

## INTERNET OF THE FUTURE -part PPP

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## INTERNET BUDOUCNOSTI - PPP

### Charakteristika:

- návaznost na předcházející výzkum - výsledky projektů
  - kapitalizace výzkumu
  - návaznost na témata „challenge 1“ - **Pervasive and Trusted Network and Service Infrastructures** - ale odlišné pojetí
  - řízeno požadavky trhu, prosazováno novými technologiemi a taženo specifickými uživatelskými aplikacemi
  - prolnutí dvou různých systémů ( izolovaně propojovaných objektů a webových systémů) vyžaduje nový přístup v architektuře, platformách i nových uživatelských aplikacích
  - mnohé projekty budou vytvářeny kolem již známých „hráčů“, ale bude prostor i pro nové s odpovídající expertízou
  - množství strategických dokumentů a uskupení
  - předpokládaná spolupráce mezi projekty
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### Content:

- 1.7 PPP FI: Technology foundation - Future Internet Core Platform
- 1.8 PPP FI: Use Case scenarios and early trials
- 1.9 PPP FI: Capacity Building and Infrastructure Support
- 1.10 PPP FI: Programme Facilitation and Support

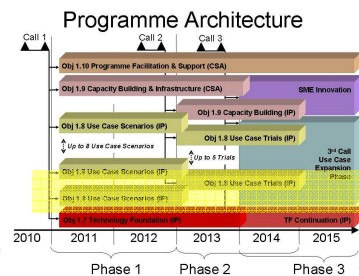
Details - see ICT work programme 2011-12

## 1.7 - Technology Foundation: FI Core Platform

- **Generic, trusted, open platform**
- **Capabilities and functionalities for**
  - upgraded network
  - information processing
  - sensor networks coupled to the Internet
  - versatile service infrastructure
  - real-time application
  - trust and identity
  - ad-hoc aggregation of resources
- through open interfaces, API, SDK
- **Functionalities depend on the requirements of the use case scenarios**
- **Generic enablers → key feature in developing functionalities**
- **Build on existing research results and considering:**
  - system view
  - integration
  - adding missing components
- **Re-usable/composable in multiple usage contexts**
- **3rd party access under FRAND**

**One IP (41 MEuro, 3 years) covering Phases 1 and 2:**

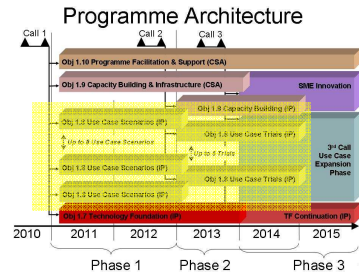
- 30% flexible budget for meeting use case needs
- system design
- early prototyping
- early implementation and validation





## 1.8 - Use Case Scenarios and Early Trials

- **Use cases with high social and economic impact**
- **Vertical application scenarios:**
  - with enhanced efficiency, sustainability, performance by tighter integration with advanced Internet capabilities
  - leapfrogging advanced internet technologies, such as
    - context awareness and sensor networks
    - advanced real time information processing
    - handling huge volume of data
    - ad-hoc service composition and mash ups
    - managed broadband connectivity and services
    - embedded media support
- **Identification of generic versus specific enablers (collaboration with TF-technology foundation)**



### Phase 1 (competitive)

- Up to 8 IPs (5 MEuro, 2 years) with broad coverage
- specification of use cases & scenarios
- identification of generic and specific enablers
- conceptual prototypes
- Phase 2 implementation plan

### Phase 2 (competitive)

- Up to 5 IPs (13.5 MEuro, 2 years) with 10% flexible budget (local business ecosystems)
- working experimentation sites with generic and specific enablers available
- selected test applications implemented
- validation of openness and versatility of the core platform
- planning phase 3



## Six characteristics of a good use case

- 1. Innovation on the application side**
- 2. Realism in terms of large scale trials to be carried in 3-5 years**
- 3. Need for advanced Internet functionality**
  - beyond the existing Internet
  - validating the PPP core platform concept
- 4. Synergies with other use areas proving value and potential of core platform, e.g.**
  - Sharing of data (e.g. from sensors)
  - Services and application mash up
  - Common devices and infrastructures
- 5. Possibility for provisioning and upgrading of experimentation infrastructures for phases 2 & 3**
- 6. Relevance to EU policies, e.g. EU Digital Agenda**
  - high social and economic impact

