



Smart Cities in Europe 2020 strategy

**Inteli event
1 July 2013, Lisbon**





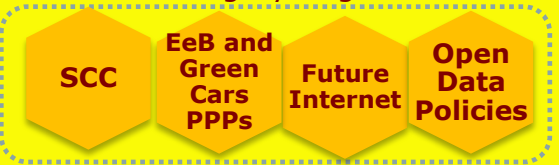
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Outline

- Vision for Smart Cities
- Policy development
 - European Innovation Partnership on Smart Cities and Communities
- ICT Research and Innovation supporting Smart Cities
- Horizon 2020

An holistic vision for Smart Cities

<p>why</p>	<p>Societal Trends</p> <p>Environmental: energy consumption & emissions</p> <p>Economic: knowledge-intensity</p>		<p>ICT Potential</p> <p>ICT for green: enabling effect</p> <p>Green ICT: sector's own footprint</p>
<p>what</p>	<p>Vision</p> <p>Future Intern.</p> <p>Societal Challenge</p> 		<p>Complementary objectives</p> <p>Establishing enabling infrastructures & services for businesses, digital inclusion and citizen empowerment</p>
<p>how</p>	<p>EIP SCC</p> <p>Roadblocks to Scale-up</p> <p>Innovation Co-funding</p> <p>Facilitation, Soft & Hard Policy</p> <p>WP2013, H2020</p>		<p>CONNECT Smart Cities Strategy</p> <p>Creating Synergies</p> 

combined approach and instruments

- Societal challenge approach
 - Usage scenarios, business models, application requirements, best practice networking.
- Enabling technology approach
 - Multiple technologies called upon to be integrated: networks, service platforms, Sensors/IoT.
 - Experimental facilities, testbeds
- Available instruments
 - Now: ICT & CIP Work-programmes.
 - Future: Horizon 2020 work programmes (2014-2020)
 - Research: open to international cooperation

smart cities – an holistic approach

- Increasing energy or transport efficiency as key objectives, but not the only ones
- Systemic approach: across sectors – energy, transport, buildings, waste, water - and considering various trends (future Internet)
- Leverage policy actions (broadband, open data...)
- Include social, environmental, structural dimensions
- Identify common barriers/challenges, standardisation
- Human dimension/aspects

a coordinated approach in the Commission

- DG CONNECT has been funding smart cities projects in different calls all over FP7 (including in CIP)
- DG RTD and DG ENER introduced Smart Cities in October 2009 in the SET-Plan financing Communication
- DG RTD, DG ENER and DG CONNECT worked jointly on Smart Cities in the context of the Energy-Efficient Buildings PPP / Green Car PPP
- DG MOVE supported Smart Cities through several policies

a coordinated approach in the Commission

- European Innovation Partnerships – concept proposed in Innovation Union Flagship Communication (2010):
 - A new approach, not an instrument
 - Covering the supply and demand side
 - Tackling special societal challenges
 - Bringing together actors at EU, national, regional level, across policy areas and industrial sectors

moving beyond silos



EIP on Smart Cities and Communities

- Urban areas:
 - big consumption of energy and greenhouse gases emission
 - traffic congestion and pollution - dysfunctional cities, undermined competitiveness, affected quality of life
- Solutions: technologies for intelligent and resource-efficient energy and transport systems
- Conclusion: need for an initiative to spread solutions across Europe, driving costs down to enable mass production and use
- Result: European partnership making cities hubs for innovation, offering opportunities for cities, industry and citizens

EIP on Smart Cities and Communities

Our energy and climate challenges will be won or lost in cities. This EIP is about accelerating full deployment of solutions that help us answering these challenges.

