Introduction to the Infinity Project
INfrastructures for the Future Internet commuNITY

Erik Rodenbach

COST Exploratory Workshop on Smart Cities, 26-27 Sep 2011, Paris
Background and Overview of FI-PPP

Supporting programmes that accelerate the realisation of “future internet” enabled government, business and society in Europe that will allow:

• Public / business services and infrastructure to operate more intelligently, efficiently and sustainably through tighter integration with internet and computing capabilities

• Experimentation and validation of approaches that connect infrastructure, applications, devices, services and new technologies to deliver innovative new solutions

• Bringing together supply and demand sides for future internet services, engaging research, public service, communications and ICT and end user communities in the process of innovation
FI-PPP Programme Overview

**Phase 1 (2010-2012)**
- **Call 1**
  - **INFNITY** Capacity Building and Infrastructure
  - **ENViroFI**
  - **FINSENY**
  - **FI-CONTENT**
  - **FINEST**
  - **INSTANT MOBILITY**
  - **OUTSMART**
  - **SAFE CITY**
  - **SMARTAGRIFOOD**
- **INFINITY Programme Facilitation and Support**

**Phase 2 (2013-2014)**
- **Call 2**
  - **CONCORD** Programme Facilitation and Support
  - **Obj. 1.8 - Up to 5 Use Case trials**
- **Call 3**
  - **Obj. 1.9 Capacity Building**

**Phase 3 (2015)**
- **FI-WARE Technology Foundation**
- **SME Innovation**
- **3rd Call Use Case Expansion Phase**}

**Timeline**
- 2010
- 2011
- **Phase 1**
- 2012
- **Phase 2**
- 2013
- 2014
- 2015

**Additional Information**
- 26 & 27 Sep 2011
- Cost: Exploratory Workshop on Smart Cities

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**Future Internet Public-Private Partnership (FI-PPP)**

**THE INFINITY PROJECT**

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3 Phases of FI-PPP

Call 1 (deadline December 2010) – budget €90m

- Technology Foundation (One IP, €41m, 3 years)
- Use Case Scenarios – Phase 1 (Eight applications, IP, €5m, 2 years)
- Capacity Building (One CSA, €3m, 3 years)
- Programme support (One CSA, €6m, 5 years)

Call 2 (deadline October 2012) – budget €80m

- Use Case Pilots – Phase 2 (Five applications, €13.5, 2 years)
- Capacity Building (One IP, €12.5m, 2 years)

Call 3 (deadline December 2013) – budget €130m

Devoted to the expansion and enlargement of many test beds and pilots (Several application areas, ~ €100m, 2 years)
FI-PPP Integrated Programme Structure

**Programme Facilitation and Support:**
- CONCORD (Programme Coordination)

**Capacity Building and Infrastructure:**
- INFINITY (Web-based repository of available infrastructures)

**Applications (Use Cases):**
- ENVIROFI (Environmental Observation Web)
- FINSENY (Smart Energy)
- FI-CONTENT (Future uses of AV, games, Web, metadata and user created content)
- FINEST (Optimising collaboration in the logistics business)
- INSTANT MOBILITY (Mobility aspects of road transport)
- OUTSMART (Eco-systems for urban areas)
- SAFE CITY (Smart public safety and security in cities)
- SMARTAGRIFOOD (Smart farming, smart agri-logistics and smart food awareness)

**Technology Foundation:**
- FI-WARE (Core Platform)

The INFINITY Project

26&27 Sep 2011 Cost Exploratory Workshop on Smart Cities
Infinity Project Overview

• An integral part of Framework 7 FI-PPP

• Projects dedicated to the FI for Europe

• Coordination and support action

• Runs April 2011 → March 2014 (3 years)

• Supported by €3m funding from the EC

• 13 Partners (Coordinator: UPM)
Our Aim

To facilitate communication and collaboration between Future Internet infrastructure owners across Europe and organisations developing Future Internet applications in order to:

• position Europe at the centre of the Future of the Internet
• directly support experimentation for FI-PPP projects and investors
• accelerate the development and uptake of social and commercial solutions that will provide benefit to the citizens, businesses and governments of Europe
Our Approach

We will:

