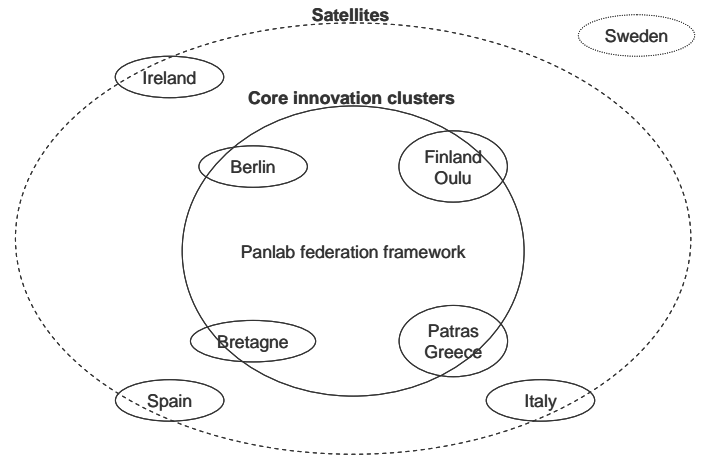


PII – Pan-European Laboratory Infrastructure Implementation

Scope and objectives

PII addresses the need for large-scale testing facilities in the communications area by implementing an infrastructure for federating testbeds. The PII project uses the concept of European innovation clusters and builds on the existing testbeds that are supporting scientific and technological endeavour within these clusters. The central objective of PII is to create a testbed federation among these regional innovation clusters in Europe. This will enable companies participating in these clusters to test new communication services and applications across Europe. The testbed federation includes four core innovation clusters and three satellite clusters.



Technical and Innovation approach

PII will develop and deploy effective mechanisms and technologies to enable a functioning federation of existing testbeds. In particular PII will:

1. Define a common abstract control framework, which enables the interconnection of diverse testbeds.
2. Develop mechanisms and tools to describe, store, locate and orchestrate testing services as well as means to automatically provide composite testbeds across multiple administrative domains.
3. Develop and elaborate mechanisms to combine and accommodate future clean-slate approaches and provide testing services in a network-agnostic manner.
4. Establish trust across the federation by means of quality assurance processes and tools.
5. Integrate the concept of User Driven Innovation.
6. Execute a techno-socio-economic study to assess the long-term sustainability of the federation model.

Target users and benefits

- SMEs involved in communication systems, application and services design and development. Typically, SMEs do not have access to real communication platforms to test their products.
- Large corporations, like terminal and network components vendors, can test their new products and collect end-user experience through experimentation on open platforms incorporating as many up-to-date network technologies and users as possible. The main added value for these stakeholders is the diverse environment that can be enabled through federation.
- R&D work in universities and other academic institutions involved in the engineering of new communication protocols and services which, in their validation phase, must be somehow mapped on real network settings in order to be tested and quantified in terms of performance and qualified in terms of interoperability.
- Real end-users who get connected on an integrated platform and collect personal experiences concerning new applications.
- All other stakeholders who need large scale, diverse testing environments, such as EC Framework Programme 7, EUREKA Cluster CELTIC, as well as national ICT programmes.

