GENI - FIRE meeting

Madrid 8 December 2008

Welcome !!!
Future Internet Research under the ICT Priority of FP7

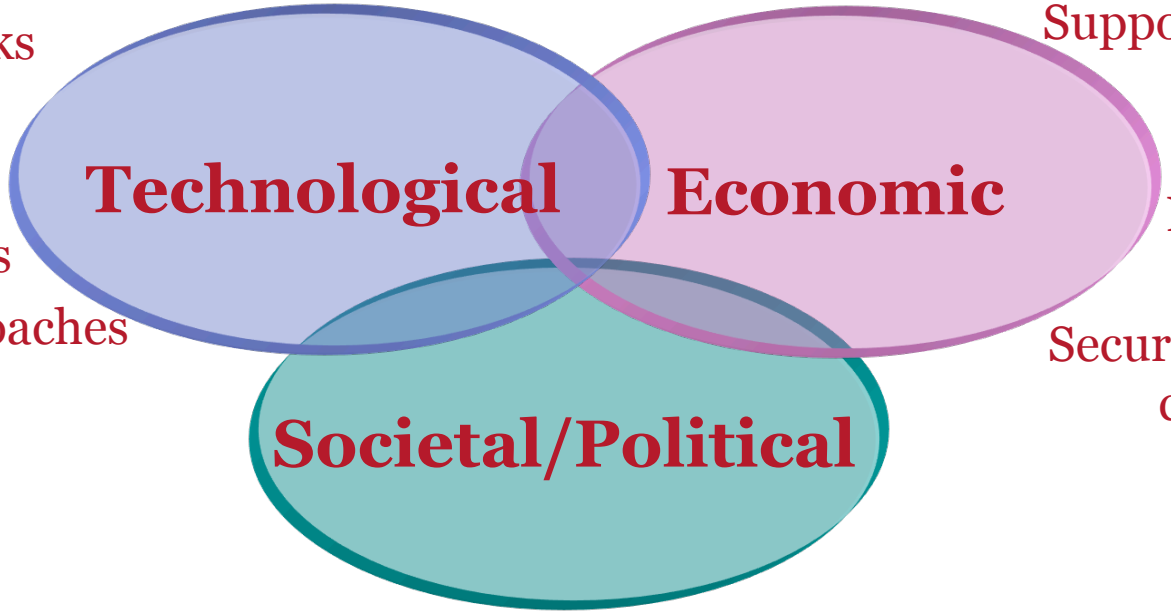
Per Blixt

Head of Unit
European Commission
DG Information Society and Media
New Infrastructure Paradigms and Experimental Facilities

European Commission
Information Society and Media

Dimensions of Future Internet

Terabyte networks
Complexity
Mobility
Internet of things
Clean slate approaches



Support investments: backward compatibility
Need for (open) standards
Security for commercial 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

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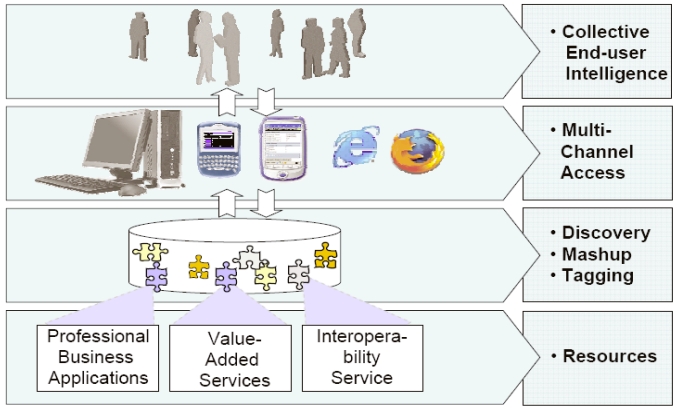
Future Internet: Multiple Aspects

