



**CELTIC**

Telecommunication Solutions

**Panlab**

Pan-European Laboratories

**Pan European Laboratories**



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Telecommunication Solutions

## What is the need?



CELTIC is a R&D project looking for **new services and applications** in Telecoms.

But implementing new services is difficult and has to be tested against the network and users.

We want to do it in a collaborative manner so ...a laboratory is required.

But our laboratory has to be different:

- Collaborative
- Pan European
- Virtual



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## What is the meaning of PanLab?



A **European Laboratory**, which will enable the trial and evaluation of **service concepts**, technologies, system solutions and business models to the point where the risks associated with launching of these as commercial products will be minimised.

This does involve increasing the scope of work that will be carried out in the **pre-competitive R&D** phase.



## How are we going to implement?



We intend to build the PanLab in two phases.

*Vision phase:*

Production of a “Common Technology Vision”

*Definition phase*

Detailed definition of the laboratory in terms of technical infrastructure, as well as in terms of legal and operational general conditions



## The vision phase

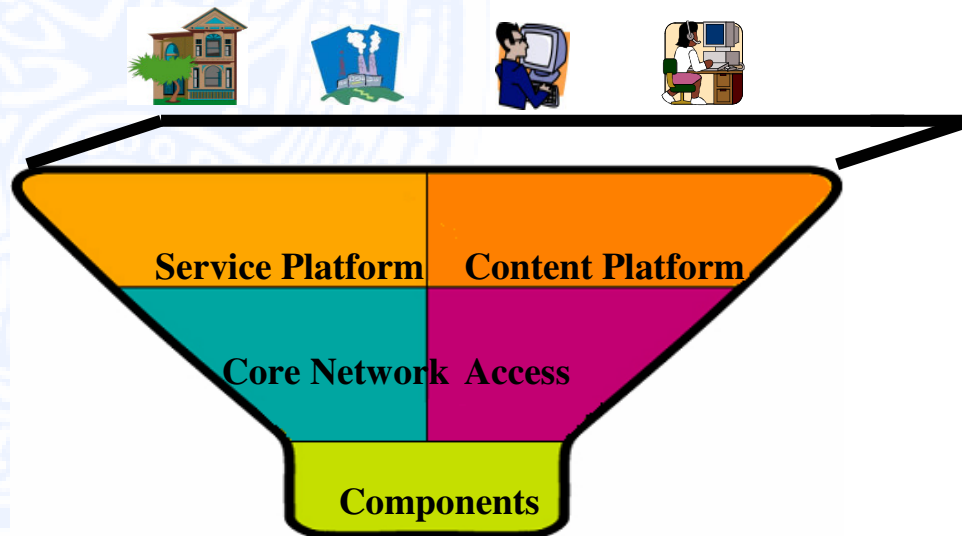


- “Strategic European vision” on telecommunications
  - What are we aiming to?
  - How it can be better developed?
  - What is hindering the process?
  - What are the milestones
- This is not an Strategic research agenda
  - More short term areas
  - More defined. Milestones, ...



## Phase 1

The PanLab as a Unified Vision for the different areas and technologies



### Description:

Pan Lab can be a virtual (or physical) meeting place to provide a common vision of all existing projects and the technology around them

The objective is to produce a road map for the future according to the results in the areas of the figure or in the Celtic core areas



## The definition phase

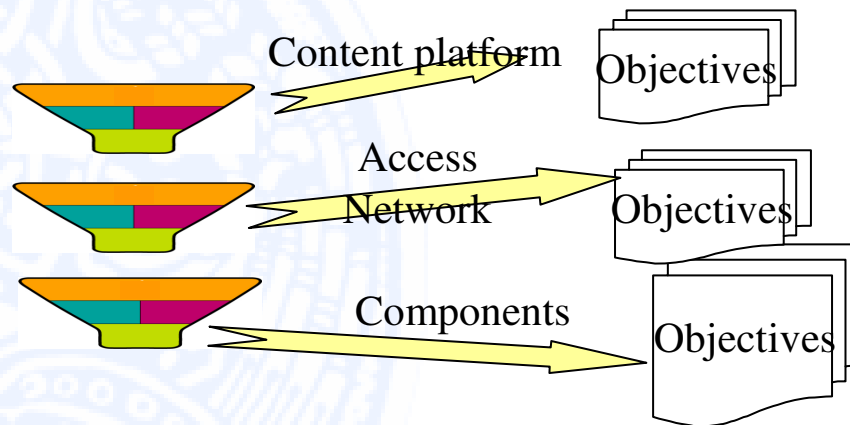


- *Definition phase*: Detailed definition of the laboratory in terms of **technical infrastructure**, as well as in terms of **legal and operational** general conditions.
- framework under which the Panlab shall operate,



## definition

The PanLab as the test and objectives lab, ...

