



**FEAST Conference 2006**

*Research without borders*

Session 8

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**FP7 ICT Work Programme**

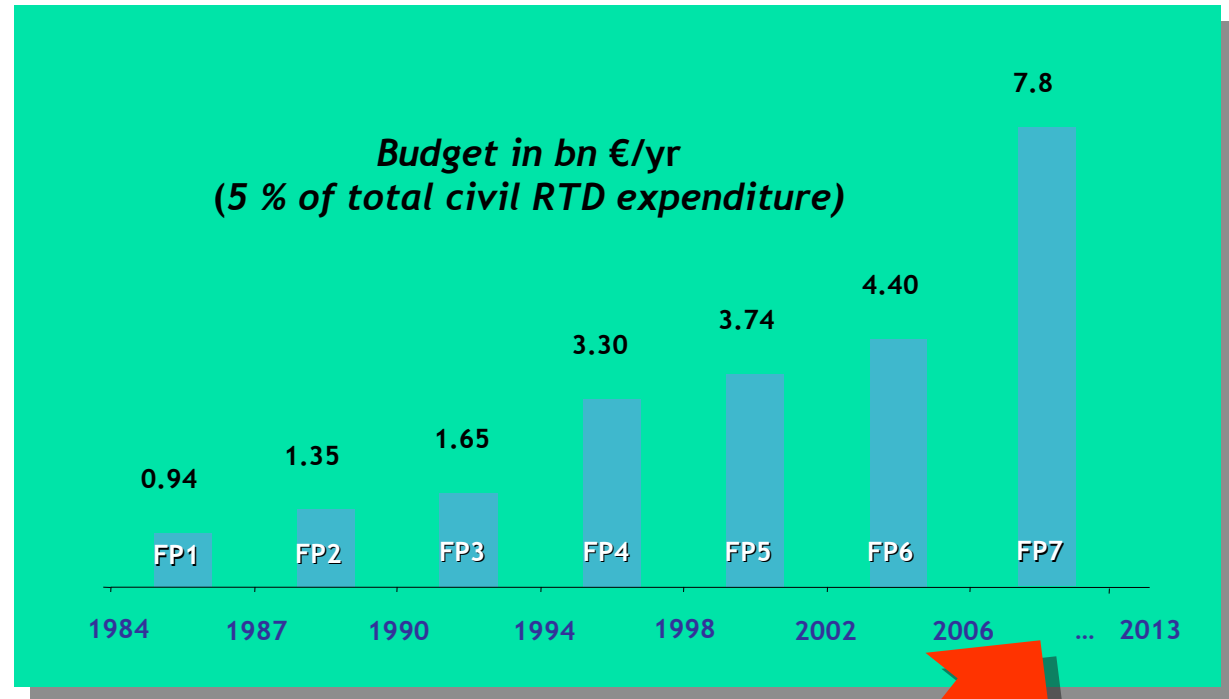
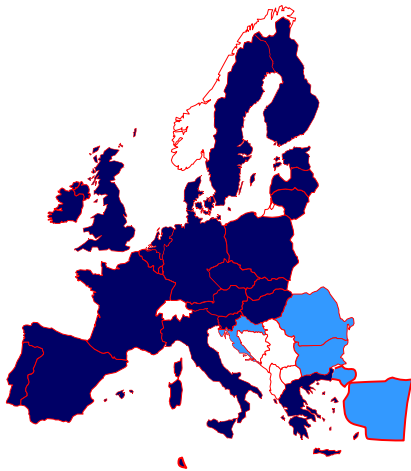
# ICT Strategies for the Future

