Information Society Technologies in the 6th Framework Programme

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SIXTH FRAMEWORK PROGRAMME

Outline of presentation

- What is a Framework Programme?
- European policies
- IST Priority in FP6
- FP6 Instruments in IST

What is a RTD Framework Programme?

The Framework Programme:

- **is the EU's main instrument for research funding in Europe**
- **is proposed by the Commission and adopted by Council & Parliament**
- **covers a period of 4 years with FP6 starting in 2002**

Legal basis (Treaty, article 163-173, co-decision article 251)

Objectives:

- **Strengthening the S&T bases of Community industry**
- **Encouraging it to become more competitive**
- **Promoting all the research activities deemed necessary by**

Implementation:

- **A multiannual framework programme .. shall be adopted**
  i.e. the general decision defining the objectives, content & budget

How does FP6 differ from previous FPs ?

Problem

- **FPs have helped foster a culture of S&T cooperation**
- **However lasting impact on greater coherence at European level is lacking**
  - FP6 budget (€ 17.5 M) represents ~ 5% of all public (non-military) research spending in Europe
  - EU invests only 1.8% of GDP in RTD compared to 2.8% in the US and 3% in Japan.

Solution

FP6 aims to:

- contribute towards the creation of a '**European Research Area'** (an internal market for Science and Technology).
- Concentrate EU efforts on fewer priorities especially where clear added value is evident
- move towards progressive integration of activities of participants working at different levels
- promote activities designed to have lasting 'structuring' impact
- support activities that will strengthen EU's S&T basis

Who decides how the money is spent?

Once Council and Parliament adopt the FP, the European Commission is responsible for its implementation.

Guiding principles

- **The EU will only fund projects with several partners from several countries**
- **FP funds are allocated following a competitive call**
- **Projects are only eligible for FP funding if their scope and objectives reflect priorities outlined in the WP**
- **Quality and technological relevance of projects are assessed by external independent experts (on average 5)**

Recent European Policies

- European Research Area (ERA) : “single market for research”; free movement of knowledge, researchers and technology
- Increase global EU expenditure for research to 3% of GDP by 2010
- Examples of other policies:
  - e-Europe 2005 (e-activities, information infrastructure/security)
  - Telecommunications (broadband, power lines, spectrum and regulatory aspects)
  - Innovation policies, SME’s

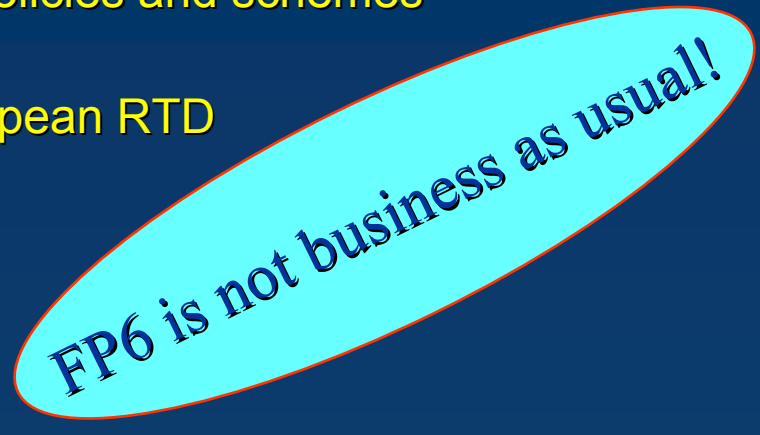
The European Research Area (ERA)

- A "single market" for research
  - an area for the free movement of knowledge, researchers & technology
  - aim is to increase co-operation, stimulate competition & achieve better allocation of resources
- A restructuring of the European research fabric
  - improved co-ordination of national research activities & policies
  - account for most of the research carried out & financed in Europe
- A European research policy
  - addresses not only funding of research activities (e.g. FP6)
  - also takes into account all relevant aspects of other EU & national policies

http://europa.eu.int/comm/research/era/

ERA-a new context for EU supported RTD

- Moving to a European level Research policy
  - Strengthen co-operation between National and EU Activities
  - Improve links between National and EU policies and schemes
  - (takes account of enlargement)
  - Development of a “shared vision” on European RTD
  - Potential for co-funding arrangements



- Realising ERA will require
  - New thinking: more strategic and goal oriented
  - New approach: concentration, critical mass and flexibility
  - New scope: taking account of the international dimension of RTD (greater awareness of who’s doing what)
  - New instruments: Integrated Projects (IPs) & Networks of Excellence (NoEs)

eEurope the Political Umbrella

By 2005, Europe should have:

"An Information Society for All "
eEurope 2005

- modern online public services
  - e-government, e-learning, e-health, ...
- a dynamic e-business environment
  - e-commerce, business process restructuring, ...

