



# The launch of Technology Platforms: Towards FP7 definition

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# DG INFSO- R&D, Regulation, Policy

- Green Books
- Liberalisation

Telecommunications  
Policy

- New Regulatory Framework
- Directives
- National Regulatory Entities

## European Research Area

- Multinational projects

Research and  
Development

- Coordinated Actions
- Integrated Projects
- Networks of Excellence
- Integrated Infrastructures

eEurope, applications  
& Contents

- eBusiness
- eContent
- eGovernment
- eLearning
- Broadband
- Security
- eInclusion



# Post eEurope Snapshot

## Policy views post eEurope 2005 driving future ICT R&D agendas

- Contribution of ICT to the Lisbon goals:
  - IS a boost to citizenship
  - ICT central to boost productivity and improve competitiveness
- Overall policy goals
  - eInclusion and citizenship
  - ICT as a motor of economic development
- Issues for IS policy beyond 2005 :
  - Content and services
  - Developing skills for the knowledge society
  - Interoperability
  - Security and consumer confidence



# ICT Trends underpinning R&D

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- Technological and social contexts of ICT applications and services must converge towards a new generation of applications (based on Ambient Intelligence and Connectivity) for the **Knowledge Society**
- Long-term strategy for the evolution and **convergence of technologies** - mobiles (IPv6, UWB, > 4G), AV...- and **services and the integration thereof into the global network evolution** (Cooperative Networks, Sharing of Resources, New Partnerships, Scalability, Minimising Complexity...)
- Users should be at the centre: their environments (private and public, the **"extended home"**; the **"collaborative workplace"**, their objects and artifacts (augmented reality, advanced robotics...),



# Trends in Research on ICT

- **ICT at the core of impressive progress and changes**
  - ICT-bio, ICT-cogno, ICT-nano-materials, ...
  - Convergence within ICT
    - Telecommunications / Informatics / Media,
    - Fixed / Wireless...
- **Growing complexity of technology chains**
  - Complex Systems
  - Combination of skills, know-how, technologies
- **Innovation in the usage of ICT**
  - Growing interdependency between technologies, products and services
  - Joint development of services and technologies
  - Creating ICT-based smart environments
- **Cooperative R&D**
  - Integrated in commercial and technological processes
  - Sharing of risks, competencies, technologies...
  - Multidisciplinarity, complexity and interdependencies
  - **EU**: critical mass, global leadership, common objectives/solutions, open to international cooperation



# The upcoming next EU R&D generation: towards FP 7 (Main Axis)

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- **Basic Research** (*individual grants, competition at EU level*)
- **Technology Platforms** (*new forms of Public-Private Partnership*)
- **Cooperative Research**
- **Human resources**
- **Research Infrastructures** (*ex. GEANT, GRIDs, big labs*)
- **Coordination with National Programmes** (*European Research Area*)
- **+ Space & Security**



“Science and Technology, the key to the future of Europe – Orientations for the research policy of the Union” Commission Communication 2004



# Towards FP7: New Industry-led Initiatives

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## European Technology Platforms: a new kind of Private-Public Partnership

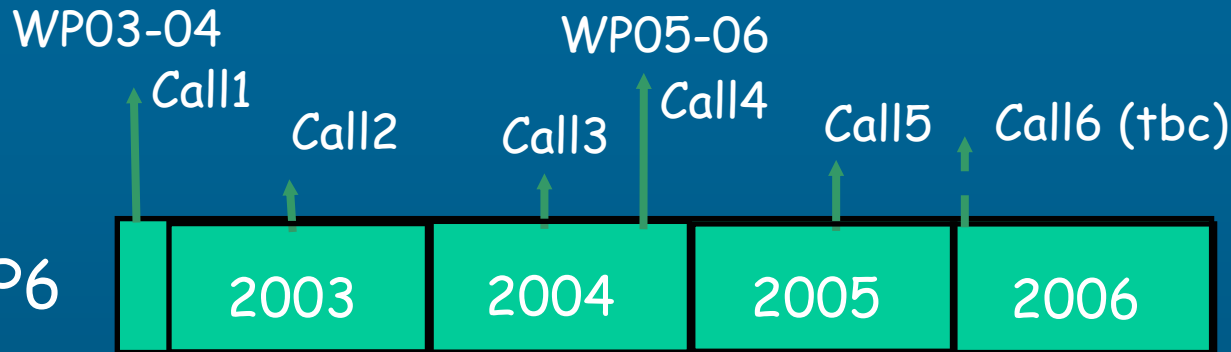
- Appeal to main stakeholders to federate around common research agendas and technology roadmap
- Increasing impact of European research in those domains
- Initiatives started in:

- *Mobile, beyond 3G;*
- *Embedded Systems;*
- *Nano-electronics;*
- *Networked & Electronic Media : converging Telecom, Information Technologies, Media and Consumer Electronics*

[ftp://ftp.cordis.lu/pub/technology-platforms/docs/tp\\_report\\_defweb\\_en.pdf](ftp://ftp.cordis.lu/pub/technology-platforms/docs/tp_report_defweb_en.pdf)



# FP 7 TIMELINE



Communication: "Preparing the future: reinforcing European research policy" (12/05/04)

Proposals on FP, SPs and RfP

Adoption

WP + Calls

New Financial Perspectives

Communication "Building our common future: Policy challenges and Budgetary means of the Enlarged Union 2007-2013" (10/02/04)

**NB: FP7 process tightly coupled to discussions on Financial Perspectives**

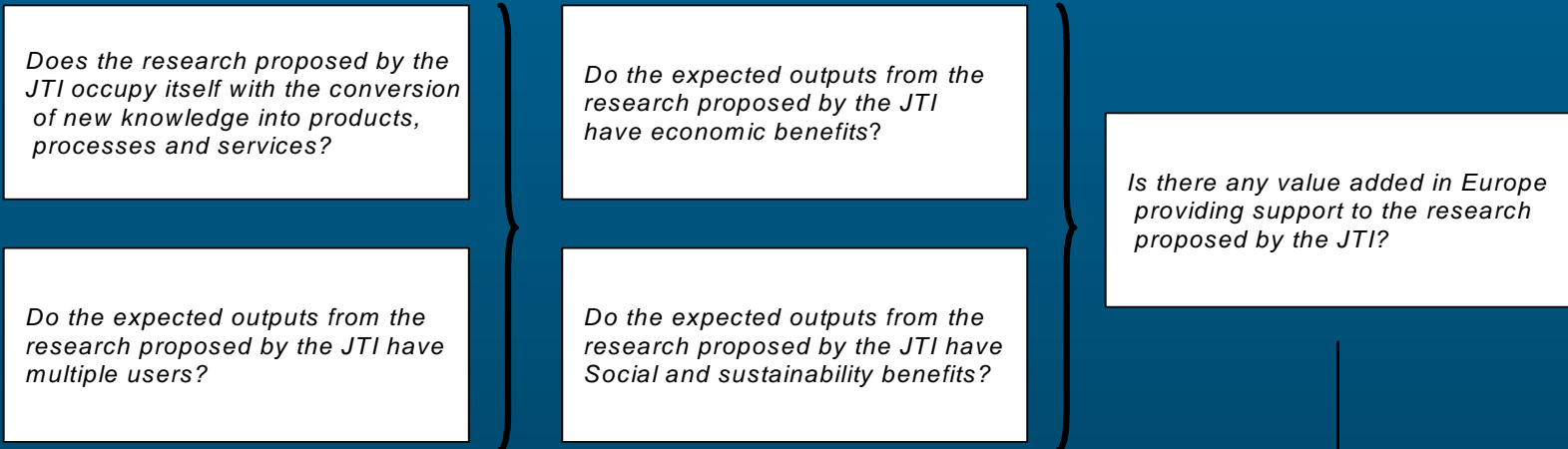


# TP: 3-stage identification process

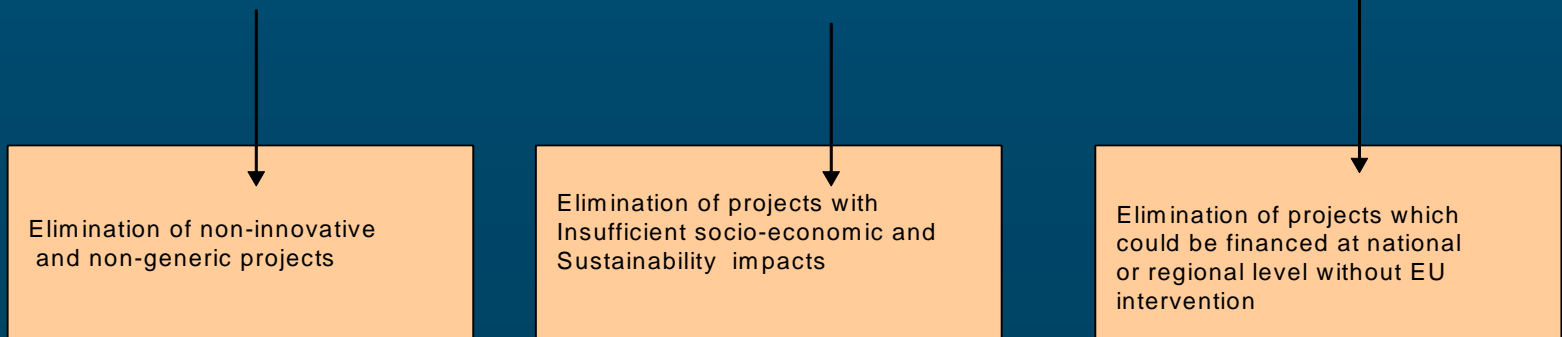
STAGES



CRITERIA



ELIMINATION



# Stage 1: Science and technology

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- Acquisition of new knowledge (highest-level, state-of-the-art), which can subsequently contribute significantly to competitiveness through new or improved cost-efficient products, processes or services?
- Respond to future market needs?
- Have multiple users with the potential to positively affect major and strategically significant European industries?



## Stage 2: Broad-based economic/other benefits

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- Significant economic benefits (expected market, projected employment creation, additional turnover etc.)?
- Contribution to sustainable development goals?
- Current and projected levels of scientific and technological effort, especially in terms of private research investment, commensurate with the scale of the potential socio-economic benefits?



