



Euro-NGI

Anticipating the Network of the Future From Theory to Design

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Chairman of the Steering Board

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Networks of Excellence

- ✓ EC Framework Programs (FP6-FP7)
 - ⇒ Support of collaborative European research
- ✓ Various instruments
 - ⇒ Including “Networks of Excellence”
- ✓ Networks of excellence are designed to strengthen scientific and technological excellence on a particular research topic
 - ⇒ by integrating at European level the critical mass of resources and expertise needed to provide European leadership and to be a world force in that topic.
 - ⇒ creating a progressive and durable integration while at the same time advancing knowledge on the topic.
- ✓ Each network will also be given a mission to spread excellence beyond the boundaries of its partnership. Training will be an essential component of this mission.



Euro-NGI (FGI/NF)

- ✓ Euro-NGI main target
 - ⇒ Create and maintain a prominent European centre of excellence in Next Generation Internet design and engineering,
 - ⇒ Act as a source of collective intelligence (or “think tank”) for the European Information Society industry and thus contribute to establishing European leadership in this domain
- ✓ 59 institutions, 202 researchers, more than 300 PhD students, 18 countries
 - ⇒ Academy and industry
- ✓ European Commission Contribution: 12 000 000 Euros (15% of the total budget)
- ✓ Starting Date: December 1st, 2003



Historical Overview

- ✓ First generation, before 1992
 - ⇒ Research network
 - ⇒ Telnet, Email, File Transfer
 - ⇒ Low traffic, low number of users
- ✓ Second generation, the '90s
 - ⇒ Commercial services, ISPs
 - ⇒ Web and basic peer-to-peer
 - ⇒ Traffic and number of networks explosion
 - ⇒ Mainly Best Effort approach and simple engineering rules
 - Main issue: capacity (transmission and addressing)

IP, a technology of choice for SPs

- ✓ Third generation today: Triple, quad play
 - ⇒ Internet access, telephony, IPTV, Mobile convergence,...
 - ⇒ Multimedia digital content and final user empowerment
 - YouTube,...



Towards the future networked society

- ✓ Third generation, from now on: Services evolution and global convergence
 - ⇒ Network and services ubiquity, Location and Context awareness
 - ⇒ Global Mobility, Vertical Handover, Always Best Connected,
 - Services Mobility across terminals, technologies and administrative domains
 - Any terminal is your terminal (bio identification)
 - ⇒ Community services, spontaneous and opportunistic networking
 - ⇒ Interconnecting/merging the real/physical and digital worlds- Wireless Sensor Networks (WSNs)
 - ⇒ Machine to machine and ambient intelligence
 - Beyond RFIDs, from today's information web towards the Internet of objects