7th Framework Programme ICT Theme

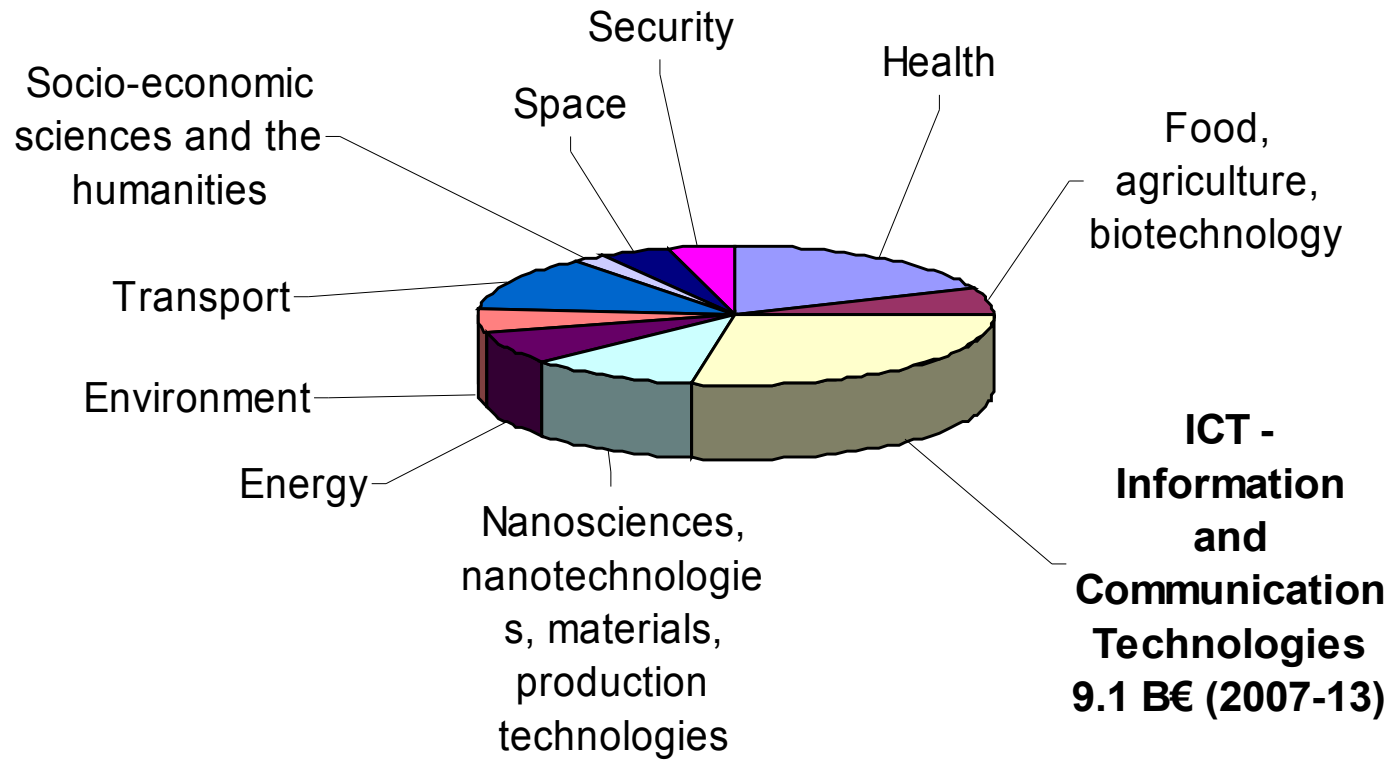
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Directorate G: Components and Systems  
DG Information Society and Media  
European Commission