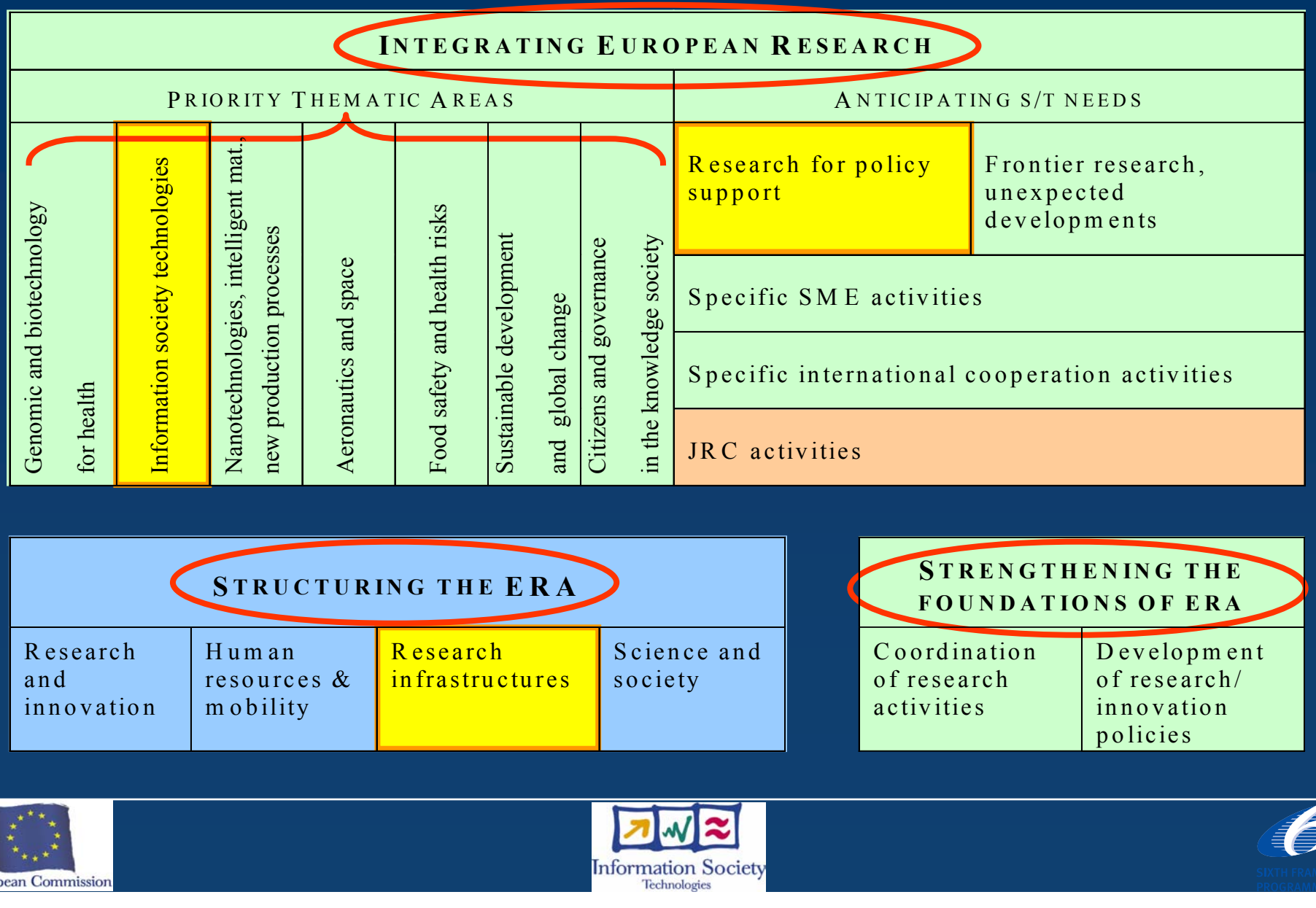
and, as an enabler for these

- widespread availability of broadband access at competitive prices
  - optical fibre access, mobile broadband, local loop competition, ...
- a secure information infrastructure
  - network security, cyber crime, data protection, ...