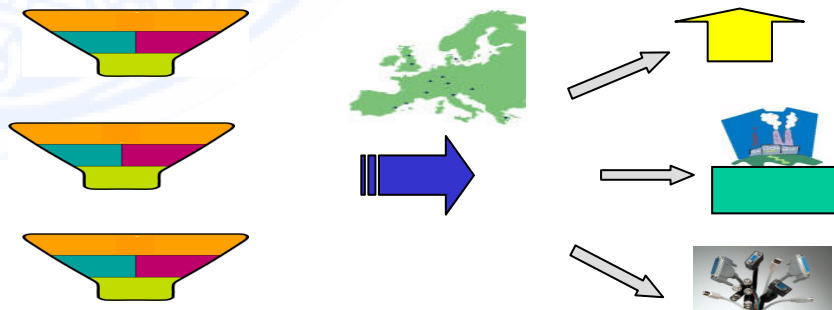


### Description:

European Laboratory will enable to test and verify objectives and assess results in an independent manner

- 1) For all Celtic projects
- 2) For all new projects
- 3) Those projects interested

an aggregator and first step to the market, ...



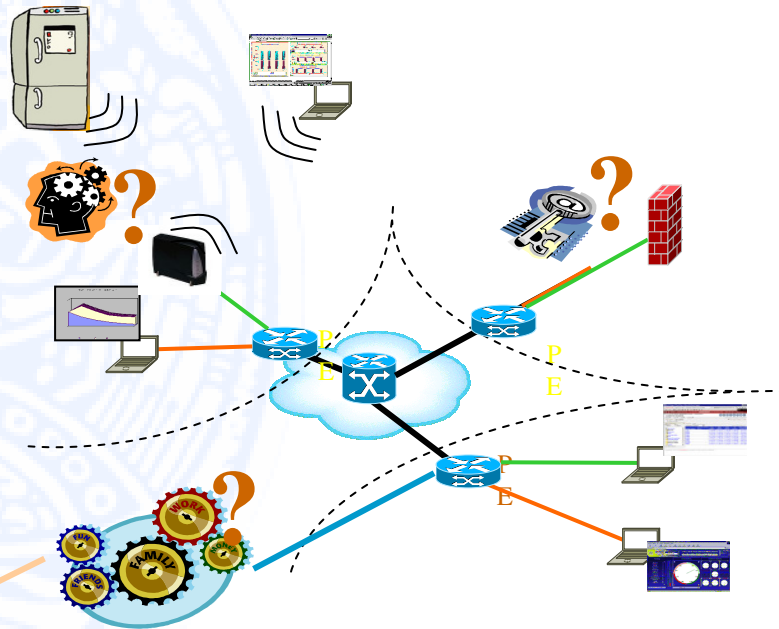
### Description:

The evaluation of projects results in the lab will allow to detect troubles and therefore, minimise risks in the commercialising process.



## definition

as a tool to identify and anticipate needs for services, applications and components, security issues, etc.



## Description:

Those results can be used for further project definition and will lead up to innovation in specific areas