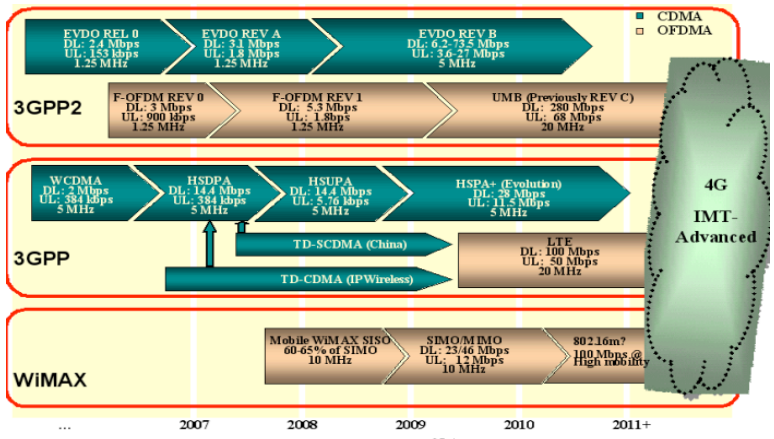
Internet of Services, Service Web



Trust

Security

3D Internet



Networks of the Future

Internet of Things

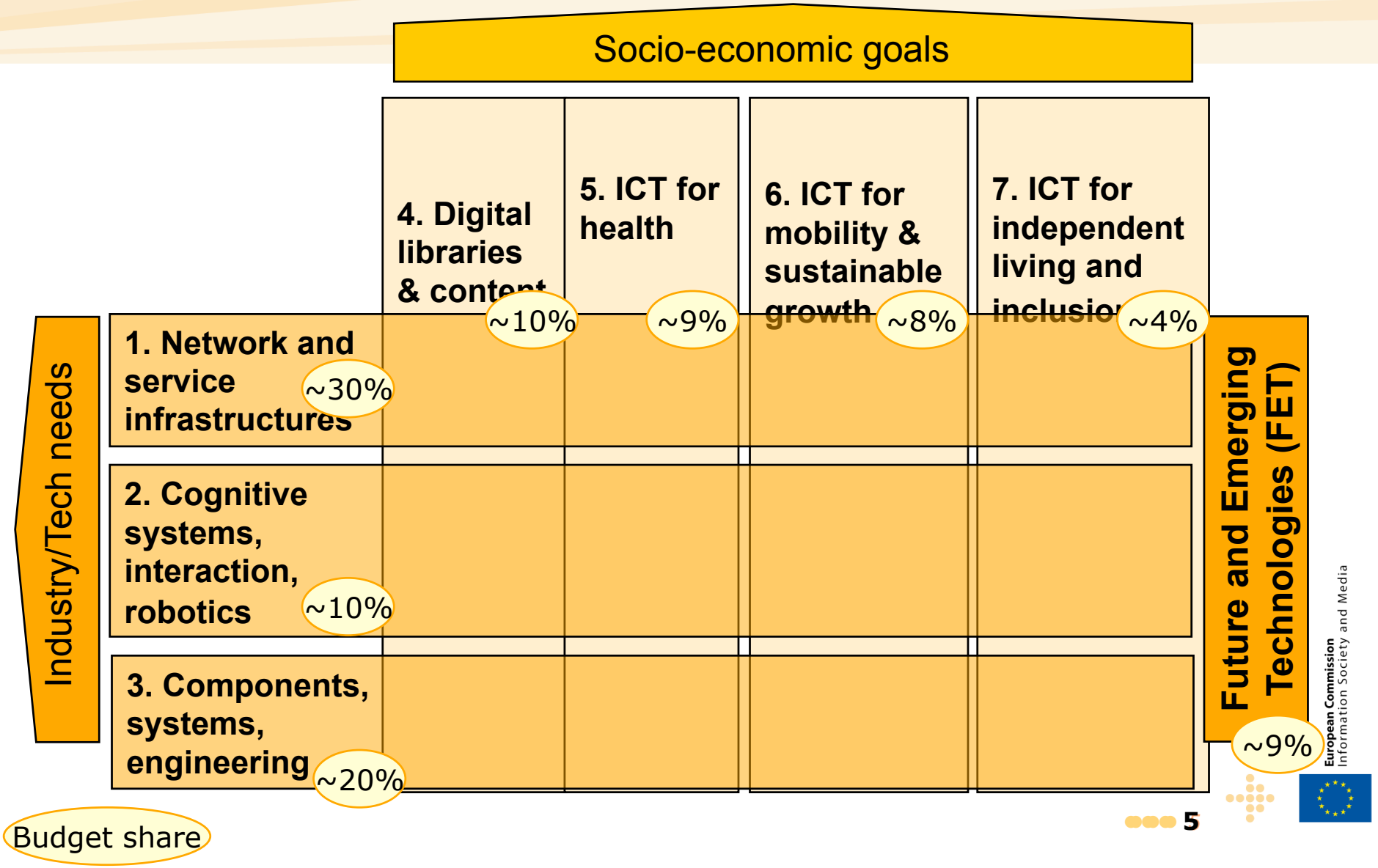
ICT Priority under FP7 - Where do we stand?

