



# The EUROPEAN FUTURE INTERNET INITIATIVE

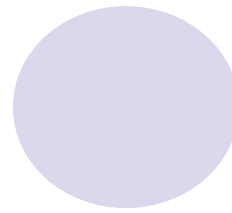
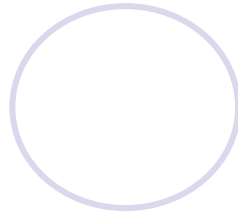
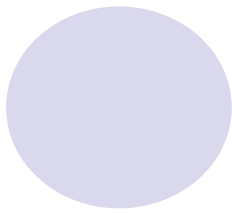
Nice  
March 2010

David Kennedy  
Chairman, EFII

# Main objectives of the FI PPP.

## Creation of new European-scale markets for smart infrastructures with integrated ICT functionalities

- Increase the effectiveness of business processes and the operation of infrastructures and applications of high societal value by making use of reappraised internet architectures, services and technologies in large-scale application contexts,
- Leverage the Internet infrastructure as an open, secure and trusted platform for building networked applications on the basis of user-centered open innovation schemes,
- Foster cross-sector industrial partnerships built around Future Internet value chains, Participation of the public sector in the PPP will also be a key asset to progress in non-technological issues,
- Involving users and public authorities at local, regional and national levels,
- Maximise the societal benefit through involvement of civil society & consumer organisations where needed.
- Address regulatory and policy issues such as interoperability, openness, standards, data security and privacy within the context of the Future Internet complex and 'smart' usage scenarios.



