



Smarter Cities

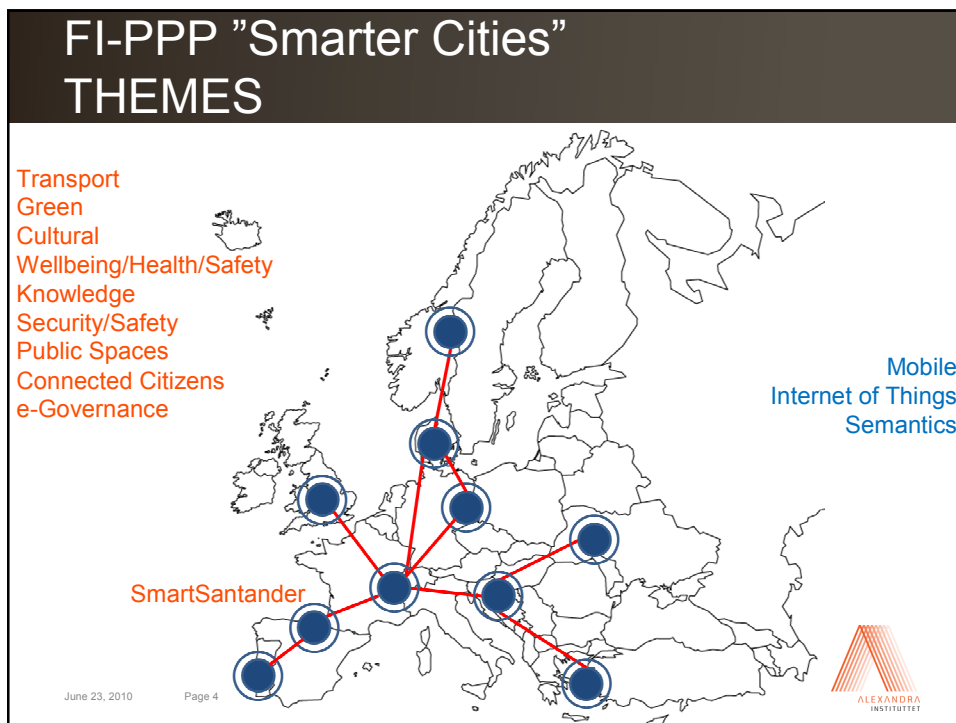
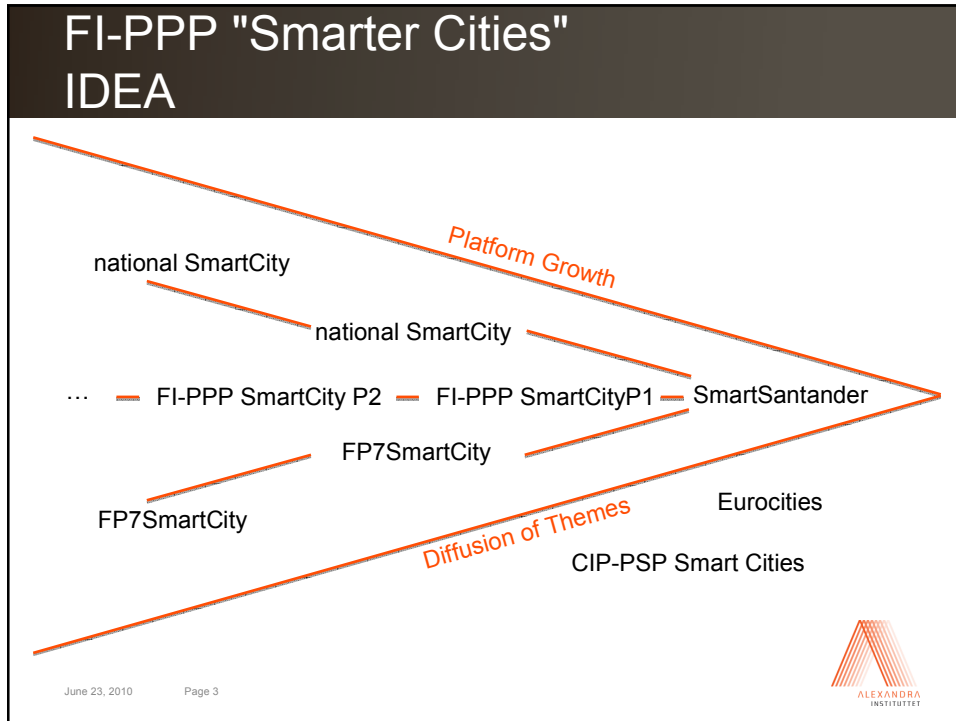
Tomas Garcia Fresno
City of Santander

Mirko Presser
Alexandra Instituttet

FI-PPP "Smarter Cities" CONTRIBUTORS

- **Mirko Presser** (mirko.presser@alexandra.dk), Alexandra Instituttet, 8000 Aarhus, Denmark
- **Tomás García Fresno** (tomasgarcia@ayto-santander.es), Santander City Council, Spain
- Alex Gluhak (a.gluhak@surrey.ac.uk), CCSR, University of Surrey, UK
- Luis Muñoz (luis@tmat.unican.es), University of Cantabria, 39005-Santander, Spain
- José M. Hernández-Muñoz (jmh@tid.es), Telefonica I+D, Spain
- Martin Brynskov (brynskov@imv.au.dk), Digital Urban Living, Aarhus University, Denmark
- Pedro Maló (pmm@uninova.pt), UNINOVA, 2829-516 Almada, Portugal
- Laurent Héroult (laurent.herault@cea.fr), CEA-LETI, Grenoble, France