- Behind us:
  - Work Programme 2007-08: 2.1 B€ of EU funding
  - Around 500 projects launched or to be launched (out of ~3000 proposals received)
  - Launch of the first Calls of two Joint Technology Initiatives (JTI) and Ambient Assisted Living Joint Programme (AAL) [95 M€ EU + 140 M€ Member States funding]

- Ahead of us
  - WP 2009-10, 1.9 B€ of EU funding
  - + JTIs >680 M€ funding
  - +AAL around 100 M€ funding

- Major instruments:
  - Collaborative projects:
    - Small or medium-scale focused research actions (average 2 M€, 6 – 15 partners)
    - Large scale integrating projects (average 10 M€, 10 – 20 or more partners)
  - Others: Networks of Excellence, Coordination and Support Actions

ICT in FP7: *7 Challenges + FET*



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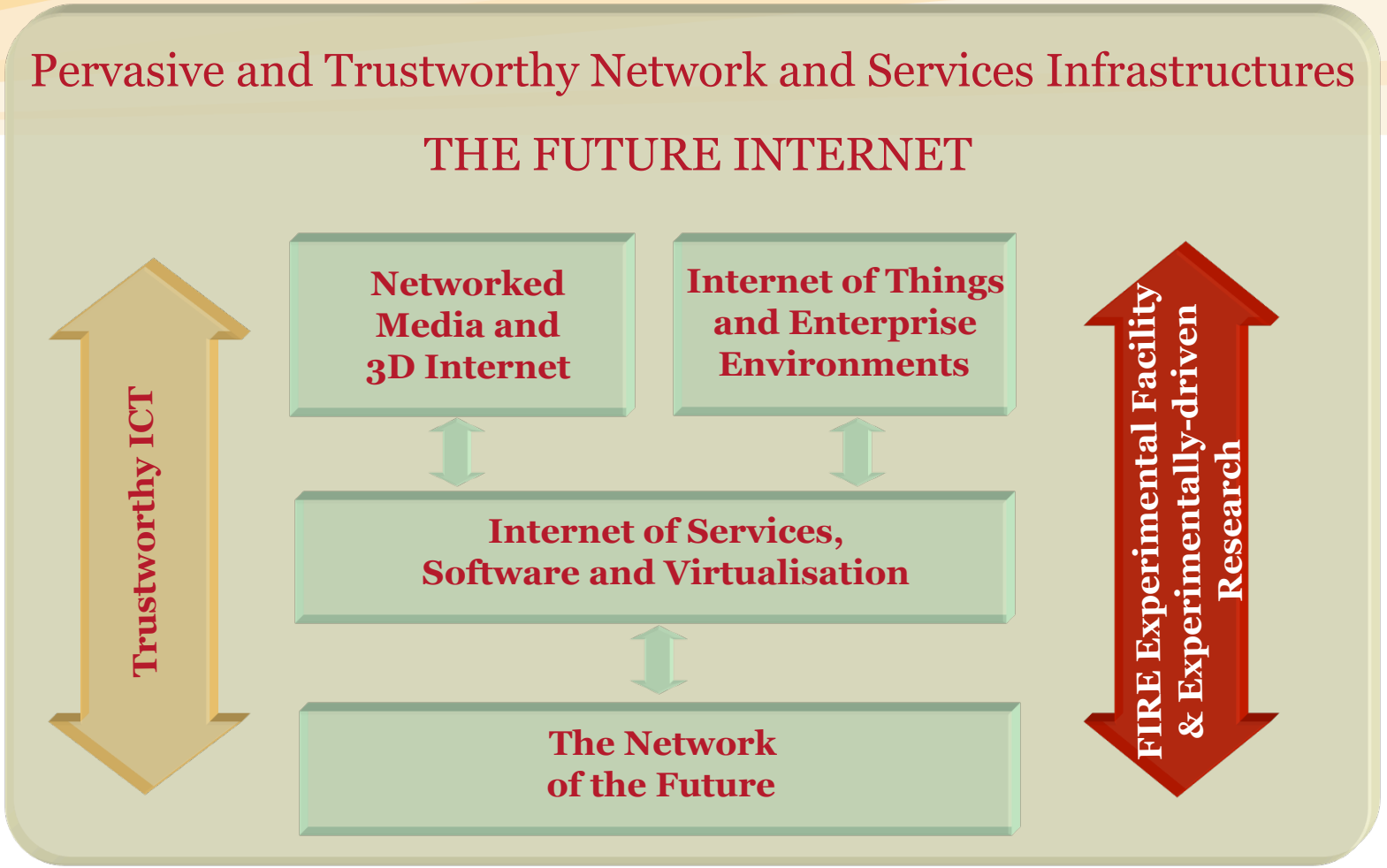
ICT Challenge 1



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

Challenge 1: Target Outcomes (1)

1.1 The Network of the Future
(IP, STREP)

- Call 4 -

Spectrum-efficient radio access to Future Networks

Converged infrastructures in support of Future Networks

- Call 5 -

"Future Internet" Architectures and Network Technologies

Networks of Excellence and Coordination/ Support actions (NoE, CSA)