Numbers

- 2000: Europe produced 5.6 PhDs per 10000 people
  US produced 4.1 per 10000
- Installed based, Europe: 5.4 per 1000
  US: 8.7 per 1000
- 10% of funding in FP6 goes to human resources
- Marie Curie will enable 9000 researchers to work abroad

The components of FP6



European Commission

Information Society Technologies

SIXTH FRAMEWORK PROGRAMME

IST in FP6 - Specific Programme

- Main objectives
  - Promote world class research in key priority areas of exceptional interest and added value to Europe and the competitiveness of its industry
- e-Europe Action plan
  - contribute directly to realising European policies for the knowledge society
- Research priorities (relevant to embedded systems)
  - Software technologies, embedded systems and distributed systems

IST in FP6 : the Budget

- Focussing and Integrating
  - Genomics 2255 M€
  - Information Society Technologies 3625 M€ incl. ~100M€ for GEANT/GRID
  - Nanotechnologies, int.. 1300 M€
  - Aeronautics and space 1075 M€
  - Food quality and safety 685 M€
  - Sustainable development 2120 M€
  - Citizens and governance .. 225 M€
  - Anticipation of S&T needs
    - Anticipating needs 555 M€
    - SMEs 430 M€
    - Specific INCO 315 M€
- Structuring ERA
  - Research and Innovation 290 M€
  - Human resources 1580 M€
  - Research Infrastructures 655 M€, incl. ~200M€ for GEANT/GRID
  - Science/Society 80 M€
- Strengthening ERA foundations 320 M€
- Joint Research Centre 760 M€

16270 M€

4% of EU's budget
5,4% of EU's public (civilian) research budget

Workprogrammes in FP6 - main content

- Provides further details on …
  the Scientific and technical content of the calls
  - based on the Specific Programme text
- Defines the evaluation and selection criteria
  - common set derived from the rules for participation
  - additional criteria depending on objectives
- Defines the terms of the calls for proposals
  - objectives to be called for
  - distribution of budget between old and new instruments
  - weights and thresholds of criteria to be used
    - including participation eligibility criteria
- Updated as appropriate
  - every year for IST

IST Workprogramme 2003- 04: Approach

- A two year WP
- A limited number of calls: Three over two years
- Concentration on a limited set of « Strategic Objectives »
- 12 “Strategic Objectives” in 2003,11 in 2004
- ~2/3 of budget targeted to new instruments

IST Workprogramme - budget phasing

Planning over 4 years

Year	2003	2004	2005	2006
Indicative Budget	835,000	891,000	935,000	964,000
Calls per year	Two calls drawing on 2003 and 2004 budgets	One call drawing on 2005 budget	Second WP (covers also all topics of SP) with updated focus	

First WP covers all topics of the SP

The strategic objectives: what do they describe?

For each objective, the WP:

- Defines the goals to be achieved with RTD in Europe
- Focuses on the parts that need to be addressed with the EU effort
- Provides guidance on the types of instruments that need to be supported
- Identifies the links with member-states activities
- Identifies links with policies,,e.g. eEurope,..

Indicative call sequence & topics (1)

Strategic objectives addressed in Call 1

1. *Pushing the limits of CMOS, preparing for post-CMOS*
2. *Micro & nano-systems*
3. *Broadband access for All*
4. *Mobile & wireless systems beyond 3G*
5. *Towards a global dependability & security framework*
6. *Multimodal interfaces*
7. *Semantic-based knowledge systems*
8. *Networked audiovisual systems & home platforms*
9. *Networked business & government*
10. *eSafety for road and air transport*
11. *eHealth*
12. *Technology-enhanced learning & access to cultural heritage*

+ FET proactive + Accompanying actions

Technology components

Integrated systems

Sectorial Applications

Indicative call sequence & topics

Strategic objectives covered in Call 2

1. *Advanced displays*
2. *Optical, opto-electronic, photonic functional components*
3. *Open development platforms for software and services*
4. *Cognitive systems*
5. *Embedded systems*
6. *Applications & services for the mobile user & worker*
7. *Cross-media content for leisure and entertainment*
8. *GRID-based Systems & solving complex problems*
9. *Improving Risk management*
10. *eInclusion*

