Belarus-EU ICT R&D Cooperation

NIS-NEST FP7 Information Day
Minsk, 28-29 February 2008

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DG Information Society and Media
International Relations Unit

Outline

- Belarus participation in FP IST/ICT

- FP7 ICT Programme

- Upcoming funding opportunities

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Successful Belarus Organisations in FP5 IST (1998-2002)

| Participant Legal Name	Number of Project(s) involved	Total EC Funding
BELARUSIAN STATE UNIVERSITY	1	86.815 €
BELARUSSKY GOSUDARSTVENNIY UNIVERSITET INFORMATIKI I RADIOELEKTRONIKI	1	56.795 €
CENTRE OF INFORMATION TECHNOLOGY - CIT	1	30.580 €
Total	3	174.190 €

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Successful Belarus Organisations in FP6 (2002-2006)

Participant Legal Name	Number of Project(s)	Total EC Funding
INSTITUTE OF MOLECULAR AND ATOMIC PHYSICS OF THE NATIONAL ACADEMY OF SCIENCES OF BELARUS	1	328.863 €
BI STEPANOV INSTITUTE OF PHYSICS OFTHE NATIONAL ACADEMY OF SCIENCES OF BELARUS	1	131.500 €
CENTRE OF INFORMATION TECHNOLOGY - CIT	1	27.856 €
BELARUSIAN INSTITUTE OF SYSTEM ANALYSIS AND SCIENCE & TECHNOLOGY INFORMATION SUPPORT	1	18.033 €
THE INSTITUTE OF SOLID STATE AND SEMICONDUCTOR PHYSICS OF BELARUS NATIONAL ACADEMY OF SCIENCE	1	12.000 €
THE CENTRALIZED SYSTEM OF STATE PUBLIC LIBRARIES OF MINSK	1	0 €
Total	6	518.252 €

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Belarus participation in FP6 IST in comparison