1.2 Internet of Services, Software and Virtualisation
(IP, STREP)
-Call 5 –

Service Architectures and Platforms for the "Future Internet"

Innovative Service / Software Engineering

Coordination and support actions (CSA)

1.3 Internet of Things and Enterprise environments
(≥2 IP, STREP)
- Call 5 -

Architectures and technologies for an "Internet of Things"

Future-Internet based enterprise systems

International cooperation and coordination (CSA)

Challenge 1: Target Outcomes (2)

1.4 Trustworthy ICT
-Call 5 –

"Trustworthy Network Infrastructures" (IP)

"Trustworthy Service Infrastructures" (IP)

Technology and Tools for Trustworthy ICT (STREP)

Networking, Coordination and Support (NoE, CSA)

1.5 Networked Media and 3D Internet
– Call 4 -

Content aware networks and network aware applications (IP/STREP/ NoE)

"3D Media Internet" (IP/ STP/NoE)

Networked search and retrieval (IP/ STREP)

Immersive media experiences (IP/ STREP/ NoE)

Support measures (CSA)

1.6 "Future Internet" experimental facility and experimentally-driven research
– Call 5 -

Building the Experimental Facility and stimulating its use (IP)

1/ FIRE Components:
operational prototype facility
2/ FIRE Users:
open calls; results of mutual interest

Experimentally-driven Research (STREP)