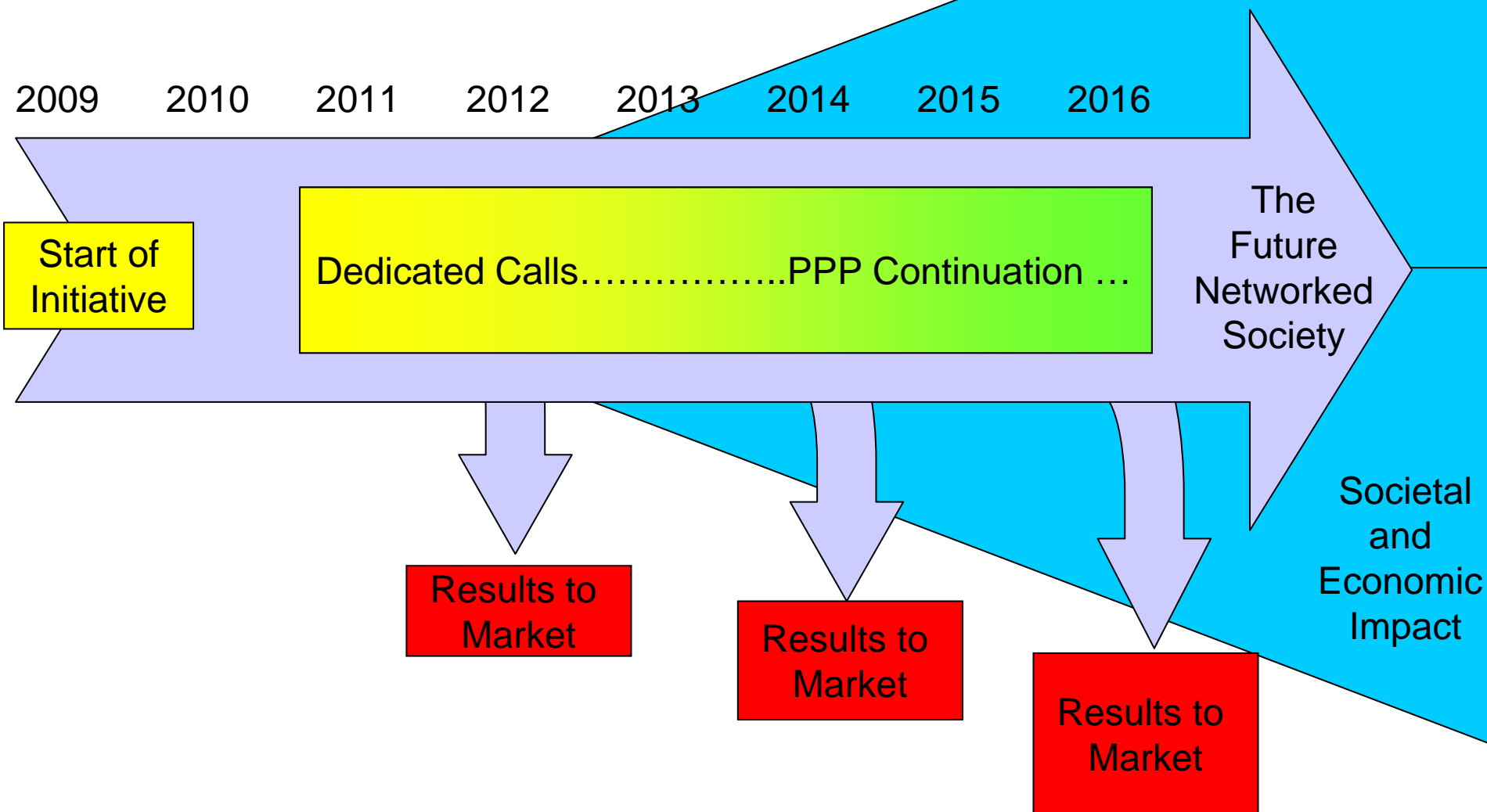
# Ambitions

- We need to keep a balance between enthusiasm and realism
- We want to implement an advanced future internet
- We want to set standards on the way so that the results can be sustainable and worth investing in
- We want to demonstrate the viability and enable new markets.

We believe:

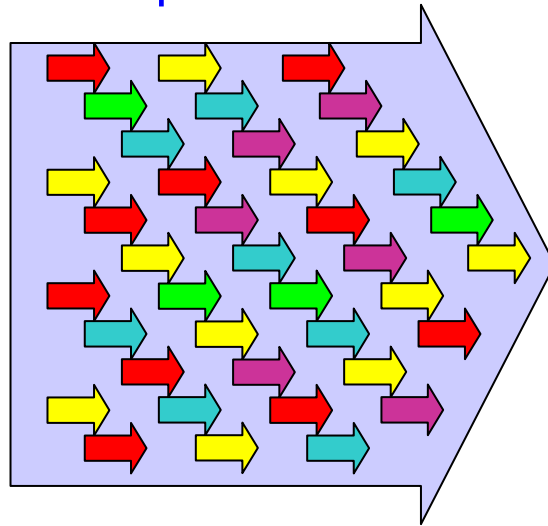
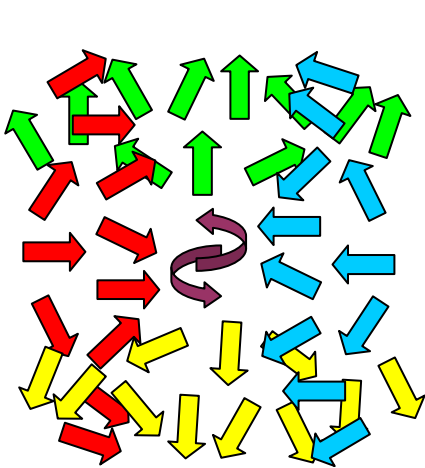
- That the innovative combination of ICT with other sectors and the cooperation between the different sectors will open new areas of growth for European industry.
- That we can accelerate Future Internet take-up through pilots and demonstrations
- That we can gain technical and economic leadership for Europe,
- That we can create the framework for a new form of PPP in FP8

