Future Internet Infrastructures & Experimental Facilities: the XIFI and the INFINITY Projects

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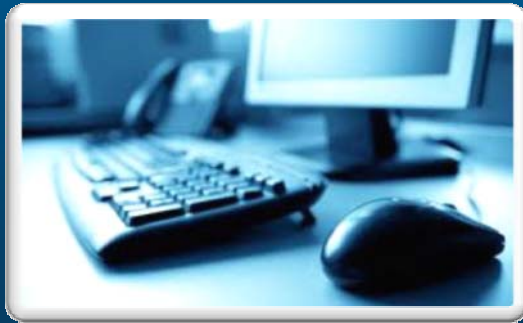monique.calisti@martel-consulting.ch
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Agenda

- The overall context
  - From the Future Internet to the FI-PPP initiative
- The FI-PPP Funding Opportunities
  - An overview
- The INFINITY Project
  - The XiPi repository
- The XIFI Project
  - The XIFI Open Call
- Conclusions and questions

The Context

You are developing Future Internet-related:

➢ Products

➢ Solutions

➢ Services

➢ Systems

A kee need

You want to introduce them
as fast as possible in the market

You need to test them properly!

Testing as a key step

Tests in closed labs are often not enough

Larger scale test environment that better match applications requirements and the market characteristics are needed

Moving beyond...