-
- And outcomes of Norwegian and Danish discussions on FI-PPP Smart Cities




FI-PPP "Smarter Cities" CULTURE

- | Internet of Things
- | Mobile
- | Social Media
- | 4D Internet
| Streaming HD
- | Provenance and Trust
| Security
| Privacy
| Identity
- | Read/Write Web 3.0
| Service Creation/Composition

-Culture

- ❖ Arts
- ❖ Journalism
- ❖ Tourism
- ❖ Events
- ❖ Cultural Trespassing




June 23, 2010 Page 5

FI-PPP "Smarter Cities" CULTURE/EVENTS

- Temporal but intense events (>20k persons)

Setup	Execution	Post Experience
Rapid, cheap deployment	Online experience, safety, security, collaboration, emergency, ...	Content generation, relive experience

- Culture – Arts – Sports – ...
- Links to Usage Areas: Emergency, Health, Transport, ...
- Links to Technologies: IoT, IoS, 4D Internet, Networks, ...



June 23, 2010 Page 6

FI-PPP "Smarter Cities" CULTURE/EVENTS

<http://www.aglance.dk/>

3D maps

ALEXANDRA
INSTITUTTET

June 23, 2010 Page 7

FI-PPP "Smarter Cities" SMARTSANTANDER Use Cases

GOAL ➔ Usability and Acceptability of the deployed services

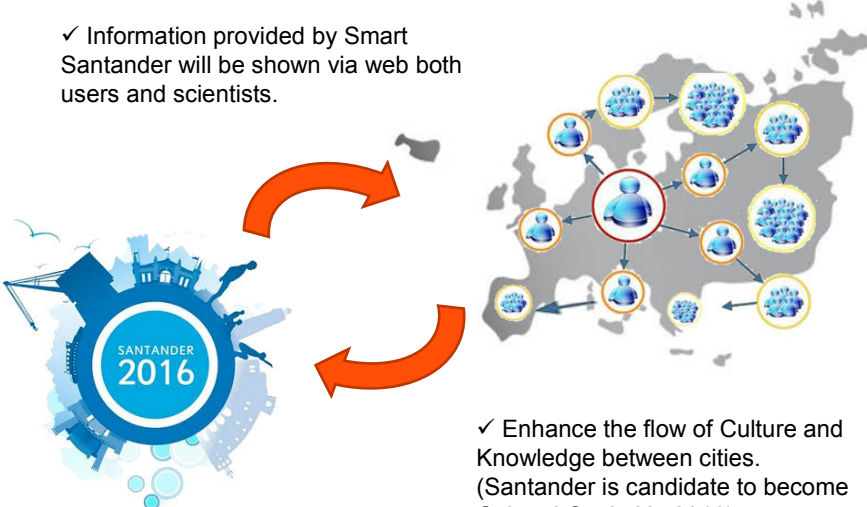
Candidate Use Cases:

- **Health , Welfare & Environment.**
 - ✓ Allergy-caused by substances and/or pollutants (i.e. CO2).
 - ✓ Noise and pollution dynamic maps.
 - ✓ Monitoring of Alzheimer patients (alert generation when leaving a specified security perimeter)
- **Traffic.**
 - ✓ Monitoring saturation and traffic jams in the different city areas.
- **Public Transport**
 - ✓ Smart BUS/Taxi stops. Information about next incoming vehicles, number of passengers, etc.
- **Parks & Gardens.**
 - ✓ Sustainable water use in parks and gardens.
- **Tourism.**
 - ✓ Information related to areas of interest (pre-historical caves ,...)

June 23, 2010 Page 8

FI-PPP "Smarter Cities" SMARTSANTANDER Knowledge Federation

✓ Information provided by Smart Santander will be shown via web both users and scientists.



The diagram illustrates the 'SMARTSANTANDER Knowledge Federation'. On the left, a circular graphic labeled 'SANTANDER 2016' is surrounded by icons representing smart city infrastructure like buildings, a bridge, and a person. Two large orange curved arrows point from this graphic to a map of Europe on the right. The map features several circular nodes, each containing a person icon, connected by arrows, representing a network of cities. A central node is highlighted with a red border.

✓ Enhance the flow of Culture and Knowledge between cities.
(Santander is candidate to become Cultural Capital in 2016)

June 23, 2010 Page 9

Conclusions

- (1) Use Cases
- (2) Innovative Technology
- (3) Core Platform
- (4) Experimentation Environment
- (5) Role of Organisation



June 23, 2010 Page 10



Tomas Garcia Fresno
tomasgarcia@ayto-santander.es
Santander
Spain

Mirko Presser
mirko.presser@alexandra.dk
Alexandra Instituttet
side.alexandra.dk/uk
Aabogade 34, Aarhus
Denmark

