

Open Innovation for Future Internet Services in Smart Cities

Open Cities

Scope and objectives

The success of cities is linked to their efficiency, in reducing transaction costs and providing services. However, in order to maintain this success, cities have reinvented themselves many times through history.

Today, Information Technologies are doomed to be the key driver of a new wave of innovation in cities that will lead, one more time, to their reinvention.

However, public procurement and management in cities are not geared to fostering innovation. Therefore, this process of reinvention of transformation of cities into Smart Cities necessarily means to rethink how innovation is managed in cities.

Even if Open Innovation is the “de facto” standard in innovation management in the private sector, we know little of how to apply it to the public sector and this is even truer when involving technological platforms, especially in aspects such as governance or incentives.

This project aims to explore this gap with four main objectives:

- 1) Distil insights and best practices on how to apply Open Innovation in the Public Sector.
- 2) Gain understanding on the management of Technological Platforms in an Open Innovation context.
- 3) Validate the use of pan-European Platforms for Urban Labs, Crowdsourcing, Open Data, FTTH networks and Open Sensor Networks.
- 4) Trigger the development of Advanced Future Internet Services.

by leveraging existing tools, trials and platforms in Crowdsourcing, Open Data, Fiber to the Home and Open Sensor Networks in five major European cities: Berlin, Amsterdam, Paris, Helsinki and Barcelona.

OPEN CITIES

Type of project

CIP — ICT-PSP 2010.
Pilot Type B

Project coordinator

ESADE Business School

Contact person

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Project website

N/A

**Information Society
and Media DG unit responsible**
F — New Infrastructure Paradigms
and Experimental Facilities

**Community contribution to the
project**
2.9 EUR million

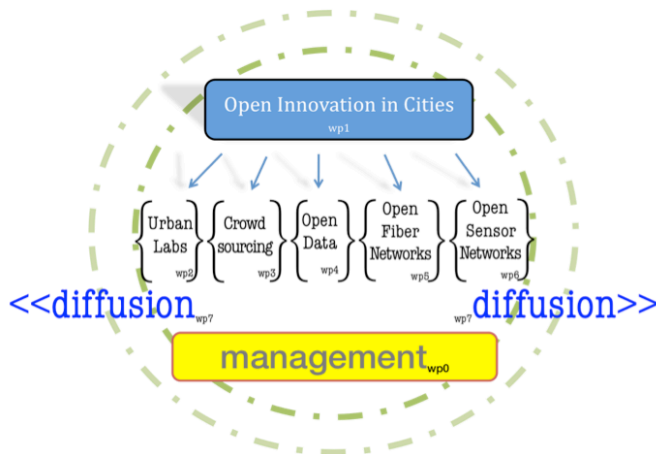
Project start date
November 1, 2010

Duration
30 months

Chosen approach

Open Cities aims to conduct two different types of research simultaneously: socio-economic research on the use of Open Innovation in the Public Sector and Future Internet research through real-life pilots.

Open Cities is therefore a complex project where there is a clear need for reducing complexity and put in place an structure that leaves room to the different levels without adding excessive work.



In this context, Open Cities opted for simplification in both its structure and its management, for a clear structure where cities and organizations lead the area of research where they can leverage their experience and their infrastructure.

Open Cities work plan is implemented in eight (8) work packages ranging from work package 0 to 7, where four of them work packages 2, 3, 4, 5 and 6 are devoted to the Pilots, work package 1 is dedicated to socio-economics, work package 7 is devoted to dissemination and finally work package 0 addresses management.

In this structure work packages 2, 3, 4, 5 and 6 are devoted to Open & User Innovation Future Internet Pilots, specifically to Living Labs in Smart Cities (Urban Labs), Crowdsourcing, Open Data, Open Fiber Networks and Open Sensor Networks respectively and lead by the City of Barcelona (Spain), Amsterdam (Netherlands), Fraunhofer Fokus (Berlin), CapDigital (Paris) and UPF (Barcelona) respectively. These five work packages are the centre of the project and most of the resources are devoted to them.

Work package 1 is aimed at three main objectives: a) provide a state of the art on Open & User Innovation for Future Internet services in Smart Cities, b) create the Living Labs that will drive the project and c) conduct socio-economic research on Open Innovation that could provide insights and generate experiments for the pilots.

Work package 7 is devoted to dissemination at three fronts: policy advisors, academic and general public using web 2.0 technologies.

Finally, work package 0 is devoted to management, both in terms of administration and in terms of defining a scoreboard with indicators that could allow presenting the level of success or failure of the project and managing its update and project tracking.

Target outcomes and benefits

Open Innovation in the Public Sector. Understanding better how Open & User Innovation can be applied to the Public Sector and specifically to fostering Future Internet Services in Smart Cities is a key objective of the project.

- Assess the integration of Open Innovation in the Public Sector, its limits and needs for change in terms of governance, structure, type of public institution, stakeholders and suitability of topics.
- Explore the Integration and governance of technological platforms in Open Innovation in the context of Public-Private Partnerships.
- Research on the role and effectiveness of incentives in Open Innovation mechanisms, such as platforms, competitions, ... in the Public Sector.
- Validate different Open Innovation approaches in the Public Sector.

Pan European Platforms. The development and validation of pan European platforms for Crowdsourcing, Open Data and Open Sensor Networks.

- Evolve and localize a Crowdsourcing platforms in the participant cities.
- Build a pan European Open Data repository with the contribution of four major European cities.
- Develop an exemplary case by integrating existing Sensor Networks platforms into an Internet, allowing its access through programmatic interfaces such as web services.
- Transform Fiber to the Home networks into Future Internet Services Platforms with applications that leverage on them.

Future Internet Services & Ideas. The delivery of Future Internet Services applications and ideas especially in the realm of mobile devices and Augmented Reality applications.

- Deliver exemplary advanced Future Internet mobile services that can trigger the development of other apps and services by its diffusion through the developer community.
- Spur the development of Advanced services that leverage on existing Fiber to the Home networks.
- Foster the creation of Future Internet services by using Open Data and Sensor Networks as a trigger and opportunity.
- Raise novel ideas on the realm of Future Internet by using Crowdsourcing.
- Create awareness on the developed platforms at EU level among developers and companies with the ambition to contribute to the development of an European space for Future Internet Services in Smart Cities.

Consortia

Open Cities Consortium is composed by 15 partners encompassing 5 European member states and 5 major cities: Berlin, Amsterdam, Paris, Helsinki and Barcelona.

The Open Cities Consortium builds on significant expertise on Open Innovation, Living Labs and Smart Cities and existing platforms on Crowdsourcing, Open Data, Sensor Networks and Fiber to the Home networks.

The Open Cities Consortium aims to build on both strands of expertise combining an interesting blend of socio-economic and technological research with real-life pilots in major European Cities.

Participant organization name	Country
ESADE Coordinator	Spain
City of Amsterdam Economic Affairs	Netherlands
Berlin Government Senate	Germany
Cap Digital	France
Barcelona City Hall – Barcelona Activa	Spain
Fraunhofer Fokus	Germany
Atos Origin	Spain
Dutch	Netherlands
Intitut Telecom	France
Universitat Pompeu Fabra - UPF	Spain
DotOpen	Spain
Tempos21	Spain
Fourm Virium	Finland
Waag Society	Netherlands
Bearstech	France