



# Future Internet Research and Experimentation – FIRE

## CALL 8, Objective 1.6 (b) (c) (e)

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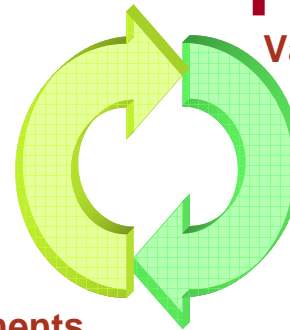
DG INFSO F4 Unit - New Infrastructure Paradigms and Experimental Facilities

# FIRE:

# Future Internet Research and Experimentation

FIRE Research

Long-term  
Research



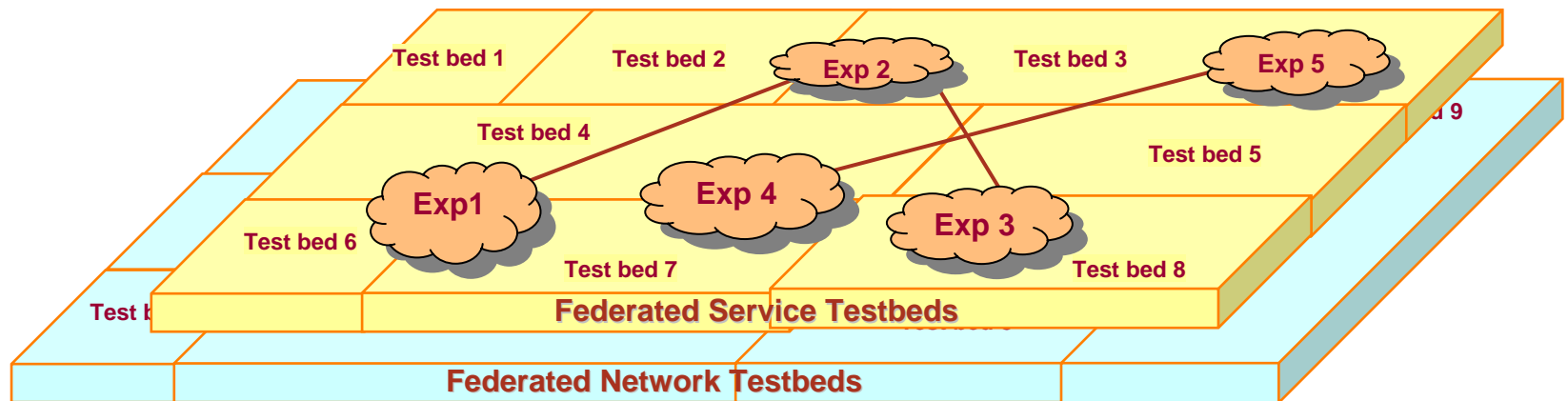
Validation

Large Scale  
Experiments

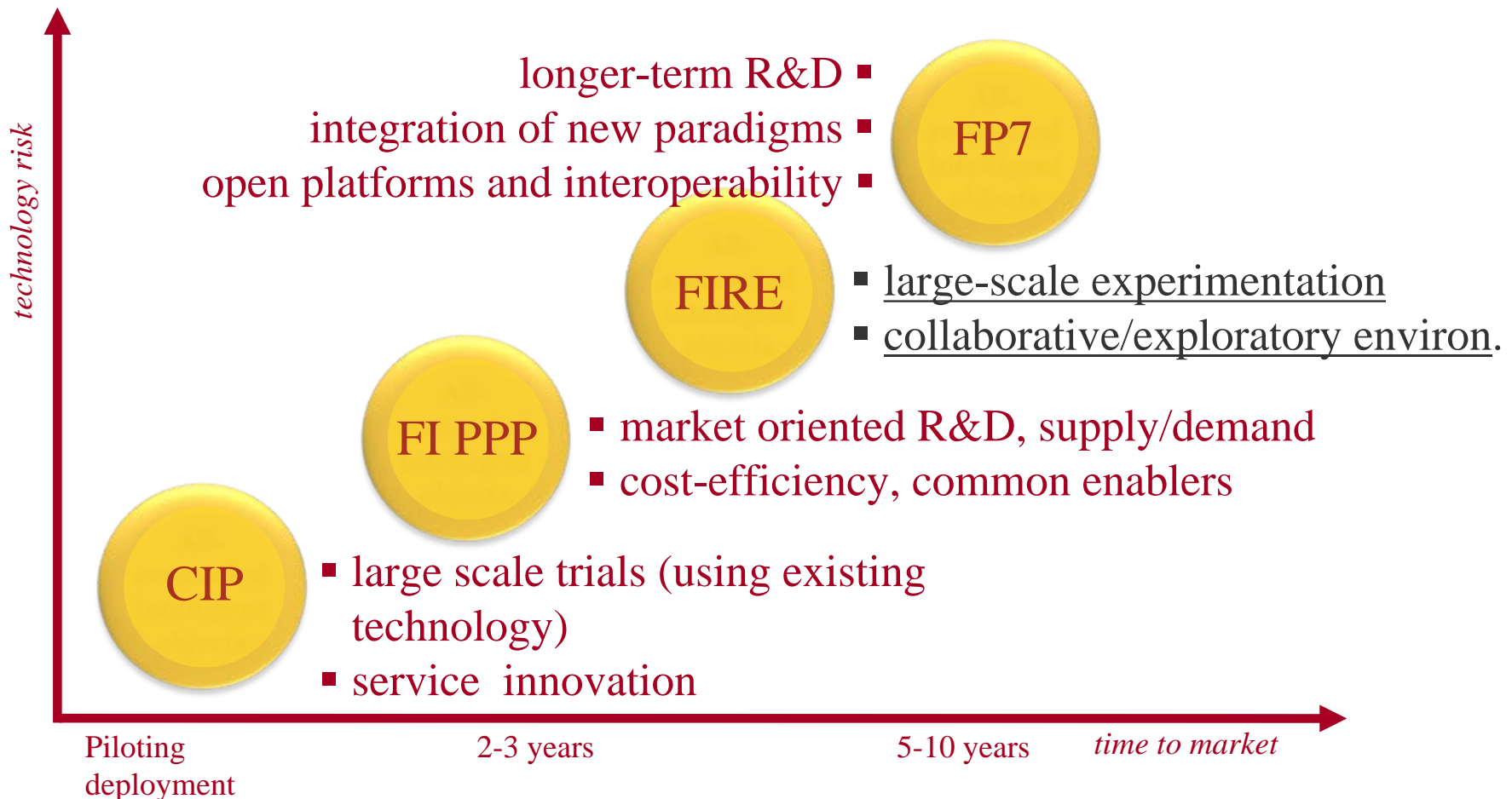
Requirements

## FIRE Experimental Facility

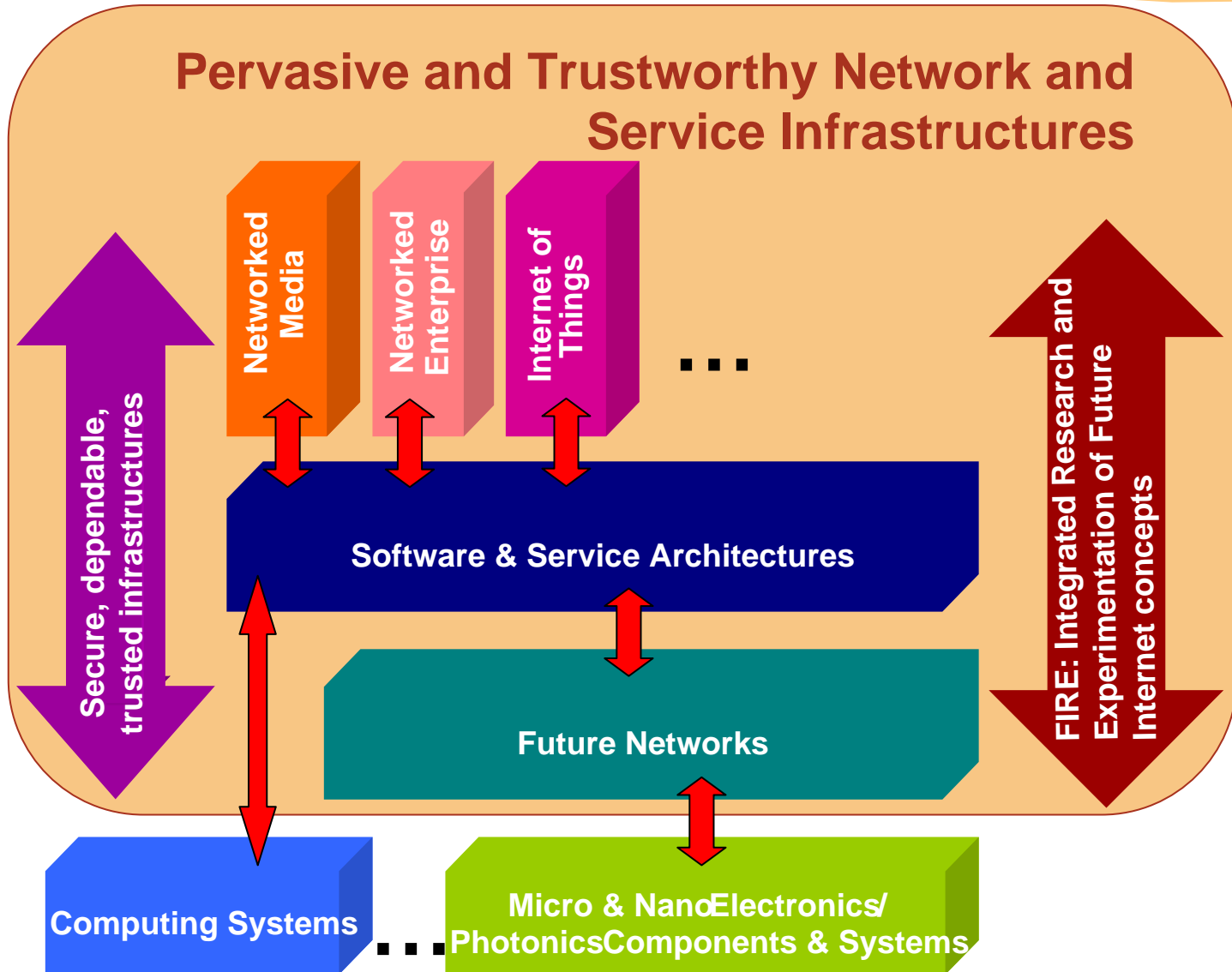
User Communities



# Future Internet: Comprehensive EU approach



# The position of FIRE in “Challenge 1”

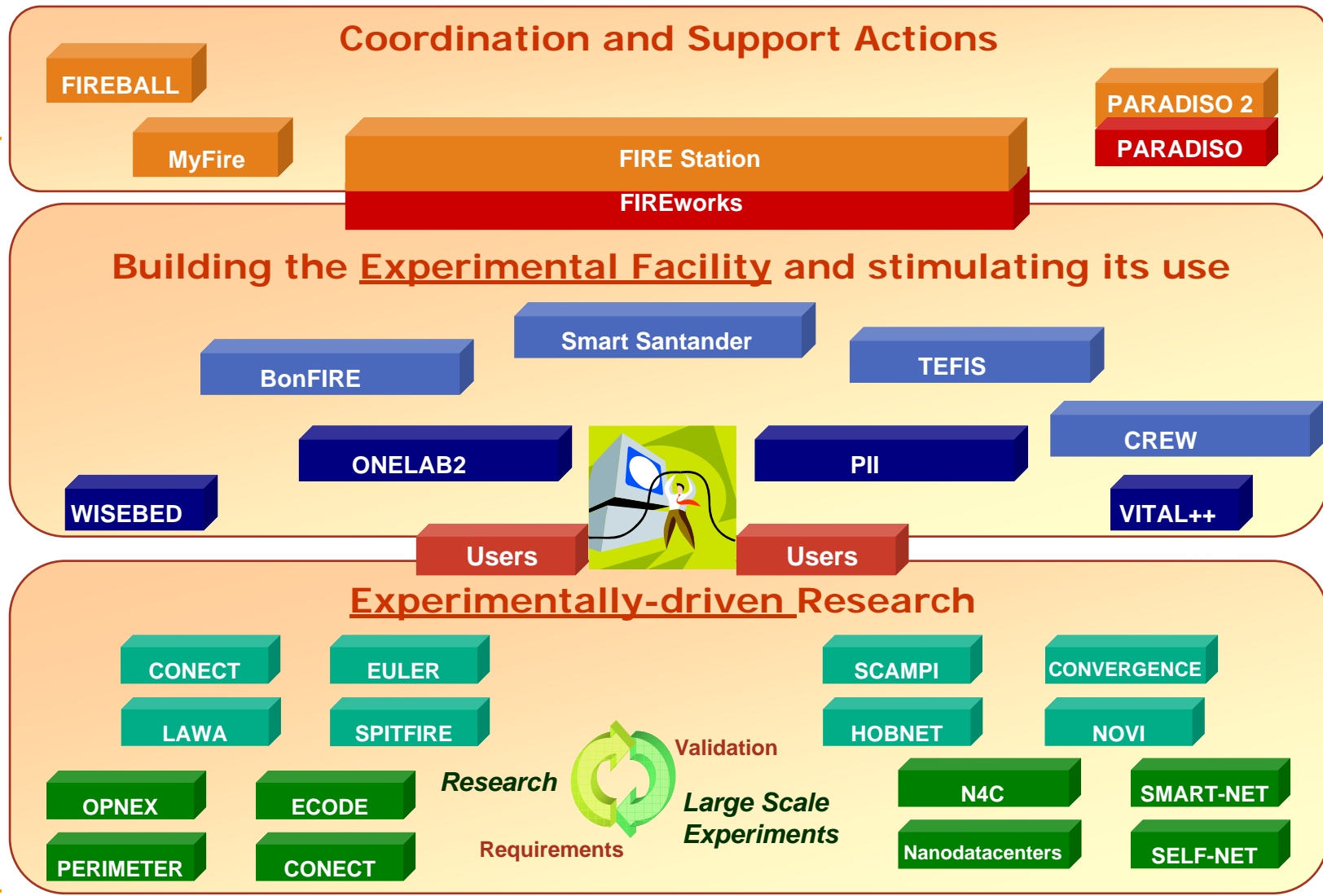


# FIRE Projects – Call2 and Call5



14 projects, 40 M€ - Call 2 - 2008

17 projects, 50 M€ - Call 5 - 2010



- IP Facility Projects Call 5
  - IP & STREP Facility Projects Call 2
- STREP Projects Call 5
  - STREP Projects Call 2
- Coordination & support actions Call 5
  - Coordination & support actions Call 2



- ☛ Call 7 (closed in January 2011)
  - **Maturing and expanding the FIRE Facility**
    - Complimentary areas (eg. Social Networks)
    - Extending and advancing early prototypes
    - IPs, 15M€
  - **FIRE Science (Internet Science)**
    - Multidisciplinary NoE in holistic FI research
    - Overcoming fragmentation and integrating life and human sciences
    - NoE, 5M€
  
- ☛ Negotiations ongoing (3 IPs, 2 EnI.EU , 1 NoE)

