

# Future Internet A Public Private Partnership

*Creating a climate to encourage investment*

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# Main drivers for ICT Research & Development

- **ICT, engine for growth in a low carbon economy**
  - smarter energy grids, energy efficient buildings, greener cars & transport systems, lighting & manufacturing
- **Changing value chains & new market opportunities**
  - Web and Internet-based services, open platforms for resource sharing, Cloud computing
- **Technology developments at a cross-roads**
  - Future Internet: Medium and longer term developments
  - Components: nanoelectronics, photonics, new materials
  - Multi-core architectures, new programming paradigms
  - Smart places: embedded, networked, learning capabilities
  - Digital media and new forms of content

*Public Private Partnerships (Future Internet, Green Car, Energy-efficient Buildings, Factories of the Future)*

*JTIs: Embedded Systems (ARTEMIS) Nanoelectronics (ENIAC)*

*ICT WP ≈ 4,422 B€ ( 1,5 B€/year)*



# Opportunities / mega-trends

## More INTELLIGENCE

*How to take advantage of the wealth of information available real-time from a multitude of sources to make more intelligent choices?*

**Turning data into value**

## More FLEXIBILITY

*How to make organization and systems just as dynamic as today's most innovative businesses?*

**Leveraging the value of "networked"**

## More EFFICIENCY

*How to face our collective responsibilities:*

- *Traffic jams costs Europe 135 B€/yr*
- *40 to 70% of electricity is lost in inefficient grids...*