Lab

Building

Campus

Neighbourhood
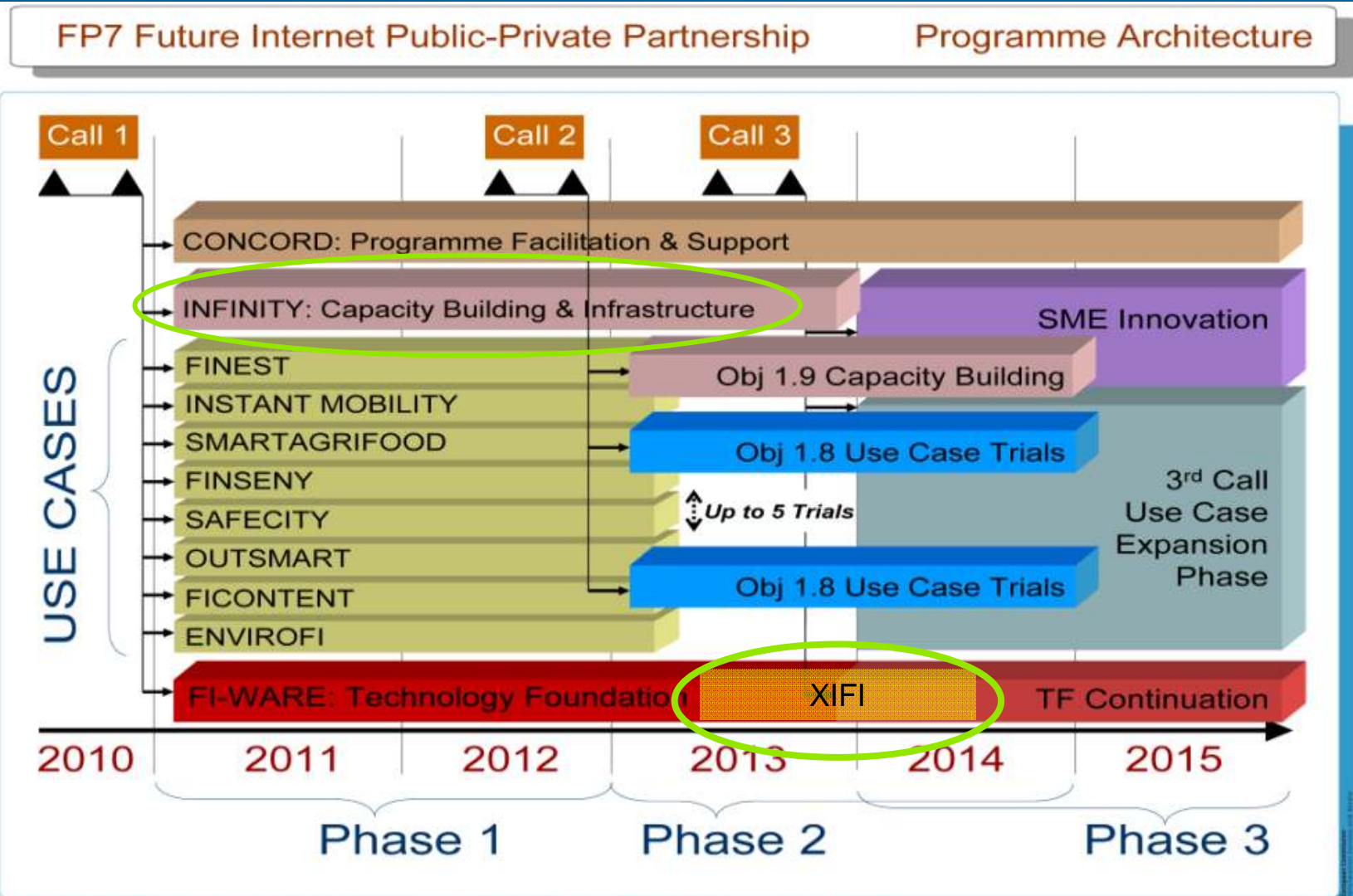

City

Region

Country

Continent

Going global!

6

The FI-PPP Initiative

- The EC **Future Internet Public-Private Partnership**
  - To promote competitiveness in Future Internet technologies and systems and support innovative Internet-enhanced applications of public and social relevance
  - To render public service infrastructures and business processes smarter and more efficient
  - To address and embrace different areas including energy, transport, entertainment, etc.

- More details at:
  - http://www.fi-ppp.eu/

The FI-PPP Programme

FP7 Future Internet Public-Private Partnership — Programme Architecture

The detailed FI-PPP work programme is available at http://ec.europa.eu/foi

FI-PPP Implementation Plan

- Phase1/Call 1: budget 90 ME
  - Technology foundation – the FI-WARE project
  - Capacity building: the INFINITY project
  - Programme support: the CONCORD project
- Phase2/Call2: budget 80 ME
  - Use case scenarios (13.5 ME, 2 years)
  - Capacity building: 12.5 ME, 2 years, open calls
  - The XIFI project
    - Funding oppportunities!
- Phase3/Call3: budget 130 ME
  - Deadline 10.12.2013 at 17h Brussels time
  - Technology foundation extension and usage (30 ME, 2 years)
  - Expansion of use cases (up to 100 ME, 2 years)
    - Funding opportunities!

The INFINITY Project

- ➢ A 3-years coordination and support action in the FI-PPP context (until March 2014)
  - ▪ 13 partners coordinated by UPM

- The main goal is to establish an approach that can quickly engage with infrastructure owners and application developers Europe-wide, building as far as possible on existing data, information, projects and programmes, to create a new, useful and valuable **repository of infrastructure capability and capacity** that relates need to opportunity and facilitates the creation of an international community that can collaborate to deliver the Future Internet

The XiPi Repository

FIND YOUR TEST ENVIRONMENT ON XiPi! *www.xipi.eu*

Get support from INFINITY www.fi-infinity.eu

PERFORM YOUR TESTS TEST WITH XIFI'S OPERATIONAL ENVIRONMENT! *

www.fi-infinity.eu

* available for experiments from April 2014

The XiPi Repository

With the XiPi portal developed by the INFINITY Project, ~150 Future Internet testing environments / experimental infrastructures are available for your tests

The repository is constantly expanding

The XIFI Project

➢ A 2-years FI-PPP project started in April 2013

  ▪ 24 partners, Telecom Italia is the project coordinator

➢ XIFI will pave the way for the establishment of a common European market for large-scale trials for Future Internet and Smart Cities through the **creation of a sustainable pan-European federation of Future Internet test infrastructures**

The XIFI Infrastructure

With XIFI, 5 initial sites are available for testing*:

- **Ireland** -Waterford Institute of Technology, HEANET
- **France** -Orange-France Telecom, ImaginLab
- **Spain** -Telefonica, Red. Es
- **Germany** –Deutsche Telekom, Fraunhofer
- **Italy** –Telecom Italia, Trentino Network
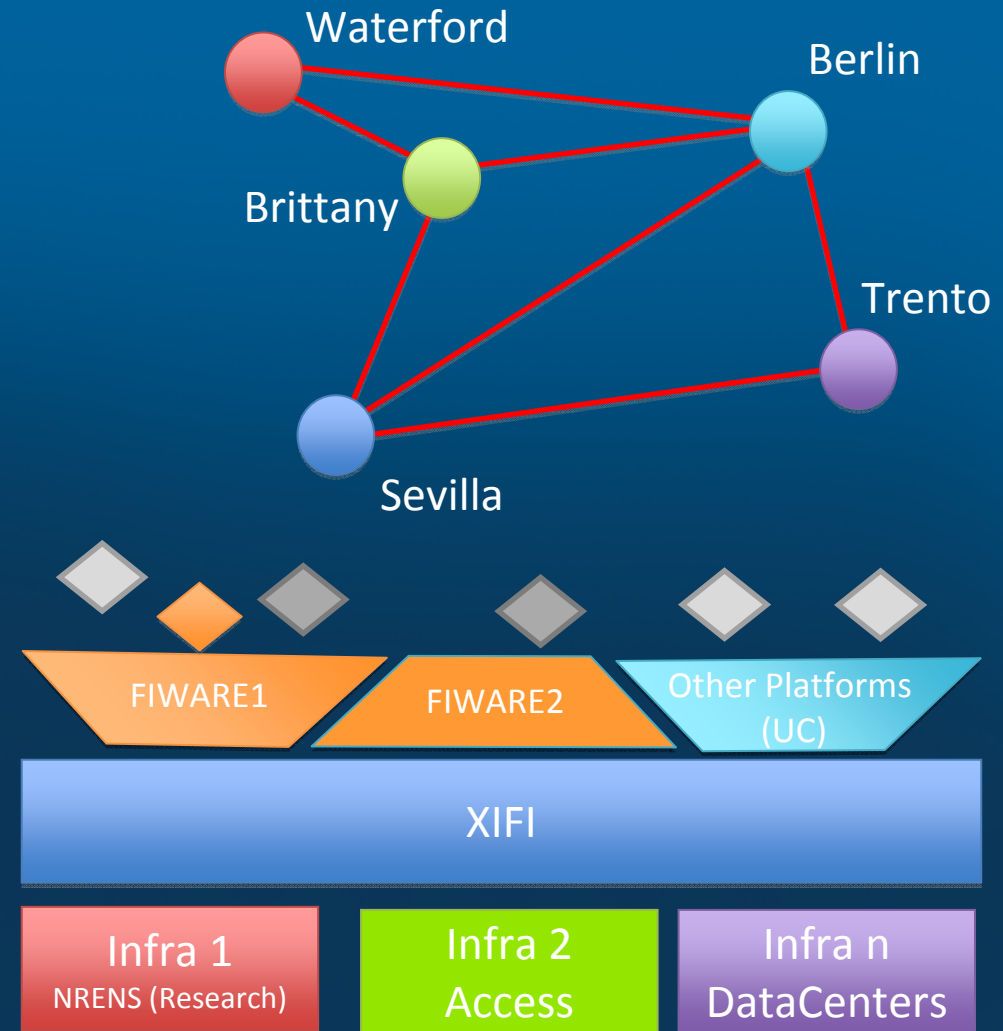
>=10 more to come in a 2nd stage**