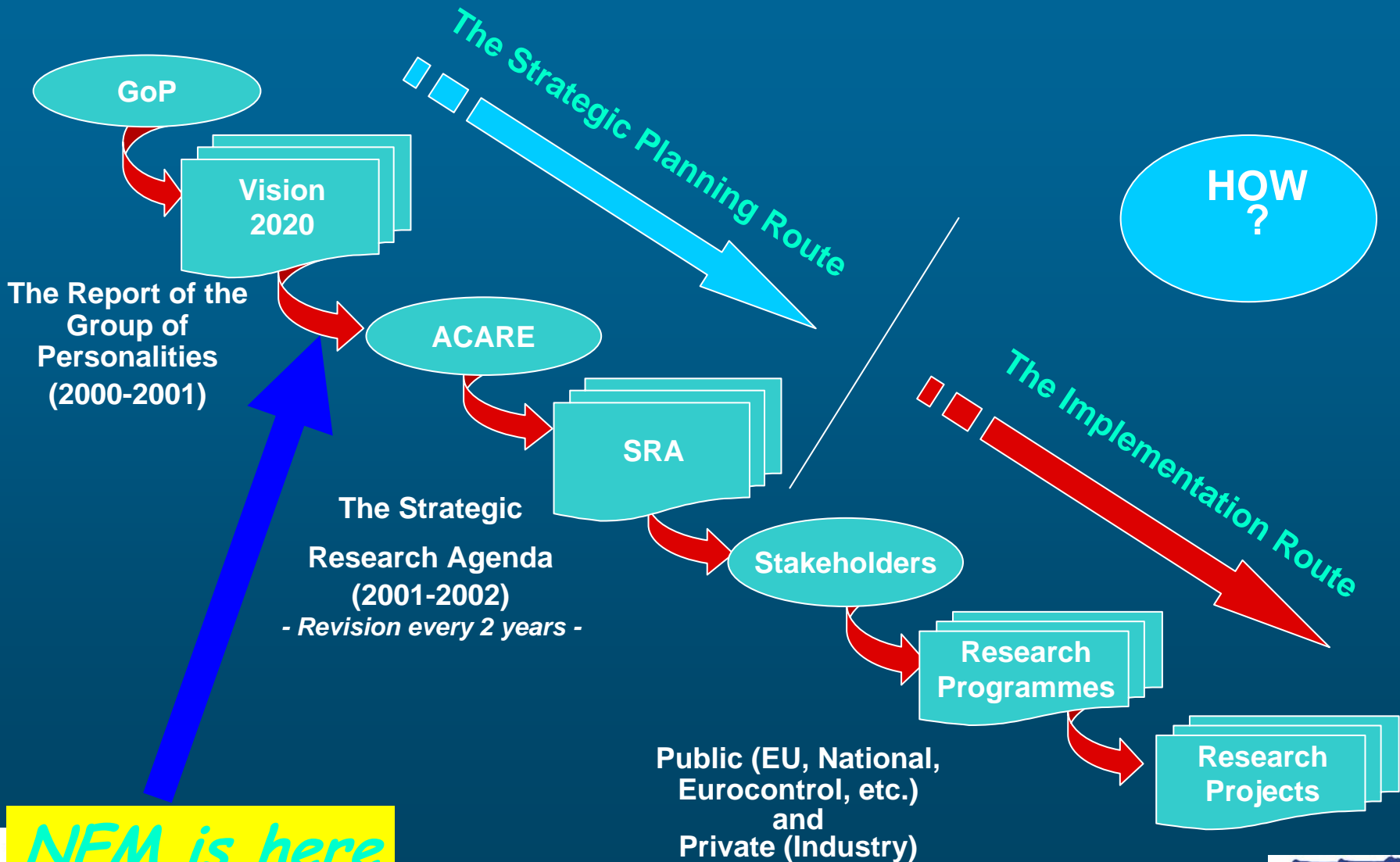
# Stage 3: European value added

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- The RTD activities can only be realistically carried out at a European level?
- Existing instruments and structures not capable of achieving the desired outcome?
- Commitment key stakeholders to long-term vision?
- Association of public authorities?
- Involvement of main industrial companies?
- Technical and managerial frameworks in place?



# Technology Platform/Industrial Initiatives: Typical process, the Aeronautics example



**NEM is here**

# What is a Strategic Research Agenda? (1/2)

A non-prescriptive, non-authoritative, collaborative, informed and dynamic strategy for developing technologies to achieve a long-term vision

## *It IS:*

- Driven by the challenges (industrial and policy) faced by the sector
- Ambitious, spanning across the short, medium and long term

## *It IS NOT:*

- A research programme or workprogramme. However, it should be able to influence all the stakeholders (public and private) in the definition of their programmes
- A rigid plan. It should be adaptable to changing circumstances or requirements (Revision every 2-3 years)



# What is a Strategic Research Agenda? (2/2)

## A pre-condition to the generation of a SRA:

- *The SRA can be 'artificially' generated in a purely bottom-up approach, but it will be fruitless unless it responds to a 'natural' demand from the relevant stakeholders at the highest level.*