## But, how we do it?



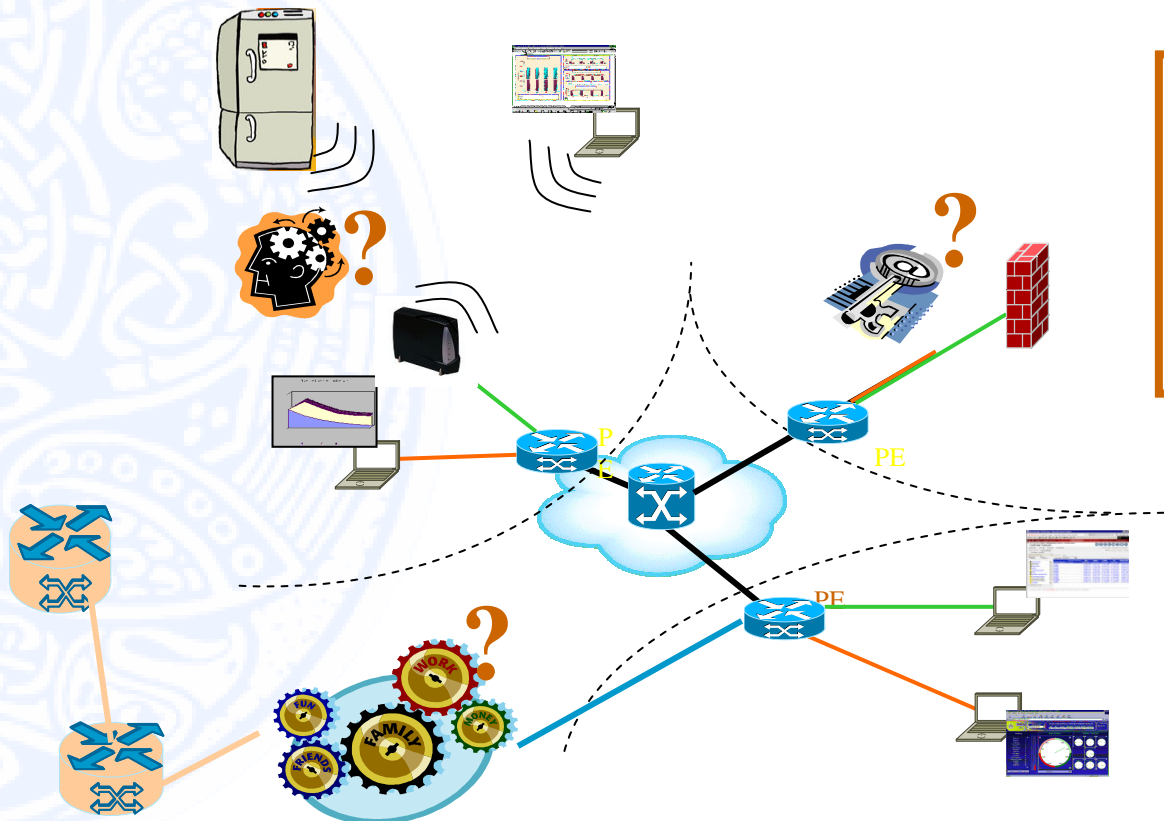
- “The Panlab is a “federation” of distributed labs, forming a virtual laboratory for many systems, platforms services



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Panlab