

# Future Internet Research and Experimentation FIRE

Per Blixt

Head of Unit, New Infrastructures Paradigms and Experimental Facilities

*An event organised by the European Commission (DG INFSO)  
& the South Korean Ministry of Knowledge Economy (MKE)*

*December 1-2, 2008  
Radisson SAS Royal Hotel  
Brussels, Belgium*



# Purpose of FIRE

- *“creating a research environment for investigating and experimentally validating highly innovative and revolutionary ideas“*
  - To investigate, test and compare, at large scale, new paradigms and future internet architectures, and their socio-economic impact
    - ✓ e.g. transport/routing paradigms, dynamic topologies, service architectures ...
    - ✓ e.g. socio economic impact of putting intelligence into the core, changing the end-to-end principle, ...

# Dimensions of Future Internet

Terabyte networks  
Complexity  
Mobility  
Internet of things  
Clean slate approaches

**Technological**

**Economic**

**Societal/Political**

Support investments:  
backward  
compatibility  
Need for (open)  
standards  
Security for commer-  
cial services and  
applications

European competitiveness on future Internet (act where market forces fail)

Consumer protection / empowerment

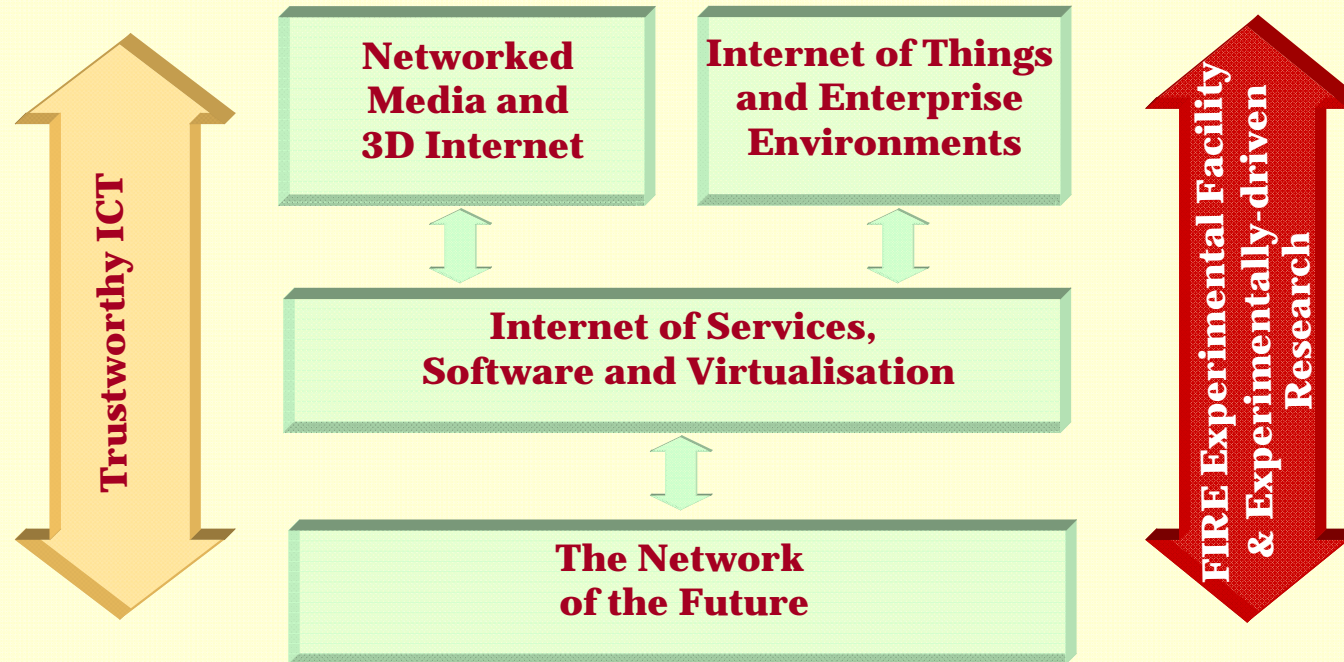
Social responsibility: preserve neutrality, openness, fairness, social role

Balance the need for security/accountability and the right to privacy

# ICT Challenge 1

Pervasive and Trustworthy Network and Services Infrastructures

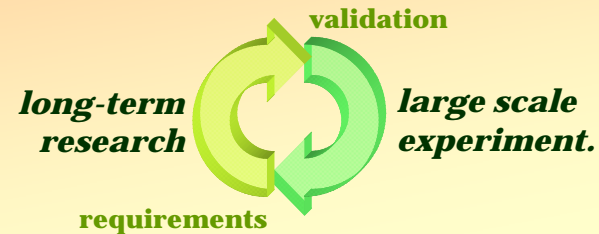
## THE FUTURE INTERNET



**Planned EU contribution under the federating theme  
“Future Internet” in 2009/2010: > 567 M€**

# FIRE - Overview of Projects

experimentally-driven, multi-disciplinary research



Building the experimental facility



support actions



(from Call2 Objective 1.6: Community Funding 40 M€)

# ICT WP 2009/10 - Objective 1.6: Future Internet experimental facility & experimentally-driven research

**Building the FIRE experimental  
facility & stimulating its use**

**25 M€  
for IPs**

**FIRE Components  
(gradual expansion)  
(20%)**

**FIRE Users  
(user stimulation)  
(20%)**

**Defining the  
challenges for  
the facility**

**Taking  
advantage of  
the facility**

**FIRE experimentally  
driven research**

**20 M€  
for STREPs**

**Co-ordination and support actions - 5 M€ for CSAs**

**ICT Call 5 - publication 31/7/09 deadline 3/11/09**

# **FIRE: ICT research in WP 2009-2010**

- Further expanding the FIRE concept and link it to national and international initiatives
  - Incremental building of the FIRE Facility
    - Incentives for experimentation cutting across layers, including service architectures, large user communities
  - More visionary experimentally-driven research on Internet protocols, architectures and services
    - Open, bottom-up approach, defining the challenges for the FIRE facility
  - More attention to multidisciplinary and socio-economic issues
    - Holistic vision of the Future Internet as a Complex System
    - Paradiso Conference 22-23 January 2009

▪ **Text Text text Text Text Text**

- ✓ Text Text Text Text
- ✓ Text Text Text Text

▪ **Text Text text Text Text Text**

- ✓ Text Text Text Text
- ✓ Text Text Text Text

▪ **Text Text text Text Text Text**

- ✓ Text Text Text Text
- ✓ Text Text Text Text