# European Initiative on Future Internet



# A Focused Programme

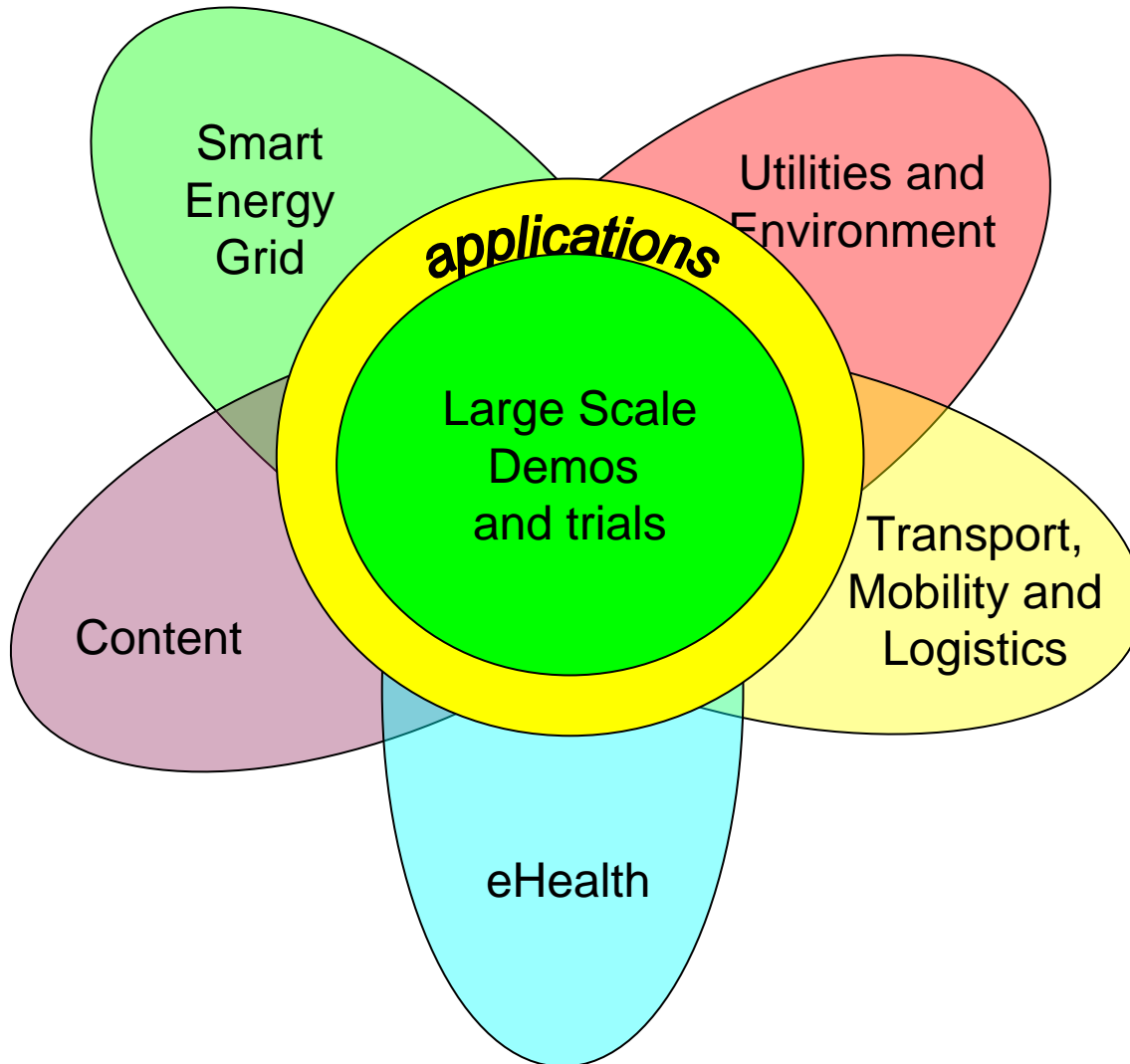
- Projects that are interdependent,
- Results that are shared,
- Goals that cannot be achieved in isolation
- Metrics that measure impact and sustainability



The  
Future  
Networked  
Society

- A multidisciplinary and integrated approach, where massively distributed services and applications are run over large scale and secure internet infrastructures is the only means to deal with the increasing complexity of intertwined application and service demands.

# Maximising the Common enablers



- Examine the basic enablers in each area
- Determine the common enablers
- Determine the enhanced enablers
- Work out how to provide a core platform that supports the enablers
- Build it and show the world
- Use it in large scale trials and tests
- Use existing advanced infrastructures to test future Internet function

# Main challenges

- **Utilities and Environment,**

- The main challenges of the PPP related to Utilities and environment is to specify, design, prototype and test a Global Urban Service Platform that will give applications unified, standard access to urban installations. This platform could also offer a hosting solution to small and medium sized urban-service operators.

- **eHealth,**

- to specify, design, prototype and test a eHealth Service Platform that will give doctors patients and applications unified, standard access to medical information and support service features such as telerehabilitation, vital signs monitoring (automatic monitoring with established thresholds that trigger alarms), alerts, telepresence of health care professionals, remote medical administration monitoring, medication reminders, appointment reminders, location tracking, context information processing, etc.

- **Smart Energy Grid,**

- designing, enabling, and advancing the integration of the physical architecture of energy generation, provisioning and consumption with a concurrent open and shared ICT architecture.