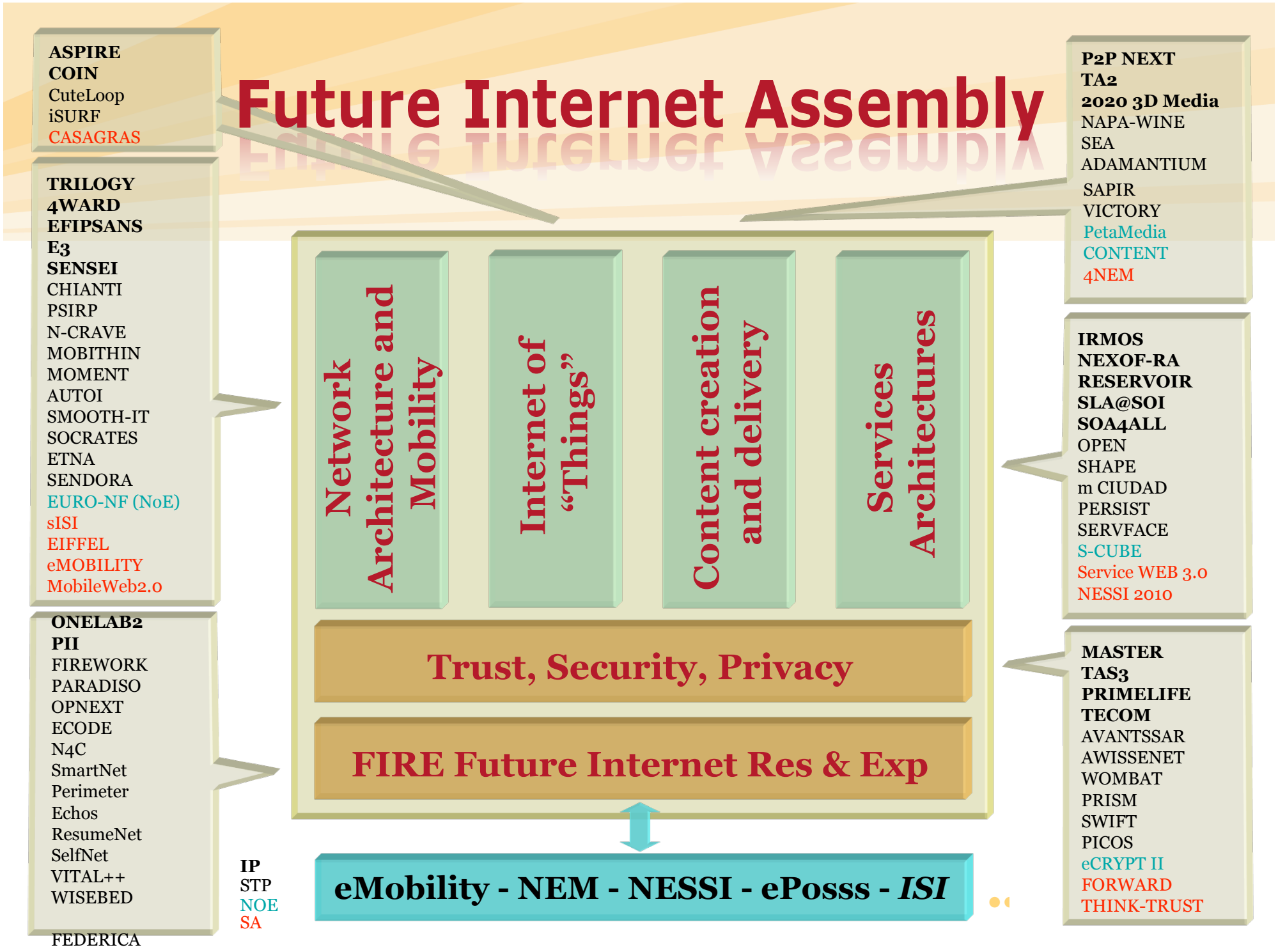
Coordination actions (CSA)

International Co-operation in WP 2009/10 (provisions relevant to FIRE / GENI)

