iCity

LINKED OPEN APPS ECOSYSTEM TO OPEN UP INNOVATION IN SMART CITIES

Scope

The iCity project aims at making a step forward in fostering the co-creation of services of public interest by third parties pushing for their space as services providers in Smart Cities' urban spaces. This will be done by bootstrapping the involvement of open innovation ecosystems such as Living Labs in bringing the users together in the whole co-creation process using a self-centred methodology.

iCity involve into the co-creation of services of public interest different types of stakeholders: private and third sector as new services developers, and citizens and companies as beneficiaries and final users of the new services.

The project responds to the growing demand from social stakeholders to provide services of public interest based upon the exploitation of available public information, digital assets and infrastructure. In doing so, the project encompasses the concept of Open Data with a novel approach of Open Infrastructures where the available municipal ICT networks already deployed in urban spaces will be made available and accessible to open innovation ecosystems (specially SMEs) with the objective of maximizing the number of deployed services of public interest.

The services to be finally deployed will be designed by interested user-driven open innovation ecosystems according to selected priority areas for cities and will be developed on the top of a shared technological platform that the iCity project will integrate in the 4 participant cities: Barcelona, Bologna, Genova and London. The iCity platform will enable services deployment using on due time appropriate municipal infrastructures in each city and providing a software development kit (SDK). Transferring will be assured by making the platform be ready to be integrated in any other interested city willing to shift into a Smart City and adopt the co-creation approach in services provision and also by making available services of public interest to the citizenship on an iCity Open Apps Store.

Draft Logo

Type of Project
Competitiveness and Innovation Framework Programme -
ICT Policy Support Programme
Pilot Type B

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Responsible INFSO Unit
F4 New Infrastructure Paradigms and Experimental Facilities