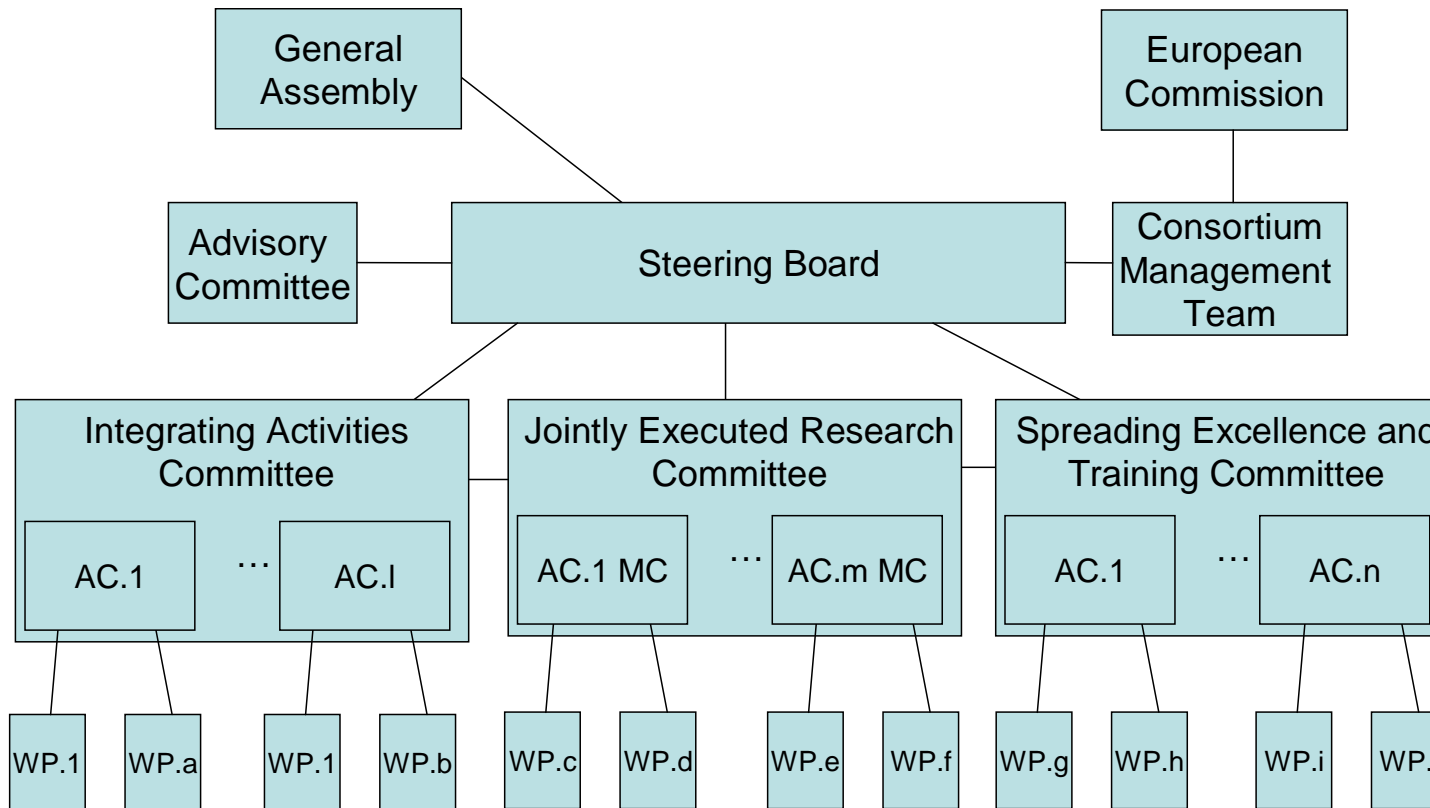


Towards the future networked society

- ✓ Third generation, from now on: Services evolution and global convergence
 - ⇒ Autonomous Networking, Cognitive networks and self management etc.
 - ⇒ Network Virtualization and Programmability
 - Control Overlays
 - ⇒ Home networking: beyond “just” networking
 - Communication, Information, Entertainment, Home automation and persons and goods security convergence
 - ⇒ Infrastructure services: virtualization (beyond VPNs), services overlays, etc.
 - Support new business processes and new business models between operators, service providers and other players.