- Challenge 1. Networks and services
  - Network of the Future (1.1): Future Internet Architectures and Network Technologies (Japan, USA)
  - FIRE (1.6): international co-operation with other initiatives in industrial and emerging countries [Co-ordination and Support actions - CSA]
- Horizontal Support Actions
  - 9.1a) Support to Information Society policy dialogues and strengthening of international cooperation [CSA]

4M€ Call 4

- General rule: US partners can participate in EU-funded projects
  - Participation must be of mutual benefit
  - Funding only in exceptional cases

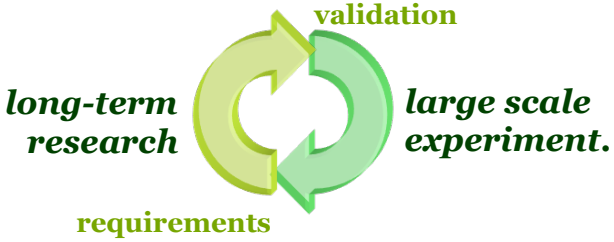

Future Internet Assembly
ASPIRE
COIN
CuteLoop
iSURF
CASAGRAS
TRILOGY
4WARD
EFIPSANS
E3
SENSEI
CHIANTI
PSIRP
N-CRAVE
MOBITHIN
MOMENT
AUTOI
SMOOTH-IT
SOCRATES
ETNA
SENDORA
EURO-NF (NoE)
sISI
EIFFEL
eMOBILITY
MobileWeb2.0
ONELAB2
PII
FIREWORK
PARADISO
OPNEXT
ECODE
N4C
SmartNet
Perimeter
Echos
ResumeNet
SelfNet
VITAL++
WISEBED
FEDERICA
IP
STP
NOE
SA
Network Architecture and Mobility
Internet of "Things"
Content creation and delivery
Services Architectures
Trust, Security, Privacy
FIRE Future Internet Res & Exp
eMobility - NEM - NESSI - ePosss - ISI
P2P NEXT
TA2
2020 3D Media
NAPA-WINE
SEA
ADAMANTIUM
SAPIR
VICTORY
PetaMedia
CONTENT
4NEM
IRMOS
NEXOF-RA
RESERVOIR
SLA@SOI
SOA4ALL
OPEN
SHAPE
m CIUDAD
PERSIST
SERVFACE
S-CUBE
Service WEB 3.0
NESSI 2010
MASTER
TAS3
PRIMELIFE
TECOM
AVANTSSAR
AWISSENET
WOMBAT
PRISM
SWIFT
PICOS
eCRYPT II
FORWARD
THINK-TRUST

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, ...

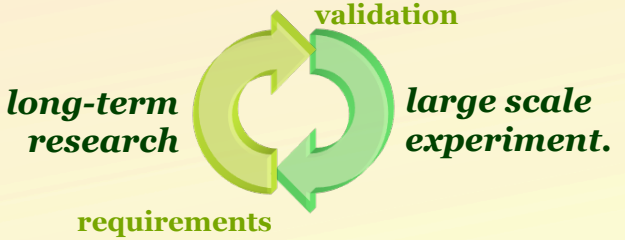


FIRE – Overview of Projects

experimentally-driven, multi-disciplinary research

OPNEX | ECODE | N4C | SmartNet

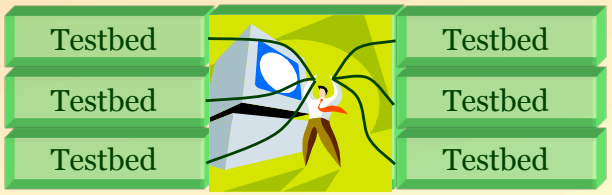
Perimeter | Nanodata centers | ResumeNet | SelfNet



Building the experimental facility

VITAL++ | WISEBED

Federica | PII | OneLab2



support actions

FIREWORKS | PARADISO

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

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