# Facility projects and Open Calls

5 IP projects have a ready large scale facility infrastructure that can be used:

- ☛ BONFIRE – research in the Cloud
- ☛ CREW – radio spectrum and measurements of wireless
- ☛ OFELIA – networking in Open Flow
- ☛ Smart Santander – Internet of Things – 20 000 nodes in one city
- ☛ TEFIS – research in services

# How to use the facility - Open Calls

Facility projects will launch Open Calls for experiments:

## Who can participate:

- Research institutes, universities, SMEs, industry;

## What are the rules:

- Similar evaluation as in EC calls;

## What is the budget:

- Around 5M € - max 200K€ per experiment;

## How to participate:

- Submit the proposal;
- If successful you will join the consortium with the rights like a normal partner;

## What are the IPR rules:

- In each case negotiate it with facility provider. Your IP can be protected.
-



# Where to find more information:

- All the information are on the FIREstation web page <http://ict-fire.eu/>
- BONFIRE: <http://www.bonfire-project.eu>
- CREW: <http://www.crew-project.eu/>
- OFELIA: <http://www.fp7-ofelia.eu/>
- Smart Santander: [www.smartsantander.eu](http://www.smartsantander.eu)
- TEFIS: <http://www.tefisproject.eu>

## See also:

<http://www.ict-fire.eu/events/meetings/1st-fire-open-calls-information-day.html>

## • Call 8 (1.6-b): FIRE Federation

- Implement a high level federation framework for all FIRE facilities
- Making Federation self-sustainable towards 2015
  - Develop credible business models assuming decrease of EU funding
  - Develop joint FIRE portal
- Set common tools
  - Brokering
  - User access management
  - Measurement and performance analysis
- Openness
  - Use of open standards and open source approaches
  - To additional testbeds and facilities
  - Standardization and certification policies
  - Use existing research infrastructures (GEANT, NREN)
  - Cooperation with EU national and international initiatives
- Indicative: 1 IP, Budget 8M€

## Call 8 (1.6-c): FIRE Experimentation

- Experimentally-driven research of Future Internet
  - Using existing FIRE facility prototypes (need clear commitment)
  - International Cooperation countries at use level is encouraged
- Visionary R&D subjects, e.g.
  - holistic network and service architectures
  - Applications with social value
  - low energy and cost solutions
- Innovative usage of the FIRE facility(-ies), e.g.
  - Large group of end-users
  - Complex system level testing
  - assessment of socio, economic, or environmental impact
  - measurements and benchmarking
  - STREPs only, Indicative budget: 15 M€

## Call 8 (1.6-e): FIRE Coordination and Support Action

- International and EU-wide cooperation with related stakeholders
  - Public Private Partnership on Future Internet
  - Initiatives in industrial countries / emerging economies
  - Standardization
- Exploiting synergies, developing standards, identifying socio-economic requirements, analysing impacts, and creating awareness
  - CSAs, Indicative total budget 2M€



## Call 8 – FIRE Expected Impact

- Saving costs on experimentation activities
  - More diverse and larger scale testing
  - Broad end-user involvement / closer to reality
  - Exploitation of results (infrastructures, products, services)
- Improve EU Competitiveness in Future Internet
  - Integrated large scale Experimental Facility
- Broad and innovative use of Experimental Facility
  - FI projects from EU, National and Intern. programmes
- Better understanding by EU Industry / Academia
  - Internet complexity as system of systems
  - Changes at providing services and market opportunities
- Strategic capability to assess Internet evolution
  - Broad socio-economic-environmental implications
  - Considering Sustainability, privacy, openness, neutrality

