

Workshop 1

# Smart cities: The reallity of IoT services in Small and Medium Cities



### Partner:

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# Idea – and questions workshop addresses:

Why are small and medium cities different compared to big cities or metropolitan ares? How can technologies like IoT and M2M which are based on sensors and sensor networks help these cities to be more energy efficient and nicer place to live? What can developers, companies, citizens, mayors and city managers learn from experiences of Santander - a smart city? What solutions are going to be delivered by recently started and ongoing IoT projects?

## **Description:**

To realise the vision of a 'smart city' means bringing together a strong variety of stakeholders that can have conflicting interests. It also means finding a common language to make civil servants, technology developers, old and new service providers, forces like the police and fire department, hospitals and citizens understand each other.

SmartSantander, a 180.000 of population, was the first smart city IoT testbed in Europe to deploy sensors on such a large scale that it has achieved this common language. One of the results, broadly shared now by the Commission, is that the key to adoption of a smart city lies in the model of public procurement for IoTizing urban services as well as their ability to be involved in what they actually would like as services from the beginning.

# What to expect?

Idea and implementation of the SmartSantander test-bed will be introduced, followed by discussion on options and possibilities of taking advantage of this test bed. There are many applications available today based on SmartSantander infratstructure and many more could be developed and offered to citizens.

Since it is not anymore only or even at all about technology, this general move towards impact of IoT technology will be shown in a few of the projects that have been working beyond technologies, addressing society and business.



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**SocioT@I** (<a href="http://sociotal.eu/">http://sociotal.eu/</a>) project addresses a crucial next step in the transformation of an emerging business driven Internet of Things (IoT) infrastructure into an all-inclusive one for the society by accelerating the creation of a socially aware citizen-centric Internet of Things. It will close the emerging gap between business centric IoT enterprise systems and citizen provided infrastructure.

**Citi-Sense** (<a href="http://www.citi-sense.eu">http://www.citi-sense.eu</a>) will develop "citizens' observatories" to empower citizens to contribute to and participate in environmental governance, to enable them to support and influence community and societal priorities and associated decision making.

**IoT Competence centre OpComm** (<a href="http://www.opcomm.eu/en">http://www.opcomm.eu/en</a>) has started as a national program that initially supported development of open IoT platform and to discover opportunities of platform usability in cases of network management, asset management and wellbeing. Competence centre has developed into a research-development community and technology center in the CSEE region and today Occapi (the IoT platform) and other developed products are used for many other applications, including certain in smart cities.

RADICAL (<a href="http://www.radical-project.eu/">http://www.radical-project.eu/</a>) project is co-funded by the European Commission under the Competitiveness and Innovation Programme (C.I.P.). RADICAL will ease the fast creation of interoperable and socially-aware services, by leveraging Internet of Things and Social Networking technologies, emerging from the results of four R&D EU-funded projects: SmartSantander, BonFIRE, SocIoS, and +Spaces. A number of services will be integrated, deployed and piloted on top of the RADICAL platform. This platform will also facilitate tools for the smart governance and flexible replication of services across cities and regions, thus shortening the time to market and allowing SMEs, citizens and local authorities to get fully involved in the smart city business.

ClouT (<a href="http://clout-project.eu/">http://clout-project.eu/</a>) is a collaborative project jointly funded by the 7th Framework Programme of the European Commission and by the National Institute of Information and Communications Technology of Japan. ClouT's overall concept is leveraging the Cloud Computing as an enabler to bridge the Internet of Things with Internet of People via Internet of Services, to establish an efficient communication and collaboration platform exploiting all possible information sources to make the cities smarter and to help them facing the emerging challenges such as efficient energy management, economic growth and development.