- **Transport, Mobility and Logistics**

- To accelerate the deployment of these added-value services, the PPP will aim at defining APIs, defining interoperability guidelines and encouraging technological enhancements for communication between vehicles, systems and other devices, and open platforms.

- **Content management**

- to provide a unified and consolidated interface between the hardware & network and the applications & services running on the infrastructure enabling consumers to use any device or application to browse, search, purchase and consume content from a distributed collection of content catalogues at a European or global level.

- **Provide a platform and infrastructure to pilot and test all these.**

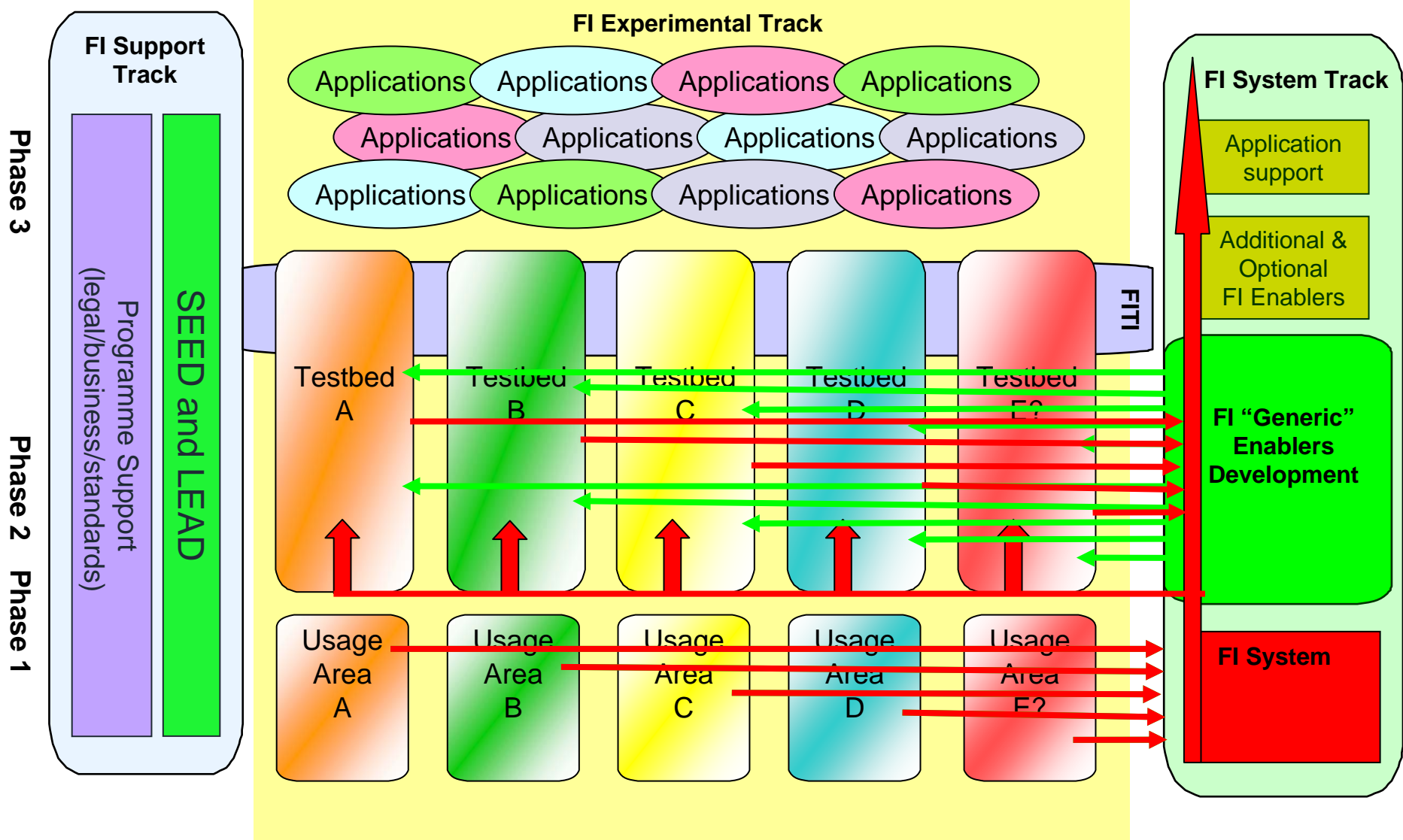
# Cross Sector and Sustainable

- Stand alone solutions developed in any one sector, will not provide the efficiency and productivity gains that a networked solution will be able to provide and that the market can support.
- **New partners in a Win-Win scenario:**
  - ICT grows the services market
  - Industry sectors get multiple advantages:
    - Improvements in their running processes
    - New opportunities to sell aggregated data
  - Users win too:
    - More security and trust in networked services
    - Better availability and response from their services
    - Ability to handle individualisation on a large scale