## 1.9 - Capacity Building & Infrastructure Support

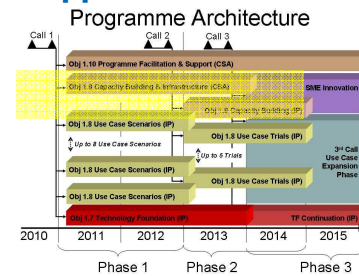
- **Leverage existing public investments in advanced infrastructures**
  - to support large scale and diverse experiments
  - to demonstrate versatility of the core platform
  - to support testing across a multiplicity of heterogeneous trials and use cases

- **Examples for infrastructures**

- GEANT and NRENs
- [FIRE](#) - Future Internet Research & Experimentation
- Advanced city and regional infrastructures

- **Establish partnership agreements**

- **Complementary to Use Case infrastructures**



### Phase 1

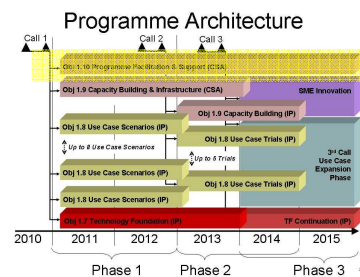
- one CSA (3 MEuro, 3 years) overlapping with phase 2
- identify candidates for experimental infrastructures for large scale experimentation
- repository of infrastructures
- identify operational constraints and draft partnership agreement across programme

### Phase 2

- one IP (12.5 MEuro, 2 years)
- integration of infrastructures for cross-cutting phase 2 and 3 trials as needed
- adaptation, upgrade, validation of infrastructures for phase 3
- assembly of a pan-European federation to support application mash-up

## 1.10 - Programme Facilitation and Support

- **Establish the adequate mechanisms for collaborations between projects**
  - boards and advisory structure
  - day-to-day management support
  - synchronisation & management of dependencies
  - mechanisms for conflict resolution
  - progress monitoring
- **Co-ordination of standardisation and assurance of openness**
  - certification programmes
  - strategic contribution to international standardisation
  - programme-level IPR regime
- **SME-oriented measures**
  - towards ecosystems for trials in Phases 2 and 3
  - awareness, training and incentive schemes
- **Contribution to policy and regulatory discussion**
  - operation of the FI framework to be developed
  - towards an internal market for e-services
- **Public Relations**
  - programme-wide PR strategy
  - individually address all relevant target audiences
  - coordinate common dissemination actions



### One Support Action covering Phases 1 to 3 (6 MEuro, 3 years)

- facilitator for collaboration
- in support of and complementary to the EC management, monitoring and review processes
- ensuring coherent and non-disruptive management support



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## Implementation Roadmap

- **Call 1: FP7-2011-ICT-FI**  
**(30 July – 2 December 2010) – budget 90 MEuro**
    - Technology Foundation (one IP, 41 MEuro, 3 years, 30% flexible)
    - Use Case Scenarios – Phase 1 (7-8 areas, IP, 5 MEuro, 2 years)
    - Capacity Building (one CSA, 3 MEuro, 3 years)
    - Programme support (one CSA, 6 MEuro, 5 years)
  
  - **Call 2: FP7-2012-ICT-FI**  
**(18 May – 29 October 2012) – budget 80 MEuro**
    - Use Case Scenarios Pilots – Phase 2 (5 areas, 13.5 MEuro, 2 years)
    - Capacity Building (one IP, 12.5 MEuro, 2 years)
  
  - **Call 3: Planned under WP 2013**  
**(later 2013) – budget 130 MEuro (tentative)**
    - Devoted to the expansion and enlargement of many testbeds and pilots (several areas, ~100 MEuro, 2 years)
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## Further Information

**Key Events 2010/11:** (Presentations, partners, ideas, roadmaps, strategic documents.....)

- Valencia- April 2010: <http://www.r2sconference.eu/>
- 21-22 June – Brussels, 2<sup>nd</sup> [Usage Area Workshop](#)
- 8 July – Brussels, [FI-PPP European Information Day](#)
- 27-29 September – Brussels, [ICT Event 2010](#)
- 20-22 October – Tampere, [3<sup>rd</sup> EU-Japan Symposium on Future Internet](#)
- 29 Nov – 1 December - Tokyo, [IoT2010](#)
- 16-17 December – Ghent, Future Internet Week, 6<sup>th</sup> [FIA Conference](#)
- 17-19 May – Budapest, 7<sup>th</sup> FIA Conference

**Sites to drill further:**

- [ec.europa.eu/foi](http://ec.europa.eu/foi) – read about the many activities the EC undertakes on Future Internet
  - [www.future-internet.eu](http://www.future-internet.eu) – The European Future Internet Portal – the community site
  - [cordis.europa.eu/ict/ch1](http://cordis.europa.eu/ict/ch1) – Ongoing European FI research & development activities
  - contact ICT NCP: [hillerova@tc.cz](mailto:hillerova@tc.cz)
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