assures connectivity to any possible technology provided by the Panlab community



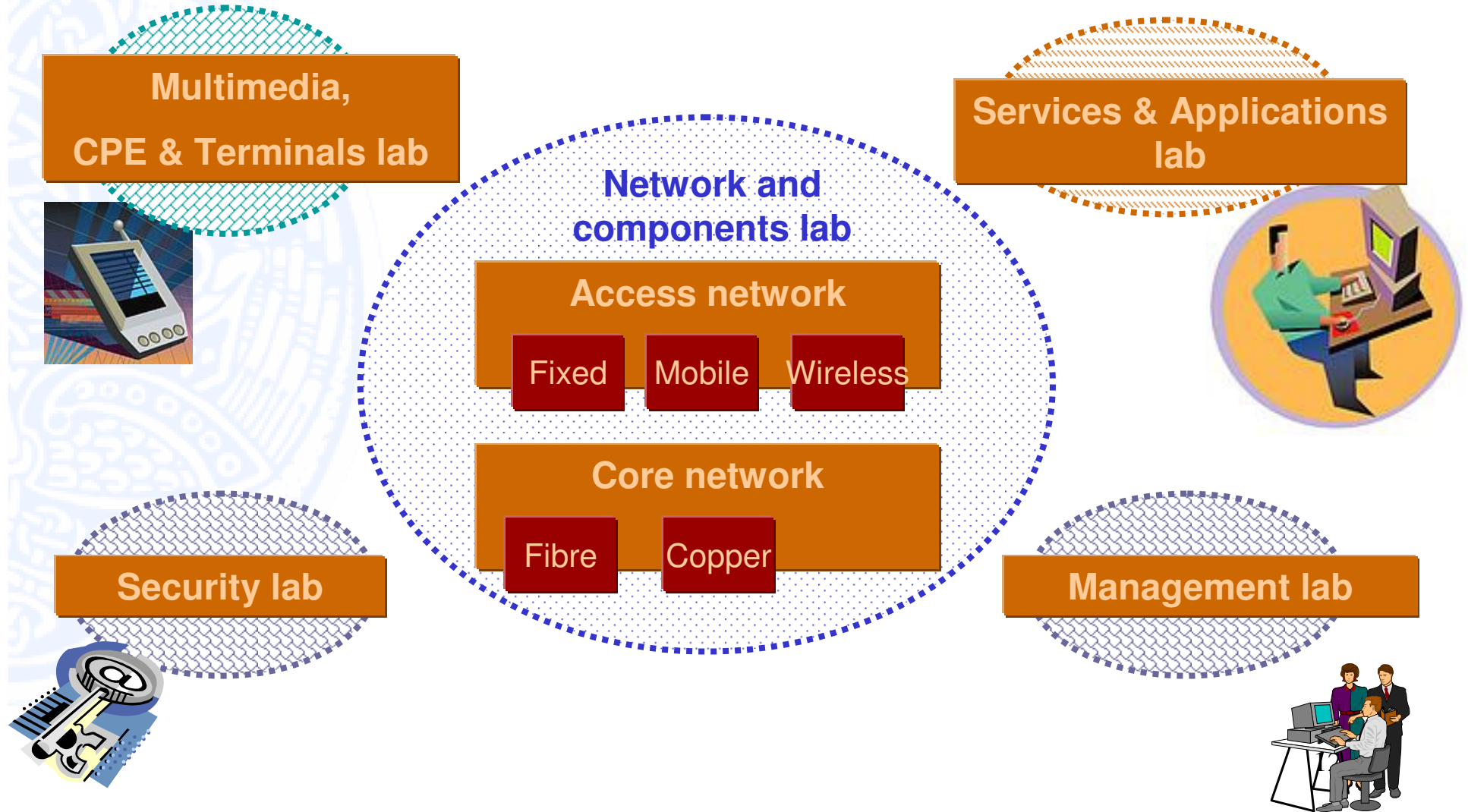
Panlab is an aggregation of the state-of-the-art to test integration and interoperation and to validate new products