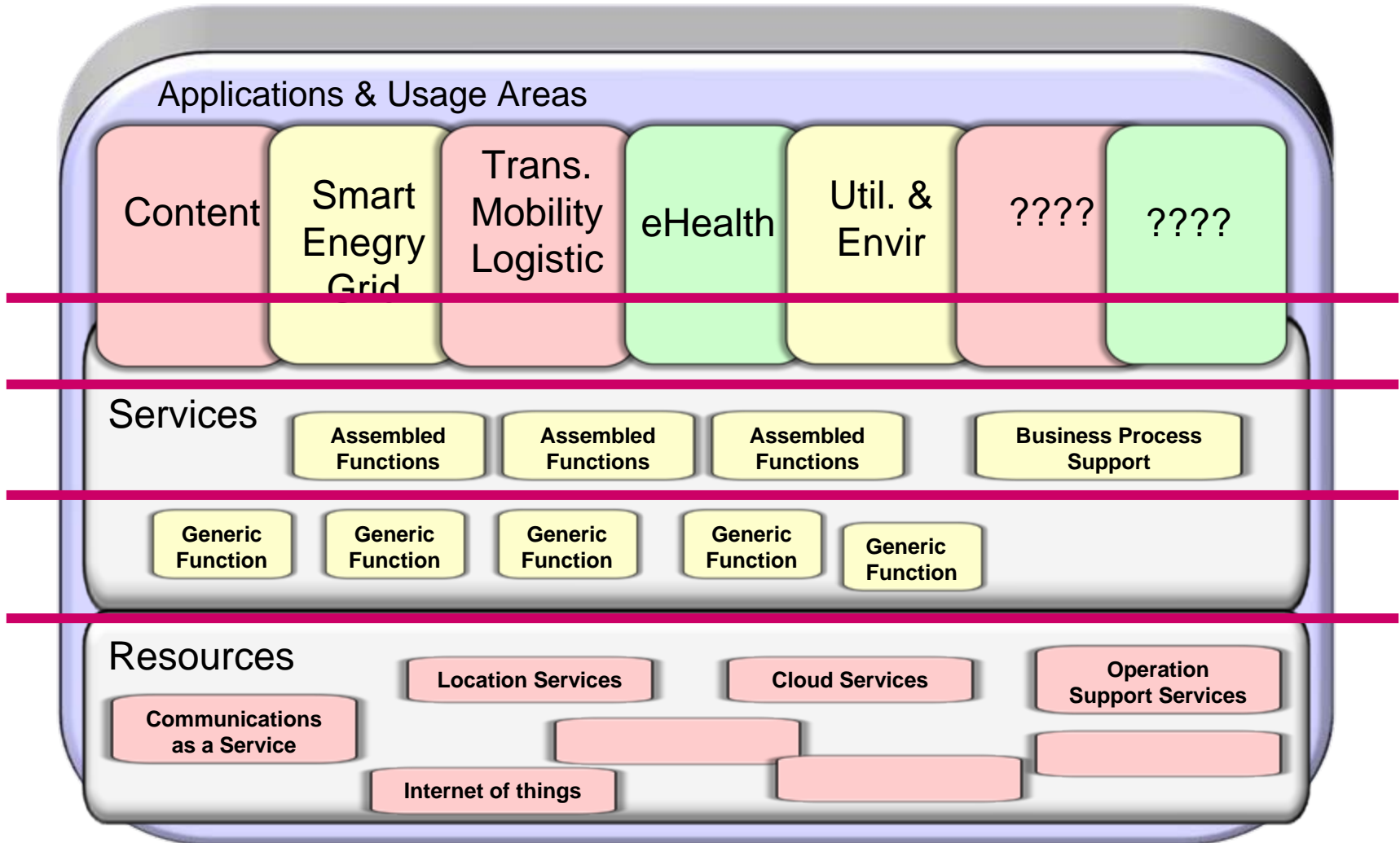
# Our recommendations for the programme

- **Large scale projects**
  - Large scale integration of results will not happen in many autonomous small projects so we must ensure having a critical mass of resources and key market players in each project to ensure sustainable results.
- **Flexibility in every stage**
  - The Future Internet is a hard target to follow so the programme management must be open to adapting the work plan as results accumulate.
- **Systematic approach to project selection**
  - Projects must contribute to the programme and uniquely address aspects of the programme, a programme coordination function must be installed
- **Facilitate the sharing of project foreground across all projects in the FI programme**
  - when such project foreground is needed for the implementation of research goals
  - by having an extended consortium agreement across the programme and
  - by having the clear understanding that ownership of such project foreground shall always remain with the entity having generated it
- **Integrate user sector competence with the ICT competence**
  - The PPP target is to demonstrate how the Future Internet can enhance all application sectors
- **Lead by example: large scale trials and demos**
  - Proving scalability, viability and international interoperability
- **Synergy: build on existing results and resources**
  - Time and scale dictate that the projects must be pragmatic and will be exploiting available results and facilities more than seeking novel technologies.