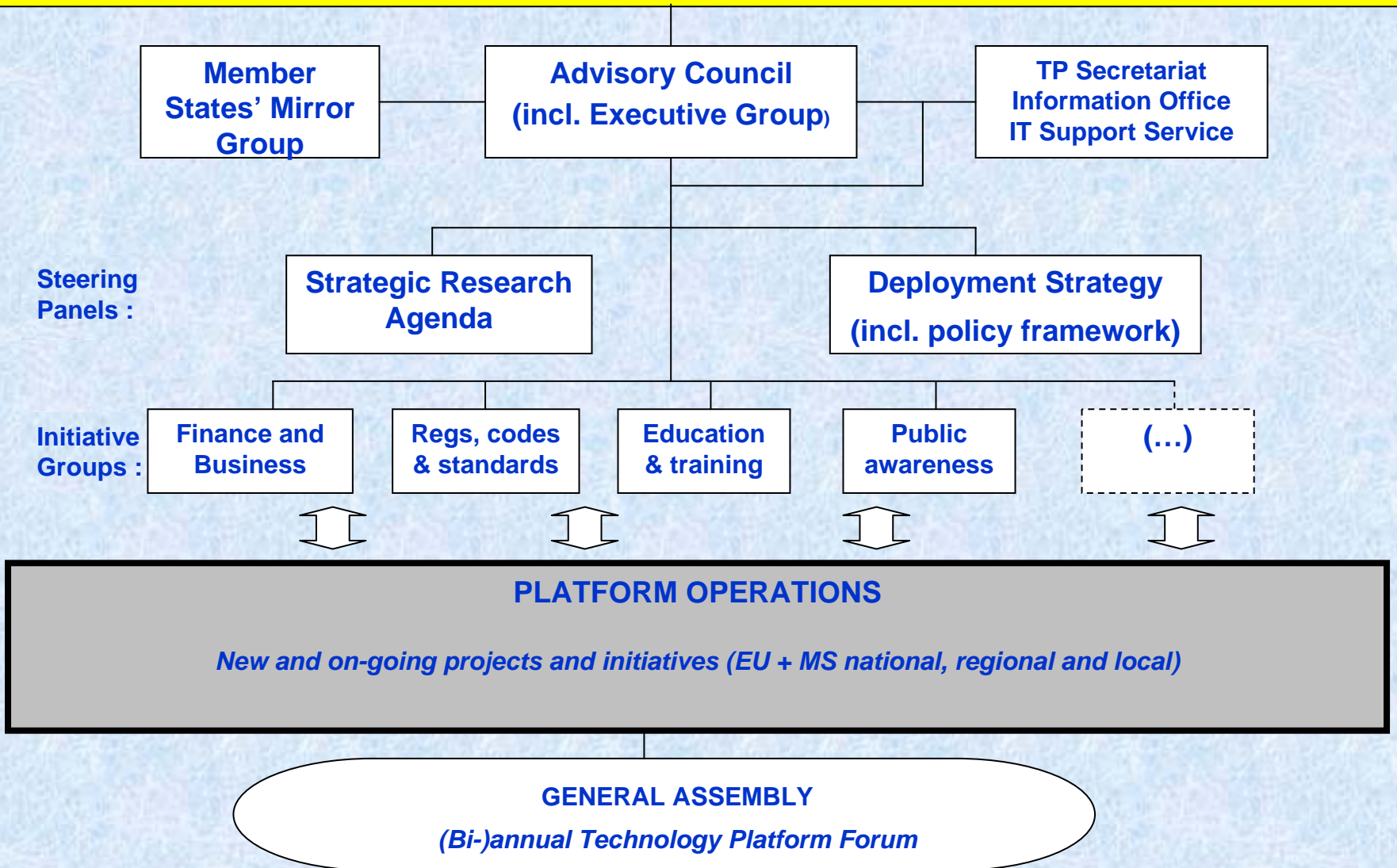
## Important:

- *In addition to the Technical Agenda, the SRA includes also a strategy regarding essential factors of implementation ('The Enablers'). The enabling subjects considered span from educational policies to research infrastructures, from certification and qualification aspects to co-ordination of programmes, etc.*



# HLG Vision

## EXAMPLE STRUCTURE: H2/ FC TECHNOLOGY PLATFORM



# Organisational Aspects and Governance

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- A “one size fits all” solution is not appropriate: freedom to determine its most appropriate organisational structure.
- Transparency and clear “rules of the game” with regard to dealing with new stakeholders are essential: Platforms must avoid the trap of becoming “closed shops” of lobby groups.
- The Commission is not owner: only to encourage and stimulate. Role of facilitator
- Operational focus needed at an early stage so that research activities begin in a concrete way and platforms avoid becoming “talk shops”.
- Industry involvement in platforms should be at high level.
- Committed involvement of national authorities is essential: “Mirror groups” is a potential good model.



# Drawing up an Strategic Research Agenda

- Strategic Research Agendas (SRAs) should be ambitious, medium to long-term in span and updated regularly
- Wide consultation needed
- Explicit priority setting
- Not to focus exclusively at European level: capitalise on private sector opportunities, notably with industry, co-ordinating and integrating national programmes
- The global dimension of the technologies concerned should also be taken into account
- SRAs should include data, budgets and tangible indications of **industry commitment**, be creative in identifying **different funding possibilities**; **not to focus exclusively on Community funding sources** (role of public funding should be to leverage substantial private investment in platforms)



# Links to other Policies

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Technology platforms are expected to contribute significantly to enhancing European competitiveness in the broadest sense and are potentially an important mechanism by which research can contribute to economic growth.

Platforms can also contribute to other policies e.g:

- environment, development co-operation, education, consumer choice...
- Standardisation;
- International co-operation;
- Regulation, convergence, interoperability...



# Networked Electronic Media and FP 7

## Strengths

- constituency;
- long term through infrastructure aspects
- R&D intensive sector;
- EU field of excellence;
- natural reach beyond R&D;
- strong policy/societal links

## Opportunities

- accrued interest in media sector;
- convergence and mobility trends
- EU R&D synergy and leadership;
- Links into non EU activity;
- emerging markets (Home Networks);
- Virgin technological landscape (ad hoc nets)
- EU Asia/LA co-operation

## *NEM (short) SWOT*

## Weaknesses

- IT/PC/content??
- reaching industrial consensus;
- slow standards reactivity

## Threats

- Issues diluted under a myriad of non co-ordinated initiatives;
- New technology and standards left to non-EU industry;



# WP 2005-06 CALL 4

SO (2.4.6) Structure, as forerunner of a possible NEM initiative under FP7

*Content Creation (not part of SO)*

3D TV

Content handling & protection

Virtual Reality

Network Delivery & Interoperability

Acc Measures

Terminal rendering & adaptability

DRM

QoS

Home Networks

Scalability

*SYSTEM APPROACH*

# Conclusions

- **NEM is an important opportunity for Europe: new markets driven by convergence (supply) and service/ content (demand)**
- **In line with R&D EU policy**
  - Public-Private Partnership (Barcelona and Lisbon Councils - 3% of GDP for R&D, Knowledge Economy and Society)
  - Opening up new markets
  - Competitiveness of key industry
  - Articulation with other actions: regulation, standards,,,
- **In line with ICT R&D EU policy**
  - User-centric, Convergence... A key "*Integration Environment*" underpinning many application areas
  - **At the core of EU policies:**
  - Consumer choice, Interoperability, access to education, media and culture, inclusion

**SHOW COMMITMENT TO INVEST AND TO COORDINATE  
BUILD AND KEEP MOMENTUM  
THE EC WILL FACILITATE THE PROCESS**