# Framework Programme 7 (2007-2013): Increased R&D investment

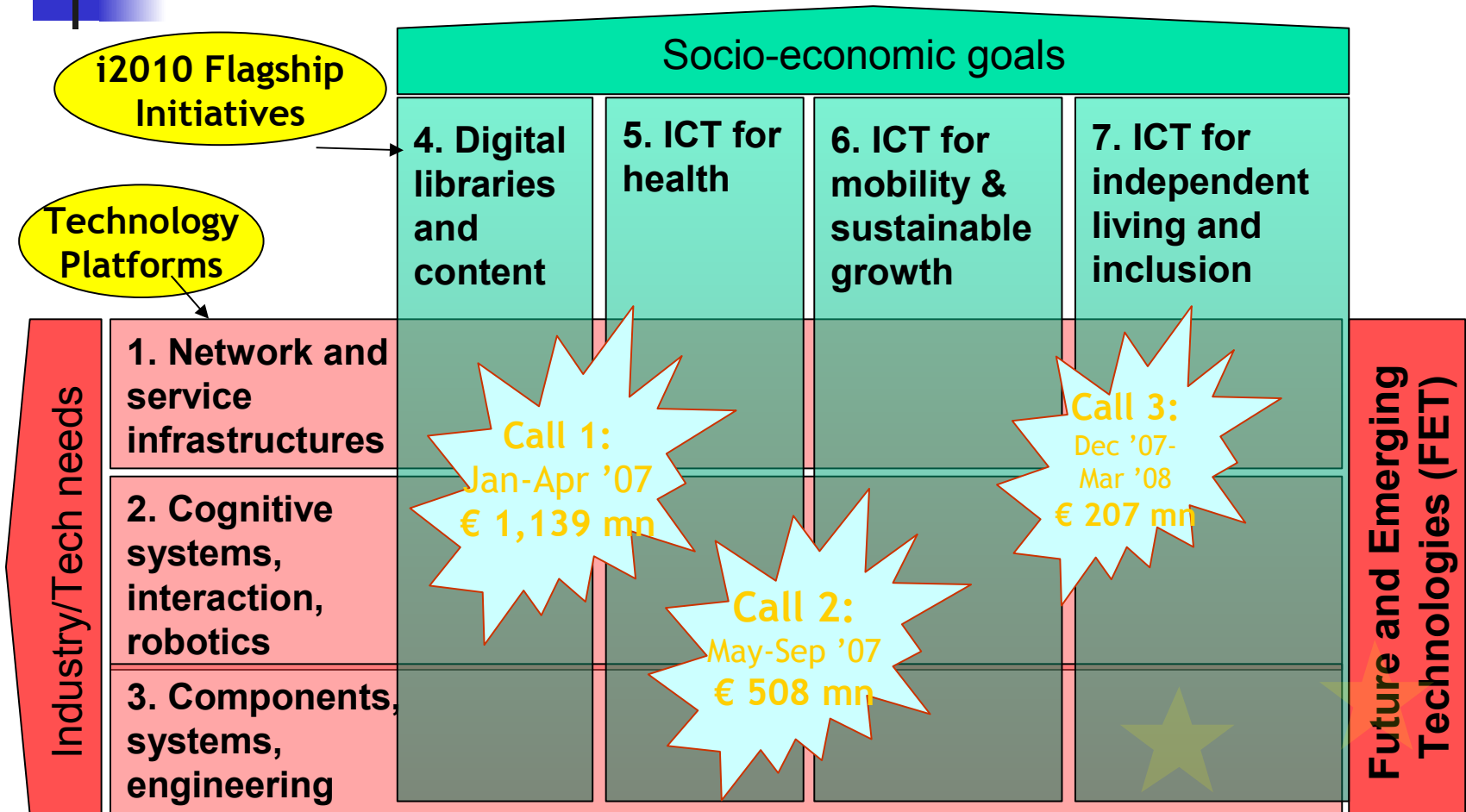


# FP7 Cooperation Programme



# ICT Theme

## Work Programme 2007 *Challenges*





# ICT Call Schedule

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- ICT Call 1
  - Open: ~Jan 2007
  - Close: 24 April 2007
  - + FET Open –  
continuous - close 31 Dec 2008
- ICT Call 2
  - Open: May/Jun 2007
  - Close: Sep/Oct 2007
- ICT Call 3
  - Open: Dec 2007
  - Close: Mar 2008

# *Challenge 1: Pervasive and trusted network & service infrastructures*

- Network and service infrastructures underpin economic progress and the development of our societies
- A growing and changing demand
- Current technologies can be, and need to be improved significantly
- Europe is well-positioned: industry, technology and use

# Challenge 1: Objectives in Calls for Proposals

**Overall budget (585 M€ + 20 M€ from Security Scheme)**

## ICT Call 1

1. The network of the future (200 M€)
2. Service & software architectures, infrastructures & engineering (120 M€)
3. ICT in support of the networked enterprise (30 M€)
4. Secure, dependable and trusted infrastructures (90 M€)
5. Networked media (85 M€)

## ICT Call 2

6. New Paradigms and experimental facilities (40 M€)
7. Critical infrastructure protection (20 + 20 M€ from the Security Scheme)

# *Challenge 2: Cognitive systems, robotics and interaction*



- Today's ICT systems cannot learn from experience and reason, cannot contextualise and adapt, and cannot (inter)act based on observation and learning
- Overcoming such technology roadblocks opens the doors to a wide range of opportunities in new application fields
- Europe has key assets to build on

# Challenge 2: Objectives in Calls for Proposals

**Overall budget (193 M€)**

## ICT Call 1

4. Cognitive systems, interaction, robotics (96 M€)
  - 3 intertwined perspectives
    - Development of engineering principles for intelligent integrates systems
    - Design of robots or agents that operate autonomously in teams or in cooperation with humans
    - Technologies for human-machine-interaction based on a well-grounded understanding,