# Structural View of the programme



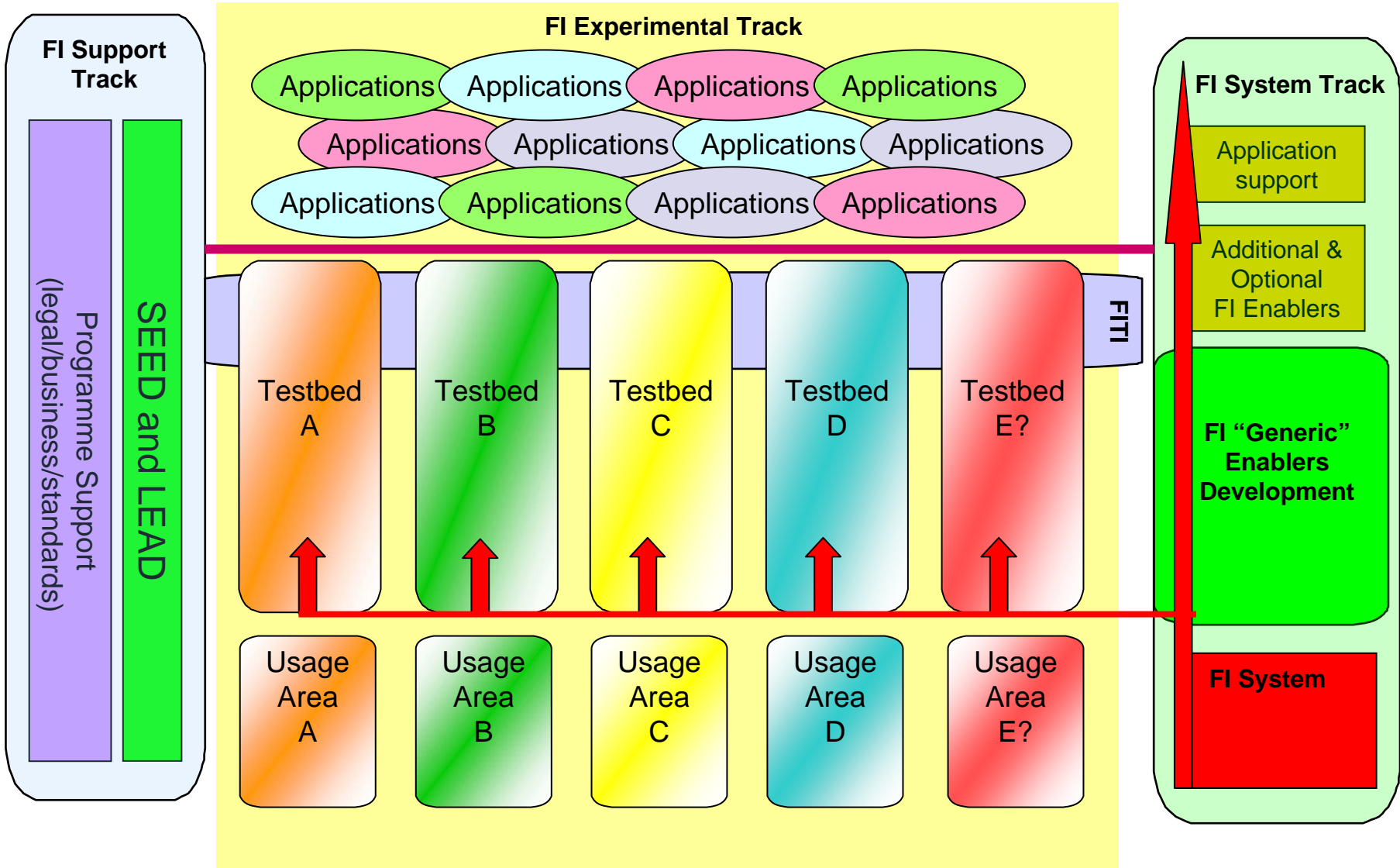
# Structure of the platform



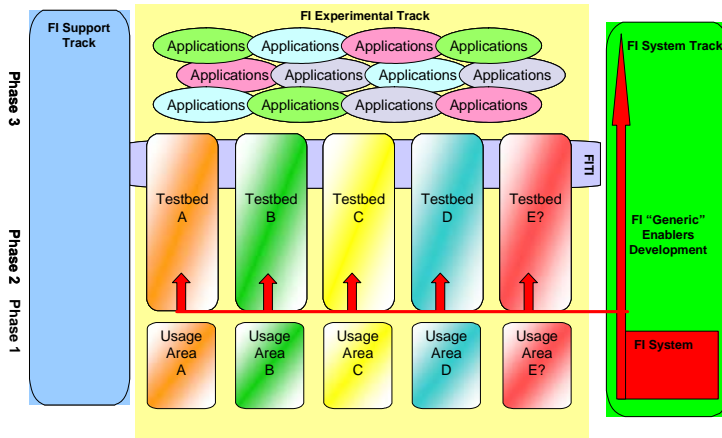
# Structural View of the programme

Phase 3

Phase 2  
Phase 1

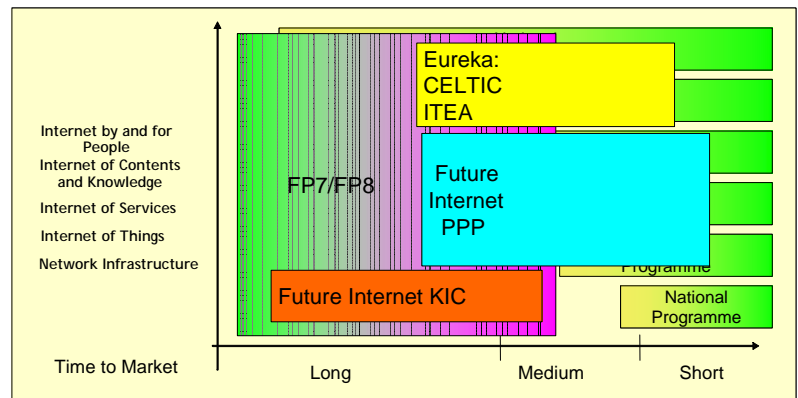


# The Future Internet area



Regulation  
 Public Procurement  
 Open markets  
 Open interfaces  
 Standardisation

National Trials,  
 Test Infrastructures  
 Structural funds  
 Regional development  
 Enterprise support



# European Future Internet Initiative

Alcatel-Lucent 

Atos Origin 

BT 



EURESCOM

 ENGINEERING

Nokia Siemens  
Networks





THALES



ERICSSON   
TAKING YOU FORWARD

SIEMENS

NOKIA

technicolor 

Telefónica

Telefónica  
Investigación y Desarrollo

- Our immediate Goals:
  - Creating a community in 2010 with the application domains
  - To run workshops on applications, enablers, and infrastructures.
  - Determining the focus points, challenges, and optimal structures
  - Encouraging innovation in structures as well as projects
  - Publish Position papers
- [initiative.future-internet.eu](http://initiative.future-internet.eu)



# Interesting Questions

1. How advanced can we be and still have a viable instantiation?
2. What defines a future internet trial? What are the desirable network characteristics?
3. What numbers define large scale?
4. How much integration of applications is needed to prove viability?
5. What investments do existing infrastructures need to be the target test environments?
6. Do we need links to public networks?
7. How can we involve users on a large scale?
8. How can we do trials so that they have a potential for commercial exploitation after the research phase?