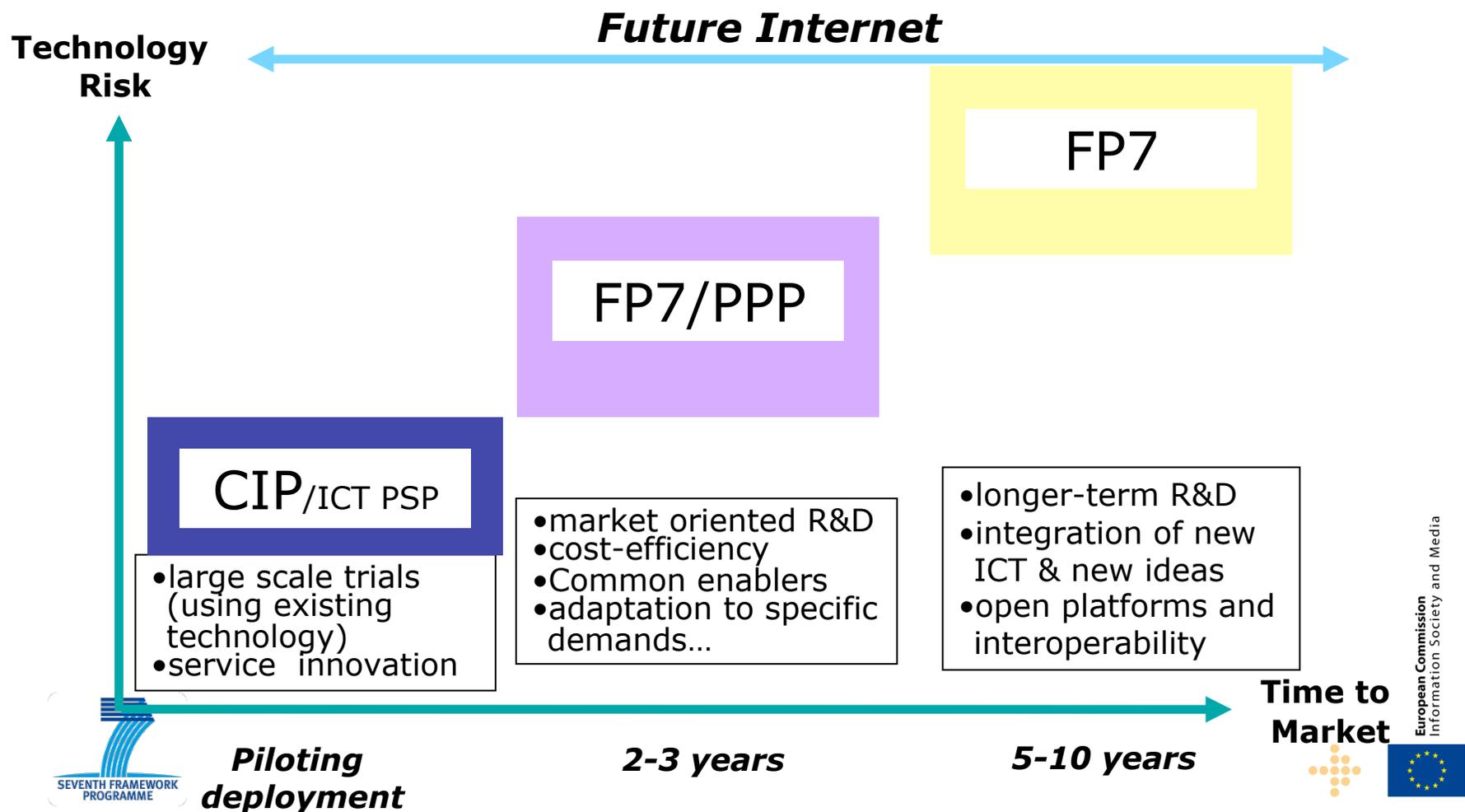
**Getting green and sustainable**

**Opportunity:** making key societal infrastructures and business processes more intelligent and sustainable through tighter integration with the Internet.

# An Internet enabled service economy



# Future Internet: A Comprehensive EU Approach



# FI PPP: overall goals

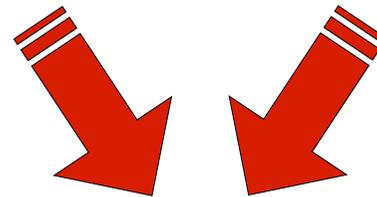
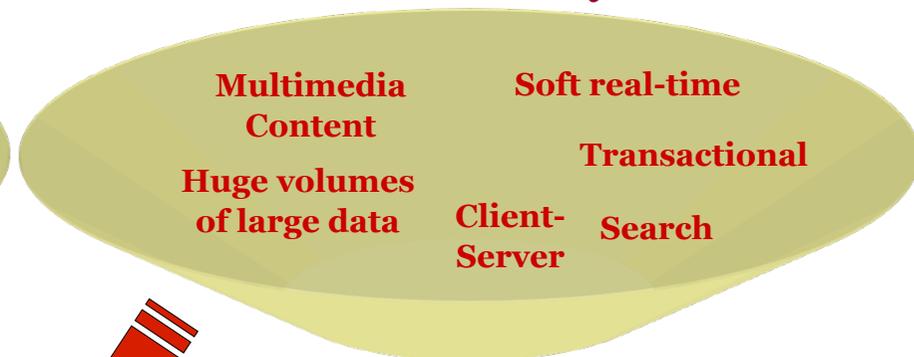
- Leverage the internet infrastructure as an open, secure and trusted platform (holistic/system perspective)
- Improve the inter-linkages between technologies and applications
- Make business processes and operation of infrastructures and applications more efficient
- Foster cross-sector industrial partnerships
- Address regulatory and policy issues
- Maximise the societal benefit through involvement of end-users, civil society/consumer organisations at local, regional and national levels