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## A possible example

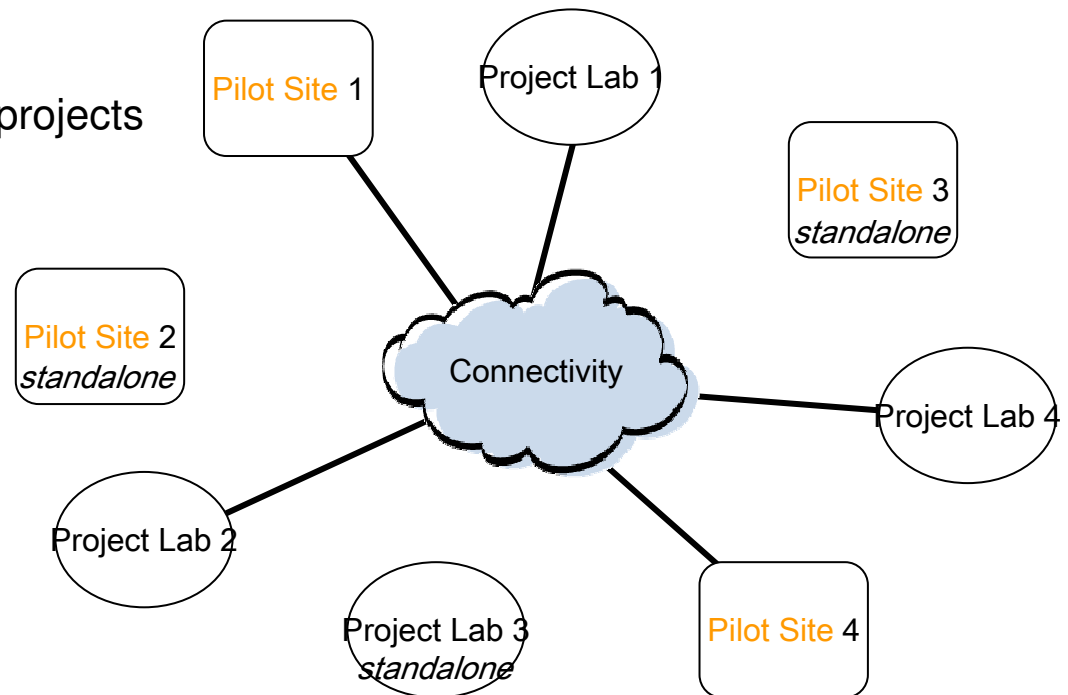


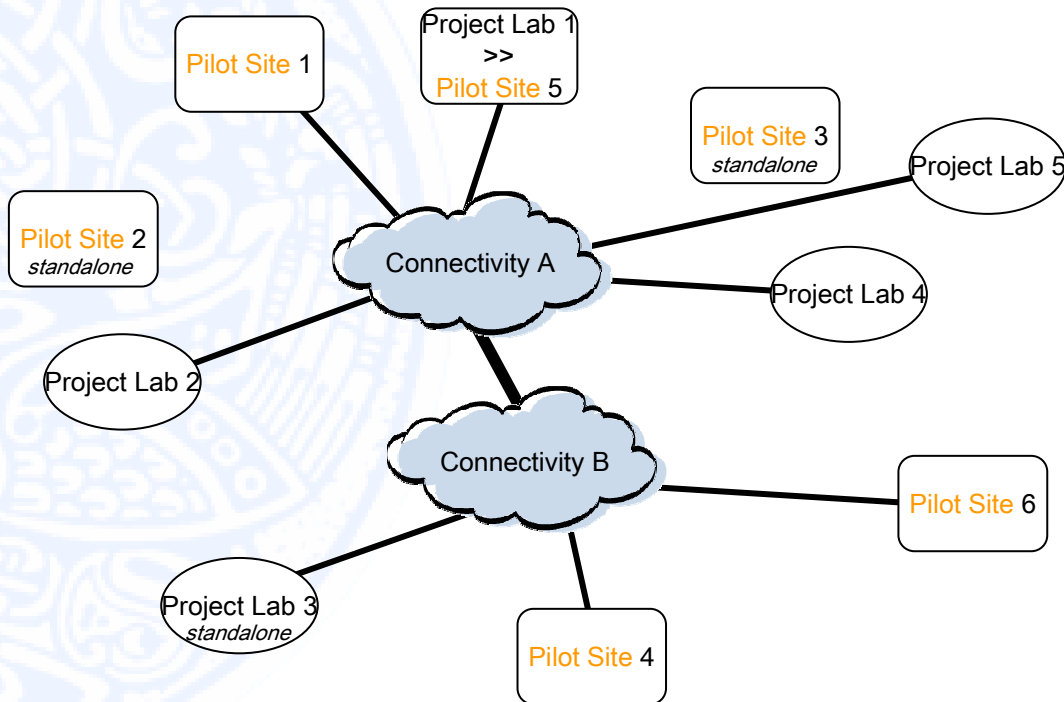


## example

### First phase:

- Definition of **Pilot Site Labs**
  - Facilitate experimentation and trials in labs having the required capabilities
- Availability of connectivity features to interconnect project labs
  - VPN-type connectivity (layer 2 / 3)
  - Upon existing networks
- Take benefit of existing initiatives and projects
  - e.g. IST/MUPPET





## Second phase:

- Promote the building of new **pilot sites**
- Continuation of project labs that present a strong interest
- Emergence of the “Unified Vision”
  - CELTIC announcements, PR
  - Network of skilled people, Events, Workshops,



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## PanLab as shop window of European telecommunication innovation, ...



### Description:

**PanLab** would be a permanent exhibition of project results. This could include

- An exhibition
- A web** containing: abstracts of existing developed projects details about programmes, pictures, activities and so on.



## What do we have already?



- **Panlab Specific Support Action**

- Consortium of 10 organisations

- Eurescom (Coordinator) supported by CELTIC, France Telecom, Telefonica, Italtel, Thomson, Alcatel, Nokia, Fraunhofer Fokus, DIMES, ETS/Canada

- Budget: 1.3 Mio. €

- Effort: 134 Person-months

- Duration: 24 months



## Main issues addressed

- Vision for ICT and roadmap for Panlab
  - Long-term ICT evolution and impact on Panlab requirements
- Legal framework
  - Conditions to participate in Panlab framework
- Approach to technical infrastructure
  - Proof of new concepts and technologies
  - Integration and test pilots
- Operational and administrative guidelines
  - Roles and relationships between test sites
  - Economical and technical impacts



## Expected results

- Common Technology Vision for ICT and the Panlab
- Roadmap for the Panlab
- Legal framework under which the Panlab should operate
- Set of general rules for the Panlab operation
- Specification of the technical infrastructure
- Set of workshops to raise awareness in the European research and industry ICT community



## Next steps



- Seek support for Panlab from
  - Projects and other companies
  - Other clusters and initiatives
- Start first implementations (outside SSA)