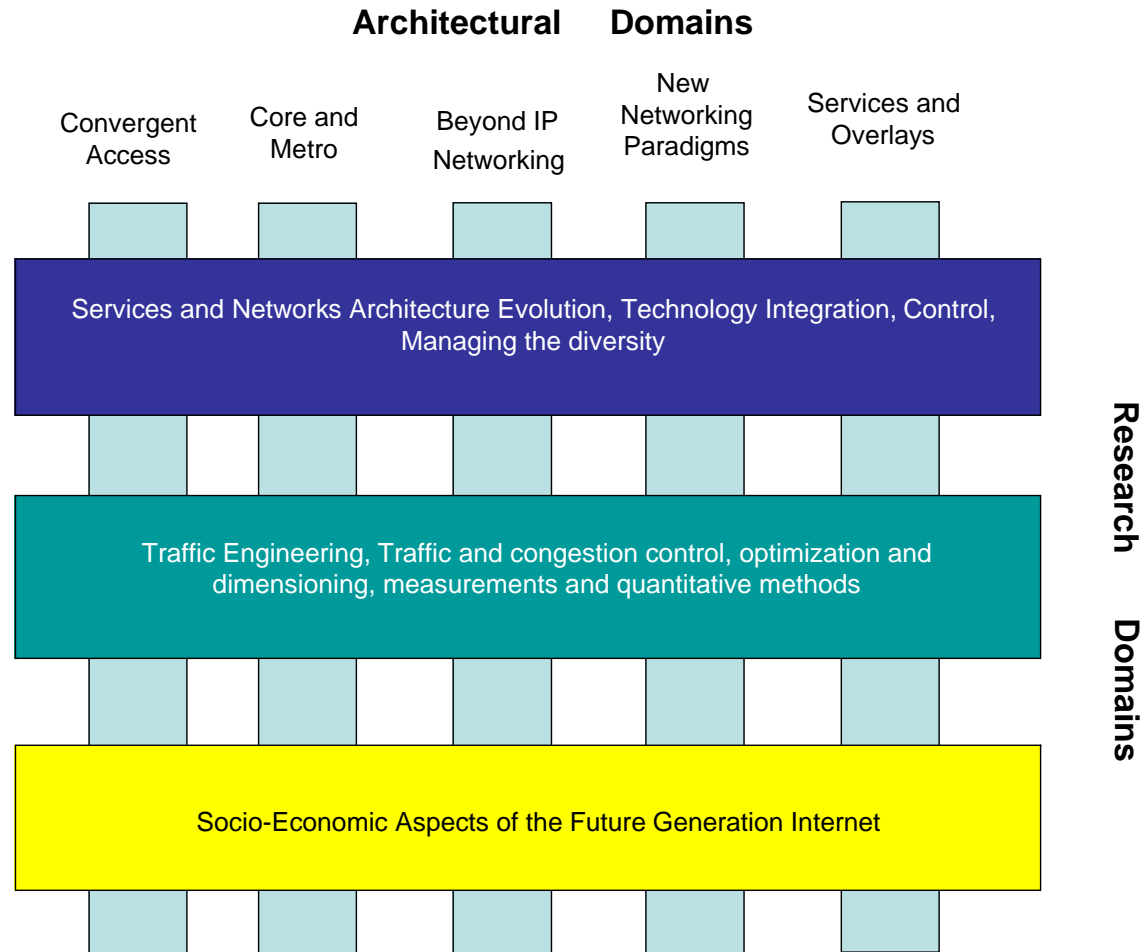
Organization Evolution



ACx: Activity x
AC.x MC: Activity x Management Committee
WPx: Workpackage x



Joint Research Activities





Socio-Economic JRA

- ✓ Governance of the Future Internet
- ✓ Advanced SLAs, Pricing, Quality of Experience
- ✓ Cost Models
- ✓ Trust, Privacy and Security



Integration activities

- ✓ Maintaining the Knowledge Map
- ✓ Development and coordination of software tools and Platforms Map
- ✓ Building Collective Intelligence - Advanced Communication Tools Map and Optimisation with the help of Experts in Cognitive and Social Behaviour
- ✓ Facilitating the mobility of researchers and PhD students
- ✓ Joint PhD Program
- ✓ Fostering Euro-NF Summer School
- ✓ Internal Workshops (6 a year) and think tank:
 - ⇒ Workshop: Socio-economic Issues in Euro-NF
- ✓ Euro-NF Plenary Meeting



Dissemination Activities

- ✓ Electronic dissemination
- ✓ Standardization Activities
- ✓ Transfer of knowledge: Publications of White papers, Special Issues, and Tutorials
- ✓ Summer School and Joint PhD. Courses Program
- ✓ International Conferences
- ✓ Synergic collaboration with external institutions industry, SMEs and Academy
- ✓ Concertation with European projects and other organizations
- ✓ Support of Spin-Off Projects from the Euro-NGI NoE
- ✓ Euro-NF Vision



Invitation

- ✓ Collaboration with external colleagues and organizations is one of our main targets
- ✓ We will be very glad to discuss with you about possible synergies
- ✓ You are kindly invited to attend our various events
 - ⇒ Conference, Workshops, Summer School, etc.
- ✓ Web site and Contacts: www.eurongi.org
- ✓ daniel.kofman@enst.fr



Looking forward for
a fruitful collaboration