Project start date
January 2012

Duration
36 months

Project's budget
5,210,472.00€

EU contribution
1,979,980.00€

Website
http://www.icityproject.eu/

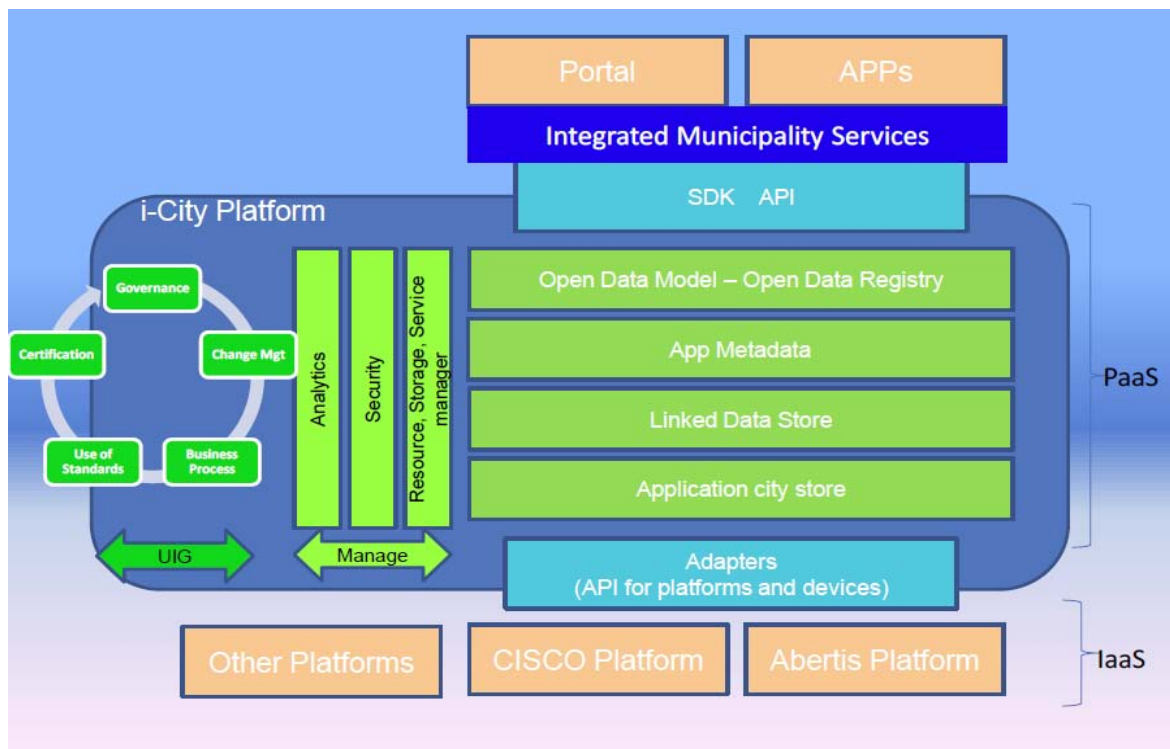# Technical approach: the iCity platform

Figure: the iCity platform – logical view

The iCity Platform will be aimed at industrializing the operations and management of the city to offer scalable, secure and robust services to the citizens and companies. The platform will enable innovation, integration and monetization of home and third party developed services. The iCity Platform is a combination of human and technical interactions through governance, Business Processes and Standardization of best practices and the use of Open data, as we strongly believe that it can't be just about technology
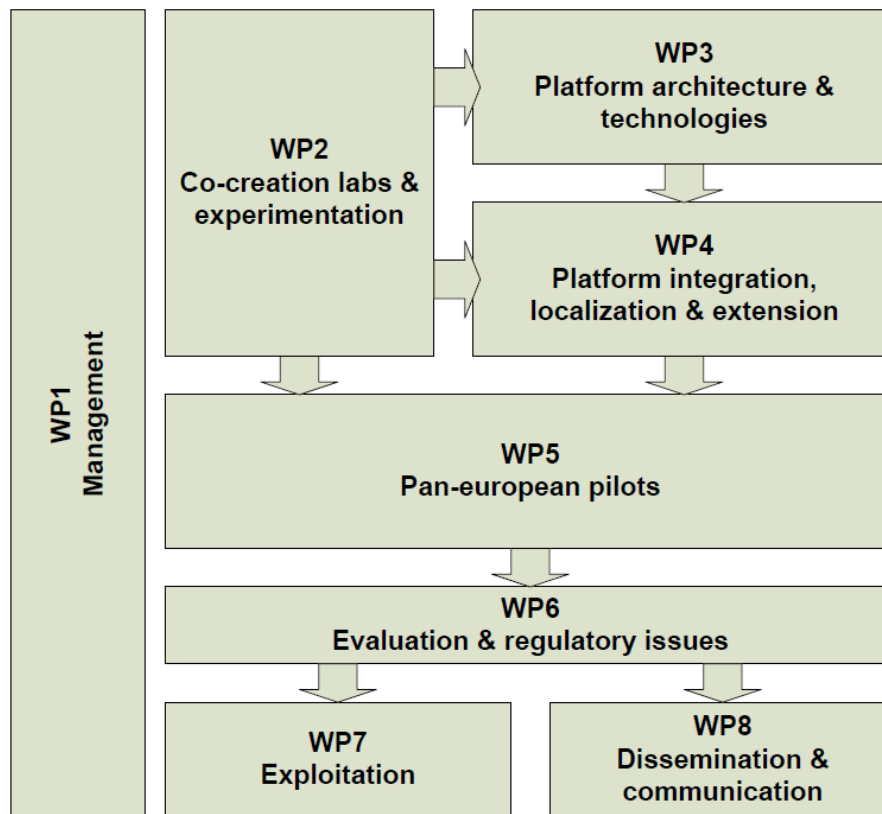
The iCity Platform will include the following features and capabilities:
- An advanced service delivery platform that is built on open standards.
- A rich set of common application infrastructure and business services to accelerate service creation and delivery.
- Integration with Operations support systems/business support systems (OSS/BSS) to enable (at scale) service orchestration, activation, service monitoring, maintenance, and billing.
- Quick integration with a wide variety of devices through a device abstraction framework.
- Quick integration with city applications using an application abstraction framework.
- A Portal for the end consumer and city operating personal.

The iCity Platform will explore its offering as a Platform-as-a-Service (PaaS) on the cloud, allowing anyone to build new applications to instantiate services of public interest using the SDK of the iCity Platform.

Target outcomes and expected results

The project intends to build up a Linked Open Apps Ecosystem based upon the vision of going beyond the already accepted concept of Linked Open Data towards the advent of a Linked Open Apps Ecosystem where public services are instantiated as public apps that valorise the combined digital assets of Linked Open Data and Urban Devices. The project is targeted towards the seamless integration of sensing, control and command functionalities available over public space, where apps will be developed to interact with a broad number of wired and wireless sensors and control devices deployed, therefore supporting a skin of "city sensing and acting" enabling dimension. Open Data will be generated upon these devices together with the already available open information as provided by public administrations.

Figure: Project structure

The iCity project intends to develop and deploy an operational approach to allow user-driven open innovation ecosystems to co-create, deploy, operate and exploit Internet-enabled public services or services of public interest in the public urban space in smart cities. That implies a shift in conventional city governance and concepts, as the project will allow for a significant transformation of the societal life in urban spaces. Its implementation will settle down the conditions for a more participative civic involvement as well as for the birth of hundreds if not thousands of services of public interest targeted to specific communities or in support of well-identified collective needs.

Consortium

PARTICIPANT	COUNTRY
Institut Muncipal d'Informàtica de Barcelona (coordinator)	Spain
Retevisión	Spain
Cisco Systems B.v.	Netherlands
Fraunhofer Fokus	Germany
Greater London Authority	United Kingdom
Internet Interdisciplinary Institute (IN3) - Universitat Oberta de Catalunya	Spain
Citilab Cornellà	Spain
Comune di Genova	Italy
Comune di Bologna	Italy

The iCity consortium consists of 9 partners in 5 European member states. It involves:

- **Cities**: providers of the platforms, open data, digital assets and infrastructures currently under operation.
- **Living labs and catalysers**: promoters of the co-creation approach and crowd-sourcing strategies.
- **Technical partners**: integrators of a common technological platform shared by all cities.
- **University**: providers of the sociological dimension to understand the new and significant social changes for which analysis and understanding is required.

This group ensures the development and deployment of an operational approach to allow user-driven open innovation ecosystems to co-create, deploy, operate and exploit Internet-enabled public services or services of public interest in the public urban space in smart cities.

Special Interest Group

The project has activated a Special Interest Group (SIG) of parties interested in following closely its development and collaborating in its different activities. The SIG has been set up with an initial group of 38 organisations from 5 European member states that already expressed their interest in supporting the project during the proposal stage and is expected to grow more during the next months.

SIG members will be invited to provide proposals and feedback for the iCity platform, participate in the co-creation of services of public interest, provide advice for the replication and rapid take-up of the iCity platform or contribute to the dissemination and dynamization of the project and its related activities.