



European Commission
Information Society
and Media



Future Internet Research and Experimentation

FIRE Opportunities for International Cooperation

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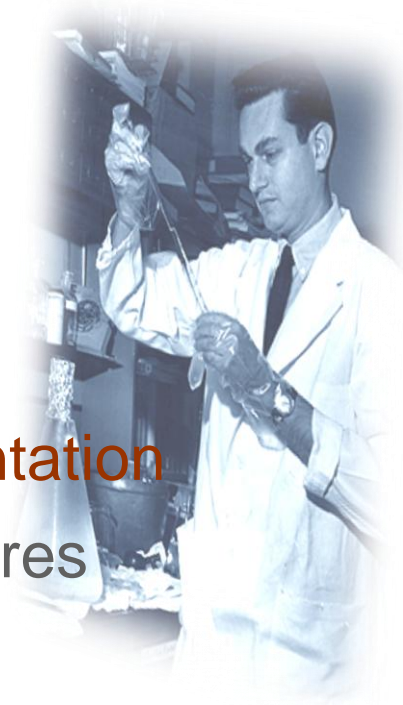


OpenLab

Opportunities for Cooperation

- Research/Education/Innovation triangle
- How can we best leverage the **cooperation** with a mutual benefit
- What are the strengths and the needs, what is the specific **context**?
- Share knowledge, best practices, code
- Education, mobility
- Extend the current technology and/or services

Future Internet Experimentally driven research



- Why?
 - Research driven by **Intuition & Experimentation**
 - A Playground for enabling new architectures
 - Shorter time to Publication/Market
 - Complementary to **Network Science**
- What? ...Enforce a **Federation** effort on building a large-scale facility for “Internet” research
 - Building, Operating, Maintaining a testbed is costly
 - Lower the **entry cost** for experimentation
 - Diversity and scale
 - Join a vibrant community

Going «GLOCAL »

- The Testbed Ecosystem
 - Local Policies / Objectives
 - Globalization
 - Widely used in other disciplines
- A world of Cooperation and Competition
- Federation as a solution
 - Going « Glocal »
 - The reasons for federation revolve around **mutual benefit**, but in practice are quite different for different types of organizations.

« HOW TO » in EU: FIRE IST

- The **FIRE** - Future Internet Research and Experimentation - Initiative
 - FIRE aims to create a dynamic, sustainable, large scale **European Experimental Facility**, which is built by *gradually* connecting and *federating* existing and new testbeds for emerging or future internet technologies.

<http://cordis.europa.eu/fp7/ict/fire/>

- **FireStation** Coordination Action

- Architecture board, International initiatives, Roadmap

www.ict-fire.eu

- **FIRE** Projects

- **Open Calls** to support the usage of the various facilities.



FIRE

The Facility as one open shared virtualized resource

The Federation concept



OneLab Facility offers:



For testbed
users

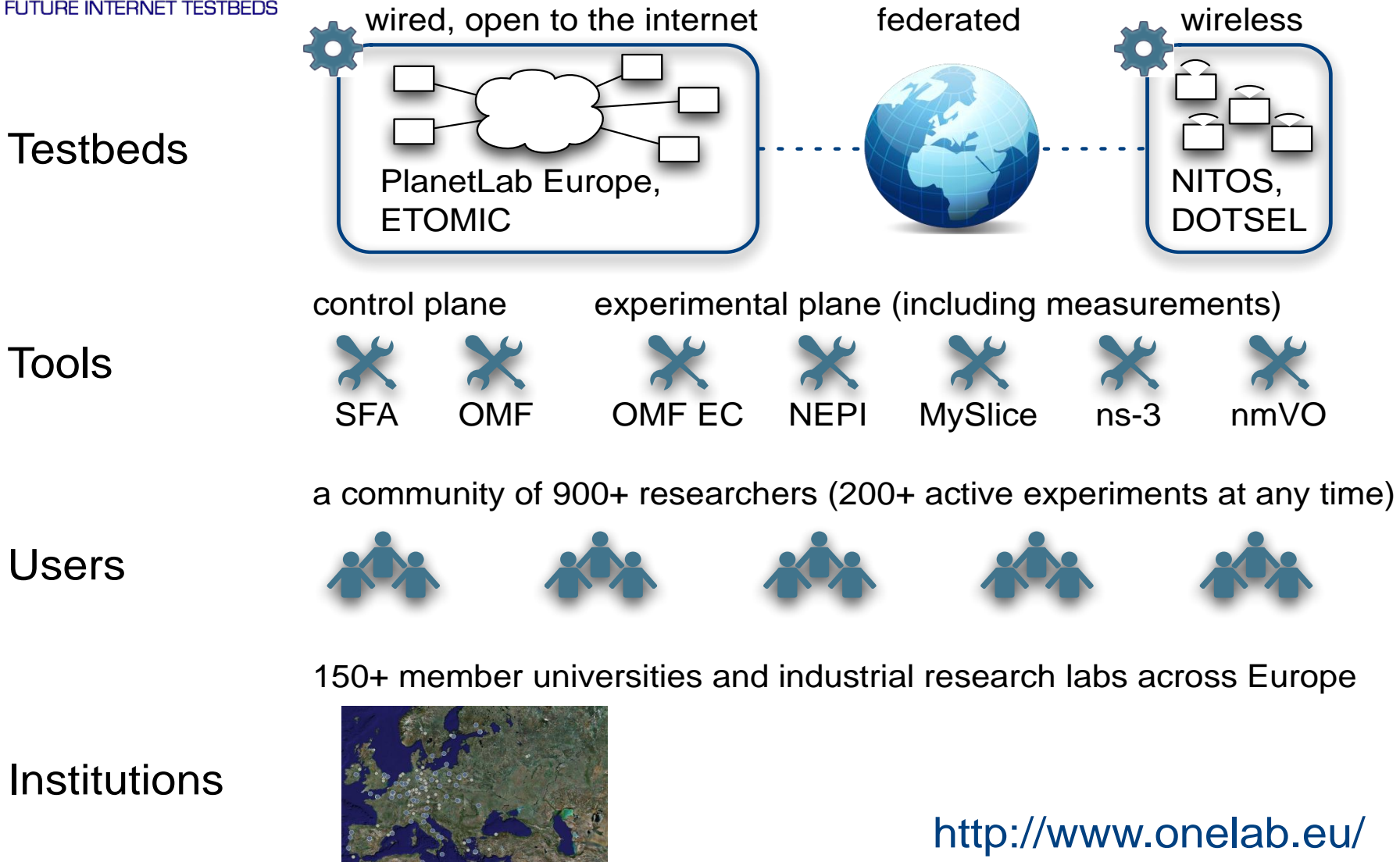
- **Testbed access**
Carry out your networking experiments on OneLab's federation of testbeds

For platform
builders

- **Testbed components**
Build your own network-based platforms and testbeds using OneLab's specialised building blocks

For testbed
owners

- **Testbed federation**
Federate your testbed with the OneLab facility



Concluding remarks

- Integrating the international community
- Identify Mutually beneficial areas for cooperation
 - Tech, management, policies, services
 - E.g. rural areas, energy efficient, wireless spectrum...
- Understand how to involve research and education (eventually innovation)
- There exist mechanisms to support cooperation
 - Projects Open Calls, regular calls, ...



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<http://www.ict-openlab.eu/>