available for experiments from April 2014
*** available progressively in the second half of 2014 and beyond*
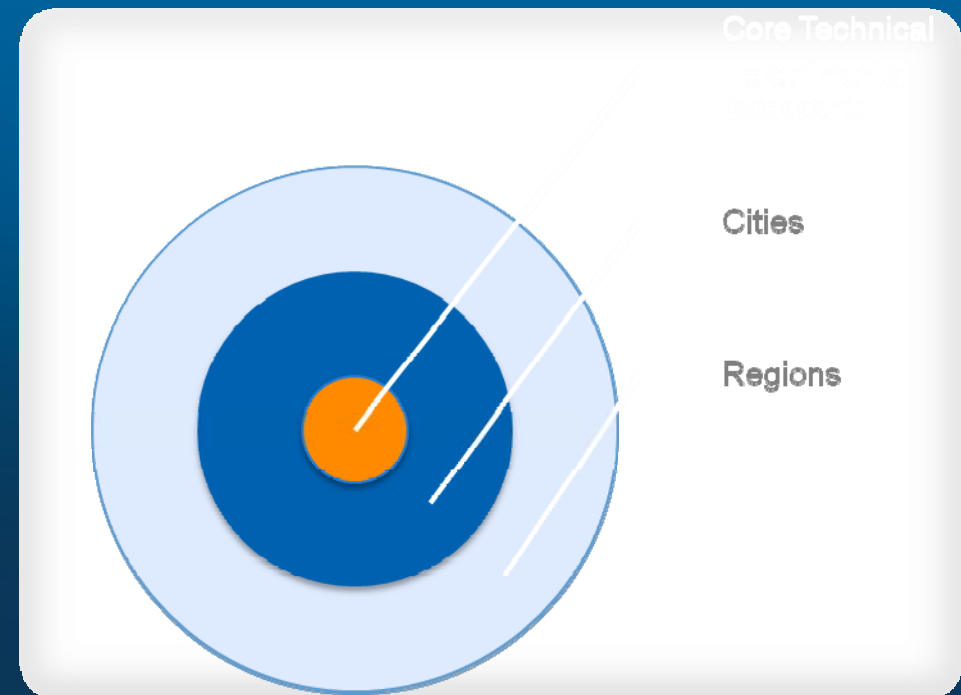
The XIFI approach

3-Step approach

1. **Build the backbone between the 5 initial core sites**. These form a federated and virtualised capacity layer to facilitate the deployment and interoperability between the FI-PPP core platform and other platforms across Europe. Consider aspects, such as:

   - The access network
   - The experimental nature of some of the networks
   - The need for data centers

2. **Validate the capabilities of the generic enablers** on the core platform

3. **Enlarge the network to reach the Use Case Pilots**, which may be using FIRE testbeds, EIT ICT Labs or private infrastructures. This will be done through an Open Call process

Waterford

Berlin

Brittany

Trento

Sevilla

FIWARE1

FIWARE2

Other Platforms (UC)

XIFI

| Infra 1 NRENS (Research) | Infra 2 Access | Infra n DataCenters |

The XIFI timeline

1ˢᵗ Year

- Define the XIFI core concepts, reference architecture and development methodology
- Deploy the core technical infrastructure
  - Embedding the core FI-WARE testbed/s
  - Learning by doing
- Provide the framework for the federation of infrastructures (technical / political)
- Ensure co-existence and interaction between
  - Sites/nodes
  - Services/Applications
  - FI-WARE/Platforms
- Consider the business and economic incentives

Core Technical

Cities

Regions

2ⁿᵈ Year

- Network Enlargement (2 MEuro to fund other infrastructure)
- Use Case "deployment"
- Full scale operations with field trials and developers (phase 3)

XIFI Open Call opening soon!

Funding Opportunities

- Open calls from FI-PPP phase 2 projects – opening beginning of September 2013
  - Info day is planned to take place in Brussels, 25 September
    - http://www.fi-ppp.eu/ai1ec_event/fi-ppp-open-call-information-day/?instance_id=35222
- XIFI Open Call
  - It will be published on the 7th September
  - Info day will take place in Brussels, 26 September
    - More info will be available soon on the XIFI web pages
- 3rd FI-PPP Call recently published:
  - Closing 10 December 2013, 17h Brussels time
  - 100 ME for SMEs and web entrepreneurs
  - 30 ME for sustainability and take-up
  - Info day in Brussels is planned 3-4 October
    - More info will be available soon on the FI-PPP web pages

The XIFI Open Call

- The XIFI Open Call as a way to
  - Expand the XIFI infrastructure capacity offering
  - Increase the diversity of service capabilities
  - Improve its geographic coverage
- The Call will be published on the 7th of September – please, check the news corner of XIFI web site
- An Info day providing more details and giving the opportunity to network will take place in Brussels on the 26th September

Conclusions & questions

- There are a lot of already available and accessible experimental infrastructures
- The INFINITY project is at your disposal to help you finding the most suitable infrastructure for your needs
- The XIFI project is building the federated FI-PPP infrastructure and give you the chance to join
- Several funding opportunities are now open!

➢ Don't hesitate to contact us for further information

Thank you for your attention!