Fraunhofer FOKUS

FRAUNHOFER INSTITUTE FOR OPEN COMMUNICATION SYSTEMS FOKUS

SMART CITY APPLICATIONS

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making cities smart

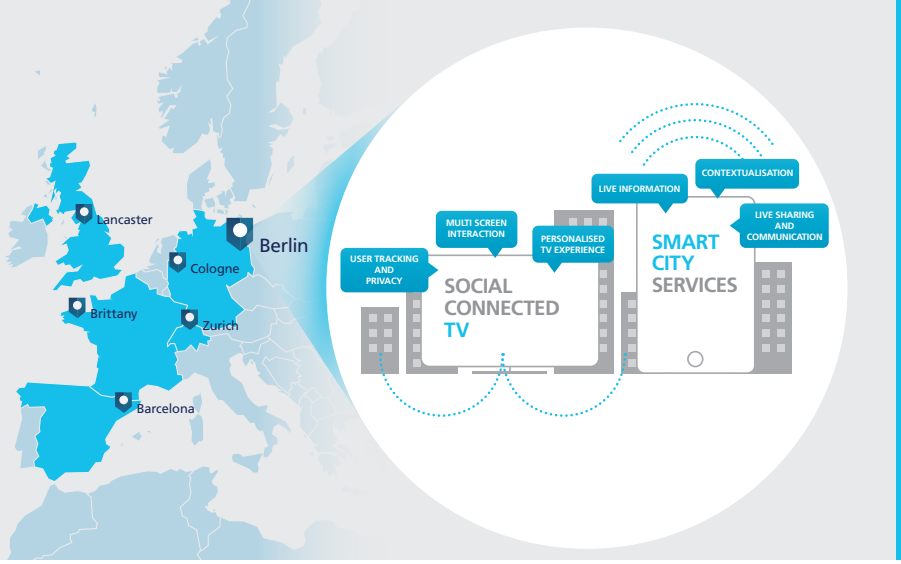
In the year 2050, planet earth will look different than it does today: More than nine billion people will be living here, of which 70 percent will be in cities. Urbanization, globalization, demographic and climate changes are putting ever higher demands on our cities. At the same time, greater opportunities to manage energy, material and human resources efficiently are also being created. It is the goal of the smart cities to seize these opportunities.

Information and communication technologies will make the cities of the future even more 'savvy'. Such developments in the fabric of urban life all come together under the general term "Smart Cities". Tomorrow's communication infrastructures will be embedded in the buildings, streets and institutions of the city, offering all people access to information, enabling sustainable economical use of resources and leveraging networked mobility to meet the challenges of increasingly heavy road traffic and building a modern system of public administration. The overarching aim here is to ensure smooth cooperation between industry and business, public agencies and citizens through close networking, an aim Fraunhofer FOKUS now embraces with its Engineering ICT for Smart Cities.

Fraunhofer FOKUS develops Smart Communication Technologies as the basis for seamless communication between people and between people and machines. These activities resulting in specific applications in the fields of eGovernment, eHealth, public safety, smart mobility and smart energy:

- First aid kit for smartphone with rescue cards, remote guidance in emergencies and blood donation service
- Citizen reporting platform for direct, fast and easy contact to local authorities
- Social media as communication channel for political campaigning

Smart City Services:
Contextualisation, live information,
live sharing & communication



– Smart City Guide a mashup of User Generated Content (UGC) and Open Data for discovering new sights and events
– webinos Internet of Things (IoT) dashboard for utilizing sensors and actuators

The FI-CONTENT initiative – Driving innovation at the crossroads of content, media, networks & creativity

Major European and global companies and research centres have joined their skills in the FI-CONTENT initiative to drive innovation at the crossroads of content, media, networks and creativity. This initiative aims at developing and experimenting across Europe cutting-edge ICT platforms devoted to applications and services in the areas of social connected TV, smart city services, and pervasive games. Any European stakeholders, particularly developers and SMEs, willing to innovate and boost their business can access and use these open platforms. Whilst doing so they will receive support from the FI-CONTENT companies and research centres. Open calls will offer funding to selected stakeholders.

Fraunhofer FOKUS is doing research and actively build the technological foundation for the Social connected TV and Smart City Services platforms. In addition, Fraunhofer FOKUS hosts the Berlin experimentation site, which is devoted to large scale user experimentations for Smart City Services as well as Social connected TV applications.

The webinos platform – A pioneering open web platform for Internet of Things (IoT) and Machine-to-Machine (M2M) applications

webinos delivers an Open Source platform that connects user's devices securely and allows applications to run and use resources across mobile, PC, home media, TV sets and in-car devices in new ways. Implementations and demos are available across all screens covering Android, Windows, OSX and Linux. The webinos project has more than thirty partners from all across Europe.

Fraunhofer FOKUS provides webinos specific APIs to develop applications which use sensors and actuators. Based on these APIs webinos IoT dashboard allows users to show a list for all available sensors and to display a graphical representation for each one. For each actuator instead, it is possible to set the current value choosing among a set of eligible values.

At a Glance:

Smart City Services
– Contextualisation
– Live information
– Live sharing & communication
– Citizen's participation (Fix my City)
– Open Data

Social connected TV
– Multi-screen interaction
– Personalised TV experience
– User tracking and privacy

webinos

FIcontent

FUTURE INTERNET PPP

SEVENTH FRAMEWORK PROGRAMME

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