# Further information

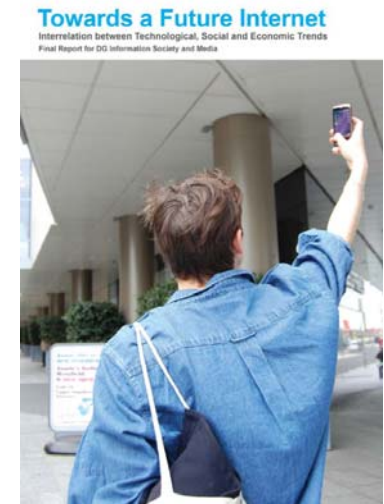
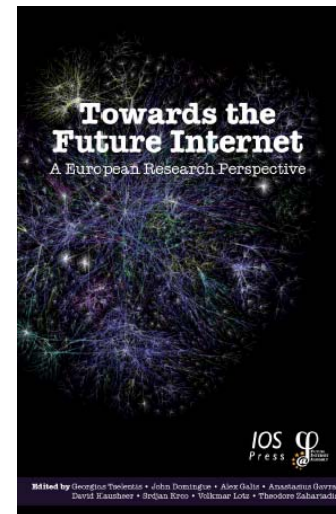
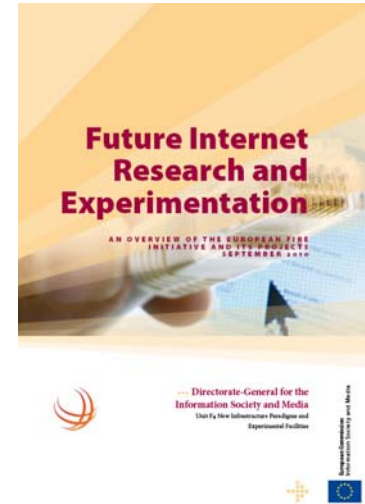


## Websites:

- <http://cordis.europa.eu/fp7/ict/fire>
- <http://www.ict-fire.eu>

## Publications:

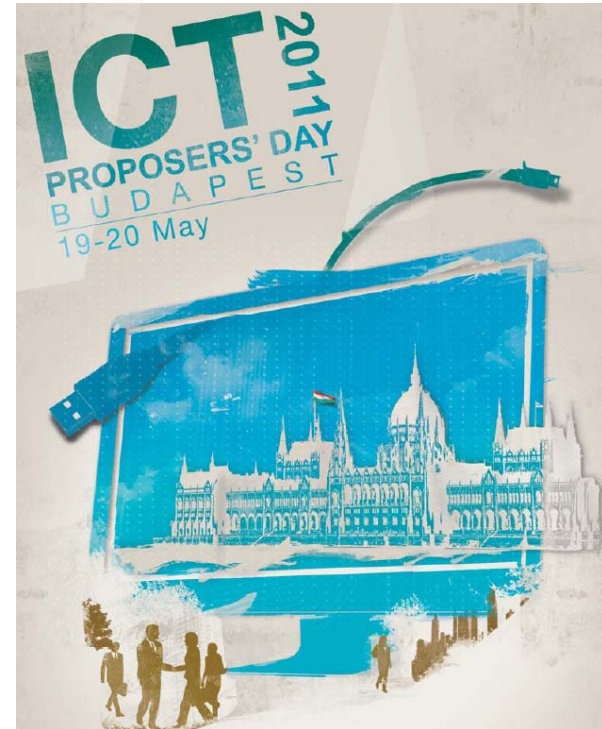
- [http://cordis.europa.eu/fp7/ict/fire/docs/fire-brochure-2010\\_en.pdf](http://cordis.europa.eu/fp7/ict/fire/docs/fire-brochure-2010_en.pdf)
- <http://www.booksonline.iospress.nl/Content/View.aspx?piid=16465>
- <http://www.internetfutures.eu/wp-content/uploads/2010/11/TAFI-Final-Report.pdf>
- <http://www.ict-fire.eu/home/publications.html>



# Upcoming Events



<http://www.fi-budapest.eu/>



<http://ec.europa.eu/ictproposersday/>

# FIRE:

# Future Internet Research and Experimentation

## Thank you for your attention



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