factor there for a topical urban development. Furthermore, a symbiosis of Open Data, networked IT and smart controlling in the future cities saves energy, is easy on the climate and makes our lives much safer. Moreover, Ulbig emphasizes the importance of smart technologies being safe with respect to

cyber attacks. "Smart Cities and cyber security are just two sides of the same coin. The Free State of Saxony cannot act on its own." As the Saxon Minister of Affairs continues: "We need Silicon Saxony as a stable and reliable partner of ours for a smart and safe urban development of tomorrow."

Work group "cyber-physical systems" as a competence center at Silicon Saxony e. V.

At the end of 2012 experts from various Saxon companies and research institutes founded the work group "cyber-physical systems". Amounting to 25 members now, this work group has created a competence center for state-of-the-art technologies which will be determining the future market. Being a primary step on the way to the "Internet of matters and services", cyber-physical systems control physical processes from a cloud, acquire sensor data with the result of being able to control as well as optimize flow of information, energy, material, goods and human resources. According to Uwe Gäbler, head of the work group "cyber-physical systems" at Silicon Saxony e.V.: "Thus, industrial processes might be automated efficiently – up to their self-regulating optimization."

Saxony to deliver key and cross-sectional technology for Smart Cities

As Dr. Wolfgang Sinn, second head of the Silicon Saxony work group "cyber-physical systems" and head of business development at the Institut für Mikroelektronik- und Mechatronik Systeme Ilmenau (IMMS) states: "The advancement of cyber-physical systems as a basis for the technological applications of the Smart Cities to come means a tremendous competitive edge for the Saxon business location within Europe." Saxony as a powerful business location for microelectronics supplies key and cross-sectional technologies. As Wolfgang Sinn continues: "Chips and compatible software mean heart and spirit for the Smart City technology." Additionally, the networking of the different sectors is called for. "In the near future, electronic devices are going to contain a variety of wireless chip solutions, increasingly involving sensors and measurement technology", as Sinn elaborates.

Top-Digital-City of Dresden: Free State ranks top in digital transformation

In a recent study, Google and the Institute for Economic Research examined where digital transformation is most pronounced. Dresden ranks top there and is the sixth top-digital-city in Germany involving the internet comprehensively in business structures and administration processes.

Dresden as the heart of Silicon Saxony has already been utilizing a number of smart technologies in the sectors mobility and traffic: the Traffic Management System VAMOS records traffic data, evaluates them and prepares them for traffic control and management. It thus enables passengers to be informed and transported by using the infrastructure in an optimum way. There, this multimodal system makes use of more than 1,000 detectors from the motorway and the Dresden



road network. The Dresden taxi cooperative operates a mobile traffic jam alert. Additionally, live camera systems visually inform about current traffic situations.

Moreover, the City of Dresden, the Dresden public transport operator DVB AG and the Technical University of Dresden (TUD) have developed a traffic solution for traffic lights integrating buses and trams: this solution aims at an optimum control of the local public transport (ÖPNV) considering the current traffic situation. Here, scientists have developed an Advanced Driver Assistant System (ADAS) enabling a smart prioritization of public transport at traffic lights. Thanks to a web-based solution the driver is provided with e.g. recommendations for speed control via Smartphone.

Another joint project focuses on the issue of electromobility. The Institute for Automotive Technology Dresden and the Institute for Traffic Telematics at the TUD and 14 partners (German automotive industry, several research centers, the City of Dresden) work jointly on the project "Energy efficient traffic 2014/2". There, an electric vehicle is linked to its surrounding and is equipped with new information displays in the driver's cabin facilitating a particular time saving and energy efficient drive through the city. There is a test track in Dresden already. On the track, the traffic and switching data of the traffic lights are recorded, green phases and congestion lengths are forecast and transmitted to the demonstrator vehicle.

For further inquiries:

WeicherMehner (Agency), Robert Weichert | Phone: 0351 50 14 02 00 | Email: info@weichertmehner.com

About SILICON SAXONY e. V.:

Silicon Saxony e.V. is Europe's leading trade association for micro and nanoelectronics, photovoltaics, software, Smart Systems and applications. The association was founded in December 2000 as a network for the semiconductor, electronics and microsystems industries. It links Producers, suppliers, service providers, universities, research and public institutes at the business location Saxony. About 20,000 coworkers are employed at the 300 member companies, achieving an annual turnover of more than 4.5 billion Euros