# Confluence of 2 paradigms

## Networked objects



## Web-centric systems



*clean slate / evolutionary*

*Generic, open, trusted*

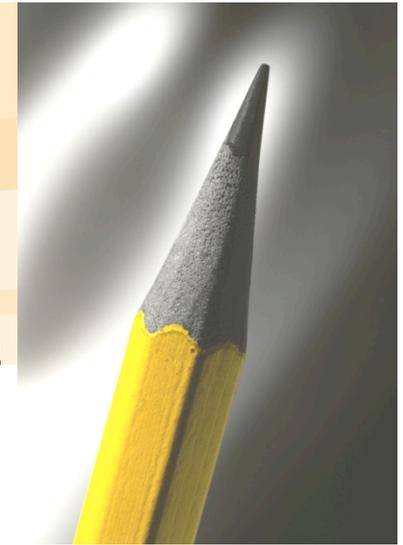
New architectures

New platforms

New use scenarios

*smart-\**

# FI-PPP Proposed Approach

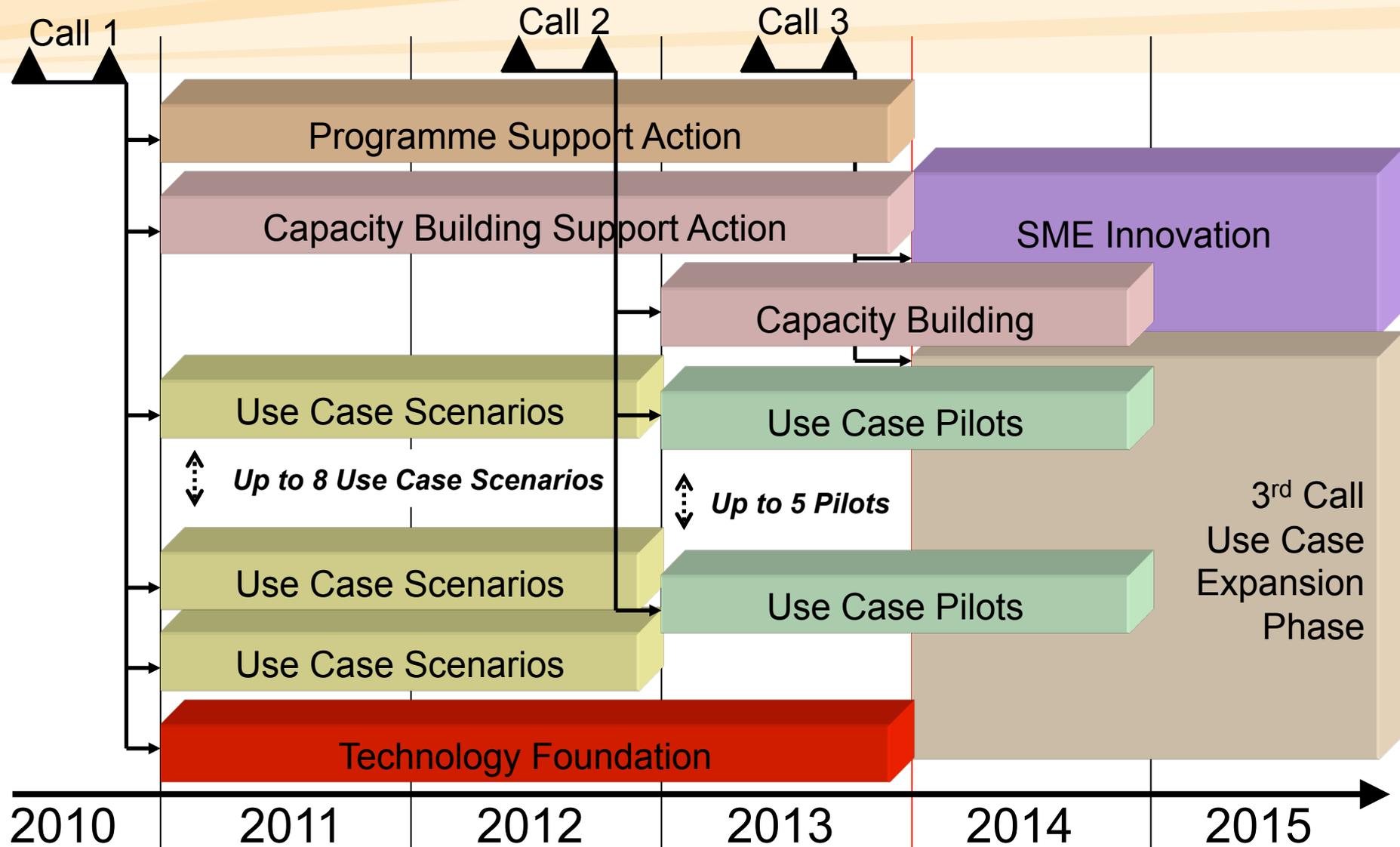


1. **Large scale projects (Programme notion)**
  - Integration will not happen in many small projects
2. **Systematic approach to project selection**
  - Projects must contribute to the **programme**
3. **Facilitate open sharing of information**
  - IPR issues should not hinder collaboration
4. **Integrate user sector competence with the ICT competence**
  - The PPP target is to enhance all sectors with the Future Internet
5. **Lead by example: large scale trials and demos**
  - Proving scalability and viability, SME, user driven innovation
6. **Synergy: build on existing results and resources**
  - Time and scale dictate using what we have already achieved in Europe.



# Programme Architecture

--- a set of coherent projects ---



draft

# FI PPP: the road to smart innovation

- i) **Broadband deployment to be fueled by new services**
- ii) **Research with strong innovation orientation: need to address longer-term... and shorter term delivery of results;**
- iii) **Interoperability/standards as important as ever**
- iv) **Need for critical mass; involvement of new players in the value chain... Convergence beyond ICT boundaries;**
- v) **Leveraging previous achievements, put in a E2E system context;**
- vi) **User driven open innovation, large scale test-beds**
- vii) **Leveraging public strengths through openness and infrastructures**