## ICT Call 3

7. Cognitive systems, interaction, robotics (97 M€)
  - Similar to above

# *Challenge 3: Components, systems, engineering*

- Electronic systems underpin trillion Euro ICT markets
- Electronic systems are embedded in all artefacts of life
- Europe is currently leading in embedded electronics in a number of industries
- European firms also among top semiconductor manufacturers and equipment companies
- Europe enjoys leading positions in emerging fields

# Challenge 3: Objectives in Calls for Proposals

Overall budget (434 M€)

ICT Call 1

3. Next generation nanoelectronics components and electronics integration (86 M€)
4. Organic and large-area electronics and display systems (63 M€)
5. Embedded systems design (40 M€)
6. Computing systems (25 M€)

ICT Call 2

9. Photonic components and subsystems (90 M€)
10. Micro/nanosystems (83 M€)
11. Networked embedded and control systems (47 M€)

# Challenge 4: Digital libraries and content

- Growing load of information and content and increasing demands for knowledge and skills
- Today's technology provides limited tools for access/interaction, development/creation, delivery/diffusion and preservation of content & knowledge
- Europe, with its unique cultural heritage and creative potential, is well placed to take advantage of technology developments and their use

# Challenge 4: Objectives in Calls for Proposals

## Overall Budget (203 M€)

### ICT Call 1

2. Digital libraries and technology-enhanced learning (52 M€)
3. Intelligent content and semantics (51 M€)

### ICT Call 3

6. Digital libraries and technology-enhanced learning (50 M€)
7. Intelligent content and semantics (50 M€)

# *Challenge 5: Towards sustainable and personalised healthcare*

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- Rising demands on healthcare
- By 2010, ICT for Health spending may account for up to 5% of the EU's total health budget, up from just 1% in 2000
- ICT is also supporting progress in medical research and a shift towards evidence-based medicine
- European businesses have every opportunity to become leading global players in the new ICT for Health industry

# Challenge 5: Objectives in Calls for Proposals

## Overall Budget (174 M€)

### ICT Call 1

2. Personal health systems for monitoring and point-of-care diagnostics (72 M€)
3. Advanced ICT for risk assessment and patient safety (30 M€)

### ICT Call 2

6. Virtual physiological human (72 M€)

## *Challenge 6: ICT for Mobility, environmental sustainability and energy efficiency*

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- Growing demand for transport services
- Accidents causing fatalities and injuries
- Increasing demand for natural resources
- Natural and industrial disasters has doubled in one decade
- Europe's industry is one of the most competitive

# Challenge 6: Objectives in Calls for Proposals

Overall Budget (159 M€)

ICT Call 1

3. ICT for the intelligent vehicles and mobility services (57 M€)

ICT Call 2

6. ICT for cooperative systems (48 M€)
7. ICT for the environmental management and energy efficiency (54 M€)

# Challenge 7: ICT for Independent Living and Inclusion



- Between 1998 and 2025 the proportion of the population classified as elderly will increase from 20% to 28%
- Need for a paradigm shift in health and social care and new requirements for inclusion, accessibility and usability
- Complexity and lack of accessibility and usability of many ICT-based products and services is a major barrier for many people
- A major economic opportunity for European industry

# Challenge 7: Objectives in Calls for Proposals

## Overall Budget (73 M€)

### ICT Call 1

2. ICT and ageing (30 M€)
  - Systemic solutions for independent living and active ageing; open reference architectures, standards and platforms for independent living, smart workplaces and mobility

### ICT Call 2

5. Accessible and inclusive ICT (43 M€)
  - Deeply embedding generalised accessibility support with mainstream ICT; computer simulation of the user interaction and computer-based validation frameworks



# Horizontal support actions

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- International cooperation
  - To pave the way for strategic partnerships in view of developing global standards and interoperable solutions and strengthening EU competitiveness
  - To widen the diffusion of the information society and strengthen the EU policy for development

# Horizontal support actions – Calls for proposal



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Overall budget (12 M€)

## **ICT 1**

International Cooperation (7 M€)

## **ICT3**

International Cooperation (5 M€)



# Thank you for your attention.

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**Information Society and Media:**  
**[http://ec.europa.eu/information\\_society/](http://ec.europa.eu/information_society/)**  
**<http://cordis.europa.eu>**

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