- gather, analyse, evaluate and organise information about Future Internet infrastructure and usage profiles across Europe
- make that information available to other FI initiatives through a “live” web enabled repository
- encourage and support interaction, collaboration and experimentation between application and infrastructure owners, operators, industry, local and regional authorities and end users
- capture and present user case studies to encourage wider take-up
- communicate and promote the activities of European Future Internet research capacity and infrastructures world-wide
- help prepare a route map to the future through integration of identified FI infrastructures in phase 2
Project Overview

1. Technical Exchanges, Discussion & Collaboration

THE INFINITY TEAM
- UPM
- CREATE-NET
- INTERINNOV
- FRAUNHOFER
- ERICSSON
- MARTEL
- TELEFONICA

INFRASTRUCTURES AND FI EXPERIMENTAL TRIALS ALL OVER EUROPE

3. Survey, Interactions & Knowledge Capture

4. Analysis, Interaction, Communication & Dissemination

INFINITY WEB-BASED REPOSITORY

5. ROUTE MAP
- Initial development of the route-map for the future internet in Europe

FI-PPP PROJECTS
- CONCORD
- FI-CONTENT
- OUTSMART
- INSTANT MOBILITY
- SMARTAGRIFOOD
- ENVIROFI
- FI-WARE
- FINSEN
- SAFECITY

Users & Beneficiaries
- EXTERNAL STAKEHOLDERS
  - SME’S
  - INDUSTRY
  - ACADEMIC INSTITUTIONS
  - RESEARCH BODIES
  - PUBLIC AUTHORITIES

Cost
- Exploratory Workshop on Smart Cities
Strategic Impact of Infinity

Experimental infrastructures are important assets for testing Future Internet ideas and to enable citizens to become involved in FI-PPP activities.

However, many developments and testing facilities are hidden from technology providers, industry and users.

The INFINITY project will identify the available infrastructures to capture a disseminate insights about the technical, social and economic dimensions and constraints for the infrastructure.

The end goal is to establish a pan-European Future Internet testing infrastructure.
Example of Infrastructures in Europe

**EU-Wide Infrastructure**
- Fire
- Geant ...

**Industrial Infrastructures**
- Telco
- ISPs ...

**Regional Infrastructures**
- City Wide Infrastructures
- Municipal Networks
- Private initiatives
- Living Labs...

**Scenario based trials**
- Intelligent Transport
- Smart Cities ...

Available Infrastructures
Impact on Stakeholders

Knowledge of FI-PPP project requirements
Access to European-Scale market
Standards, policy and regulatory initiatives

User take-up
Reduce fragmentation
Accessible service platforms
New transnational methodologies

Infrastructure Owners

Public sector & End User

The Infinity Project

Other FI Projects

Accessible infrastructures
Functionality & constraints
Support integration
Input to phase 2

FI-Ware Core Platform

Federation of infrastructures to meet emerging standards
Towards integration of heterogeneous infrastructures
Supporting the “virtual” platform and “generic enablers”

26-27 Sep 2011
Cost Exploratory Workshop on Smart Cities
Presenting infrastructures through the web repository (mock-up)

Locate and connect to Future Internet infrastructures across Europe

Register for Free

Advanced University Networks

Search

University of Trento Italy
Via Mesiano 77, 38123 Trento
tel. +39 0461 282669 - 2670
fax +39 0461 282672
dipamb@ing.unitn.it

Click for more information

26-27 Sep 2011
Cost Exploratory Workshop on Smart Cities
Searching through a theme / scenario

Locate and connect to Future Internet infrastructures across Europe

Register for Free

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<td>Marie Merck</td>
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<td><a href="http://www.moviemento.com">www.moviemento.com</a></td>
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Step 1: General Data

Enter the infrastructure's name: Sofia Advanced Internet Programme

Enter contact details: Ivan Stanicoff

Position the infrastructure on the map:
Key Events in 2011:

- 27-29 September – Torino, NEM Summit
- 5 October – Brussels, Net!Works General Assembly
- 10-13 October – Brussels, Open Days 2011
- 24-28 October – Poznan, Future Internet Week (FIA, FIRE, IoT, workshops and meetings)
- 26-28 October – Poznan, ServiceWave
- 7 November – Brussels, Workshop on Future Internet SocioEconomics

Sites to drill further:

- www.fi-infinity.eu - The INFINITY project
- www.fi-ppp.eu – Future Internet Public-Private Partnership
- ec.europa.eu/foi – EC activities on Future Internet
- www.future-internet.eu – The European Future Internet Portal – the community site
- cordis.europa.eu/ict/ch1 – Ongoing European FI research & development activities