Political Goal
Significant contribution to 20/20/20



Possible Headline Target
Significant number of Smart City solutions, highly transferable, that enable the city to overperform on 20/20/20



Operational Focus
Transferable solutions where ICT, energy and transport sectors overlap in urban context

Operational Goal
Achieving industrial scale development and deployment

- Getting cities and the private sector to commit together to advancing forward
- Co-funding for demonstration projects (via existing instrum)
- Formulating European policy action on key bottlenecks
- Coordinating existing portfolio of city initiatives

EIP - governance

■ High Level Group

- guide Strategic Implementation Plan (SIP)
- steer implementation SIP
- take commitments, led by example
- supported by a "Sherpas" Group

■ Stakeholder Platform

- provide input to SIP
- exchange of knowledge
- create partnerships



The screenshot shows the Smart Cities and Communities website interface. At the top, there is a navigation bar with links for Home, Groups, Blogs, About, Events, Login, Solution Proposals, and Browse Members. The main header features the Smart Cities and Communities logo and a large banner with the text "Join the Smart Cities Stakeholder Platform" and buttons for "Submit a Solution Proposal", "See our Working Groups", and "Join us now!". Below the banner, there is a "Highlight" section with a green lightbulb icon and text about FP7 information sessions. The "Smart Cities News" section includes a "Call for..." announcement and a "Smart City Expo - World Congress" announcement. On the right side, there is a "User login" form with fields for Username and Password, and a "Log in" button. Below the login form, there are sections for "Follow us" and "Latest Tweets".

Future Internet and Smart Cities

- **CIP** - Connected Smart Cities related projects (20 projects mainly CIP ~47M€)
- Open Innovation for Internet-enabled services in 'smart' cities
- **Future Internet PPP** - Smart Cities related projects (4 projects FP7 ~32M€)
- Increase the effectiveness of business processes and operation infrastructures in sectors relevant to city activities
- **Future Internet Research & Experimentation (FIRE)** related projects (1 project FP7 ~8M€: SMARTSANTANDER)
- City-scale experimental research facility in support of typical applications and services for a smart city

CIP - Open innovation and Smart Cities

- 20 pilot projects - 47 M€ EU funding
- Boost deployment of Internet enabled services
- Real-life deployment, cross-border

30 Smart Cities in
18 Member States



User-driven
open
innovation
ecosystems

Cross-
border
networks of
"smart"
cities

Innovative
Internet-
based
services

Future Internet PPP - Smart Cities

situational awareness

ad-hoc networks

alerting citizens

command centers



Traffic, Utilities Manag.

Sewage Management

Waste Management

Intellig. Leakage Detect.

Urban Lighting Manag.

Sustain. Transp. Manag.



OUTSMART

FUTURE
INTERNET
PPP

smart buildings

electric mobility

distributed network

micro-grid

electronic market energy



Pers. Travel Companion

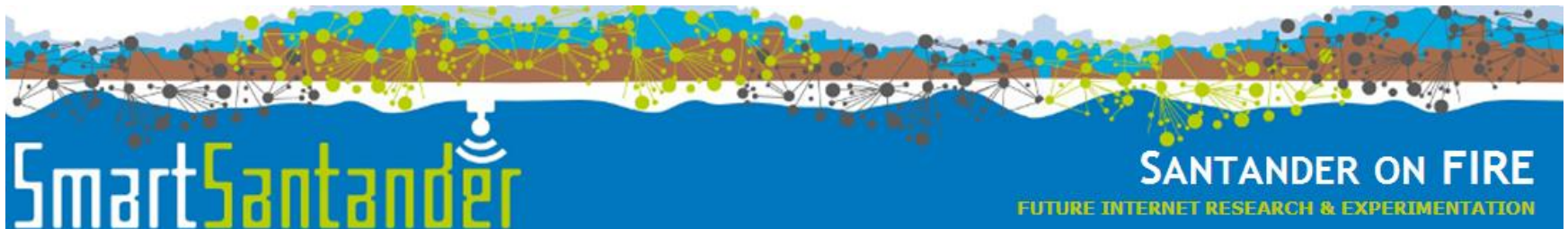
Urban Transp as service

Smart City Logistics



FIRE and Smart Cities

- SmartSantander proposes a unique in the world city-scale experimental research facility in support of typical applications and services for a smart city.
- Large, open and flexible.
- The facility will comprise more than 20,000 sensors and will be based on a real life IoT deployment in an urban setting.



Thank you for your attention!

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