+ Research Networking + Accompanying actions

Technology components

Integrated systems

Sectorial Applications

+ Services and Products engineering 2010 : Joint call with priority 3

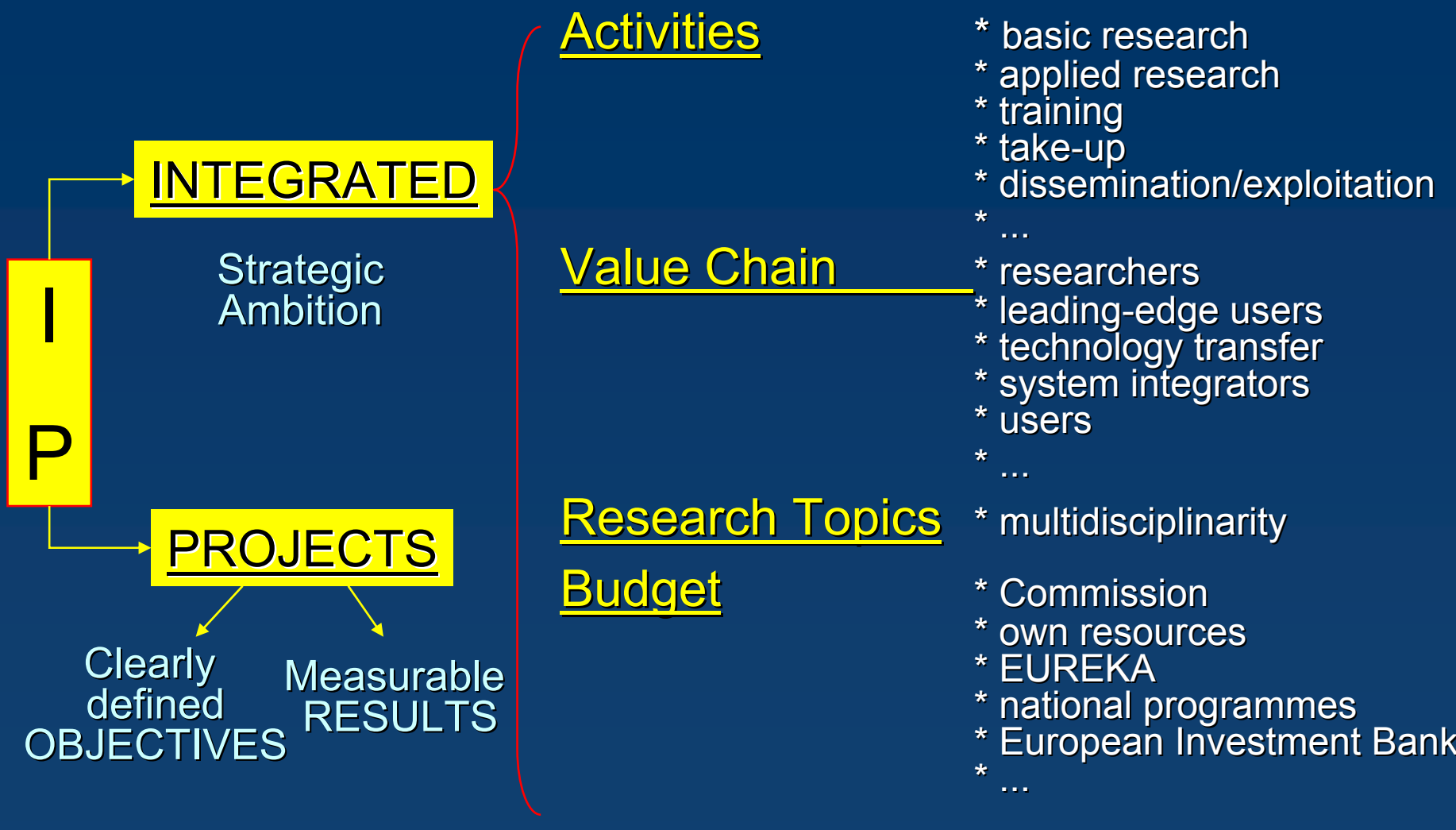
Instruments for the IST priority

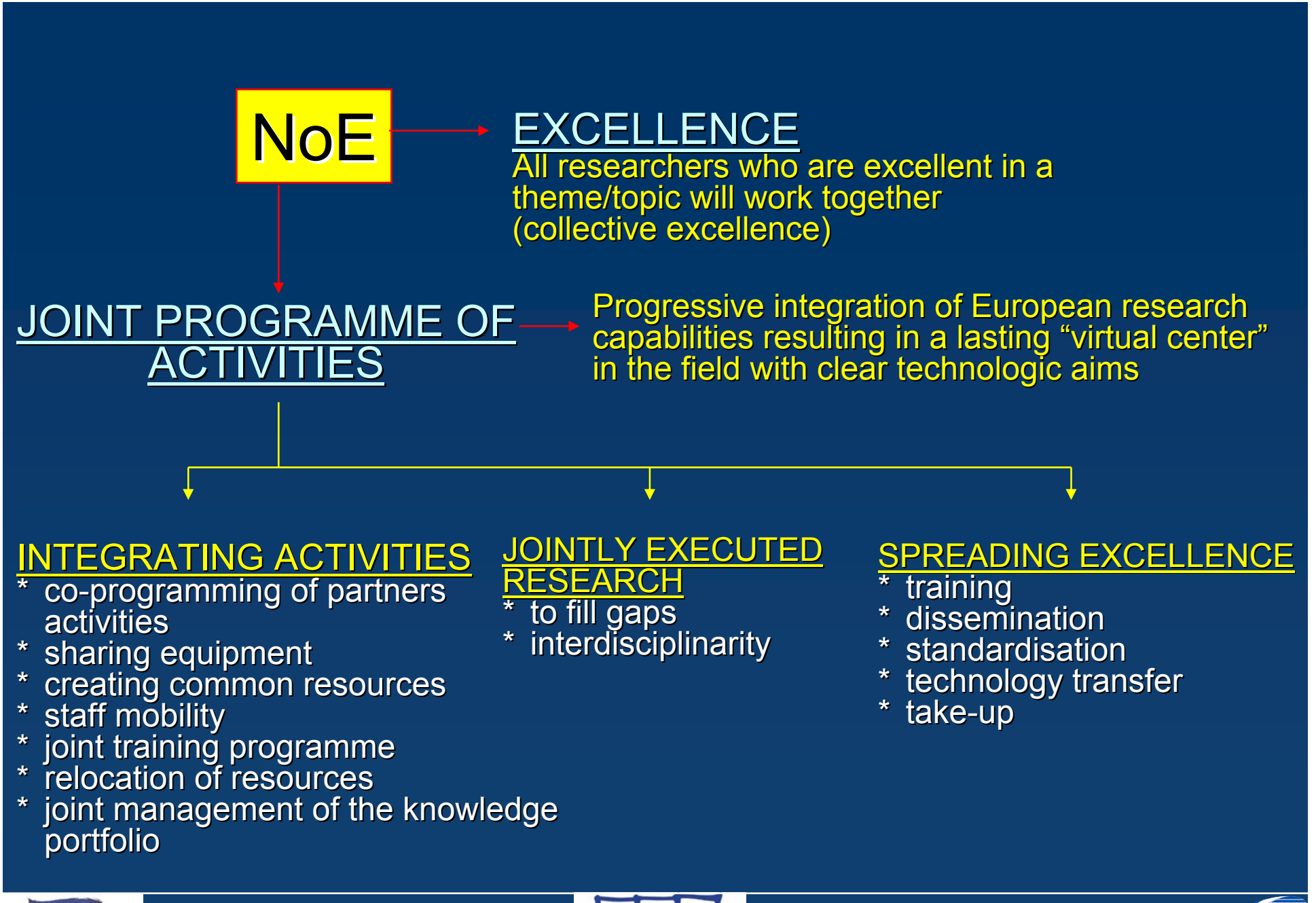
- Integrated Projects
  - Objective driven
- Networks of Excellence
  - Exploratory research
- +Article 169

NEW

- Targeted research projects
  - (address specific issues)
- Co-ordination actions
- Support Actions

No longer available …..
- Individual Take-up Actions
- SME Exploratory Awards


I
P
INTEGRATED
Strategic Ambition
PROJECTS
Clearly defined OBJECTIVES
Measurable RESULTS
Activities
Value Chain
Research Topics
Budget
* basic research
* applied research
* training
* take-up
* dissemination/exploitation
* ...
* researchers
* leading-edge users
* technology transfer
* system integrators
* users
* ...
* multidisciplinarity
* Commission
* own resources
* EUREKA
* national programmes
* European Investment Bank
* ...


NoE
EXCELLENCE
All researchers who are excellent in a theme/topic will work together (collective excellence)
JOINT PROGRAMME OF ACTIVITIES
Progressive integration of European research capabilities resulting in a lasting "virtual center" in the field with clear technologic aims
INTEGRATING ACTIVITIES
* co-programming of partners activities
* sharing equipment
* creating common resources
* staff mobility
* joint training programme
* relocation of resources
* joint management of the knowledge portfolio
JOINTLY EXECUTED RESEARCH
* to fill gaps
* interdisciplinarity
SPREADING EXCELLENCE
* training
* dissemination
* standardisation
* technology transfer
* take-up

For further information

General FP6:

http://europa.eu.int/comm/research/fp6/index_en.html

http://www.cordis.lu/rtd2002

IST:

http://www.cordis.lu/ist

http://www.cordis.lu/ist/fp6/fp6.htm

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