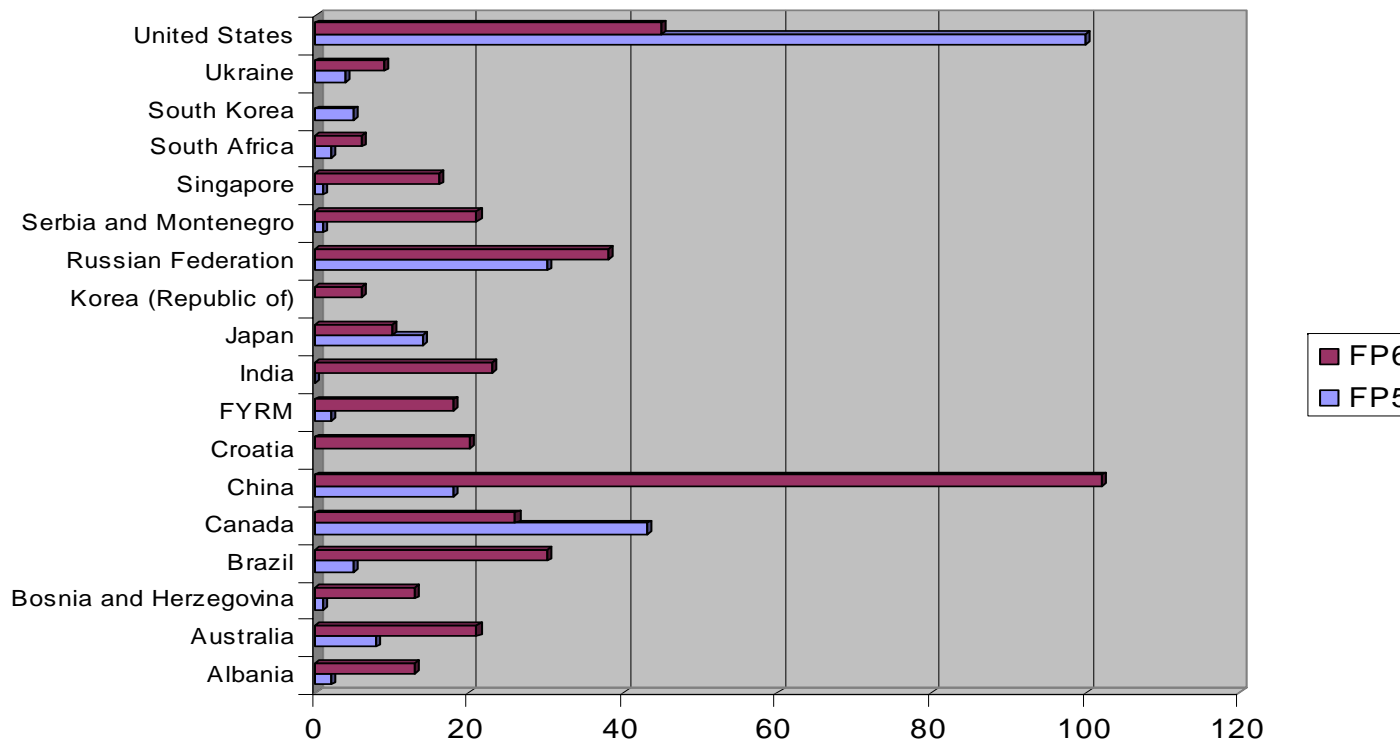**3rd Countries: Number of participations**
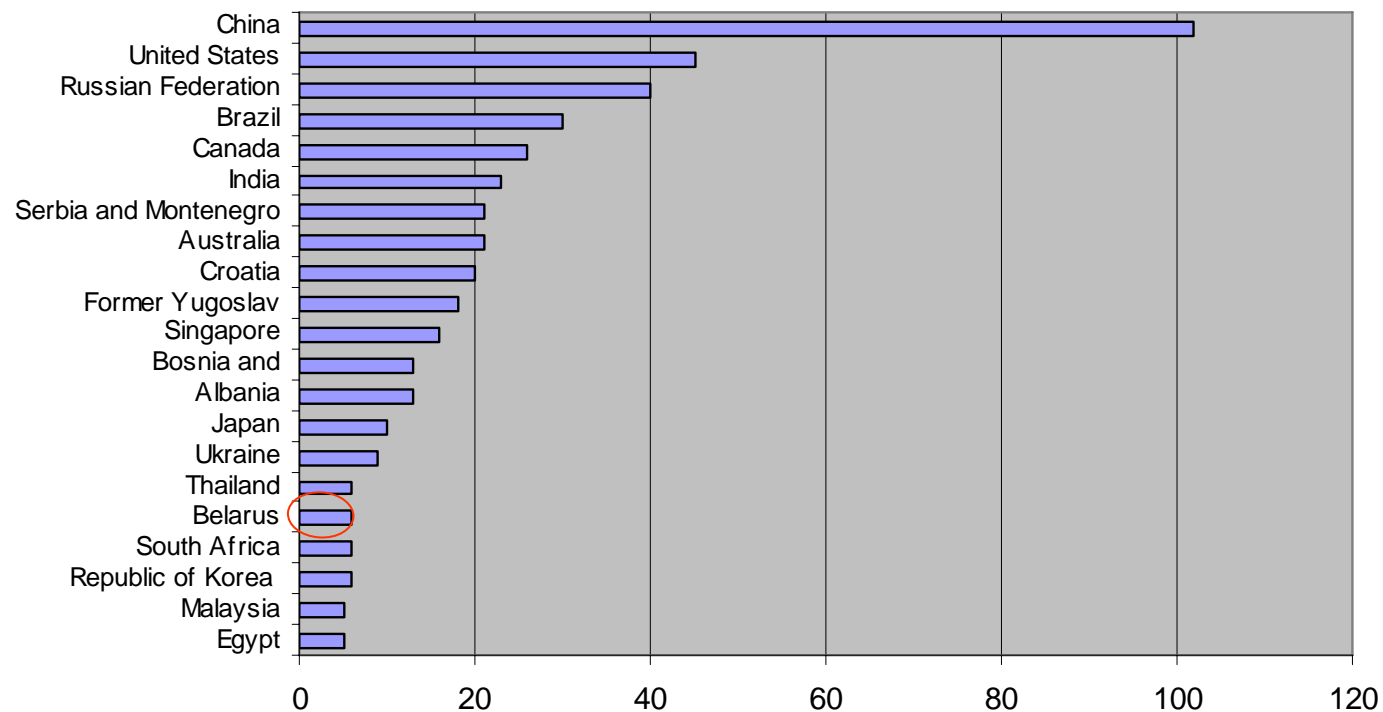
Belarus was Nr 16 with 6 successful participations in IST FP6

Trend from FP5 to FP6

3rd country participations in FP5 & FP6

FP5:
287 participations
~ 7 M€funding
FP6:
504 participations
~41 M€funding

+ Rise of China,
India, Brazil,
WB, Russia, …
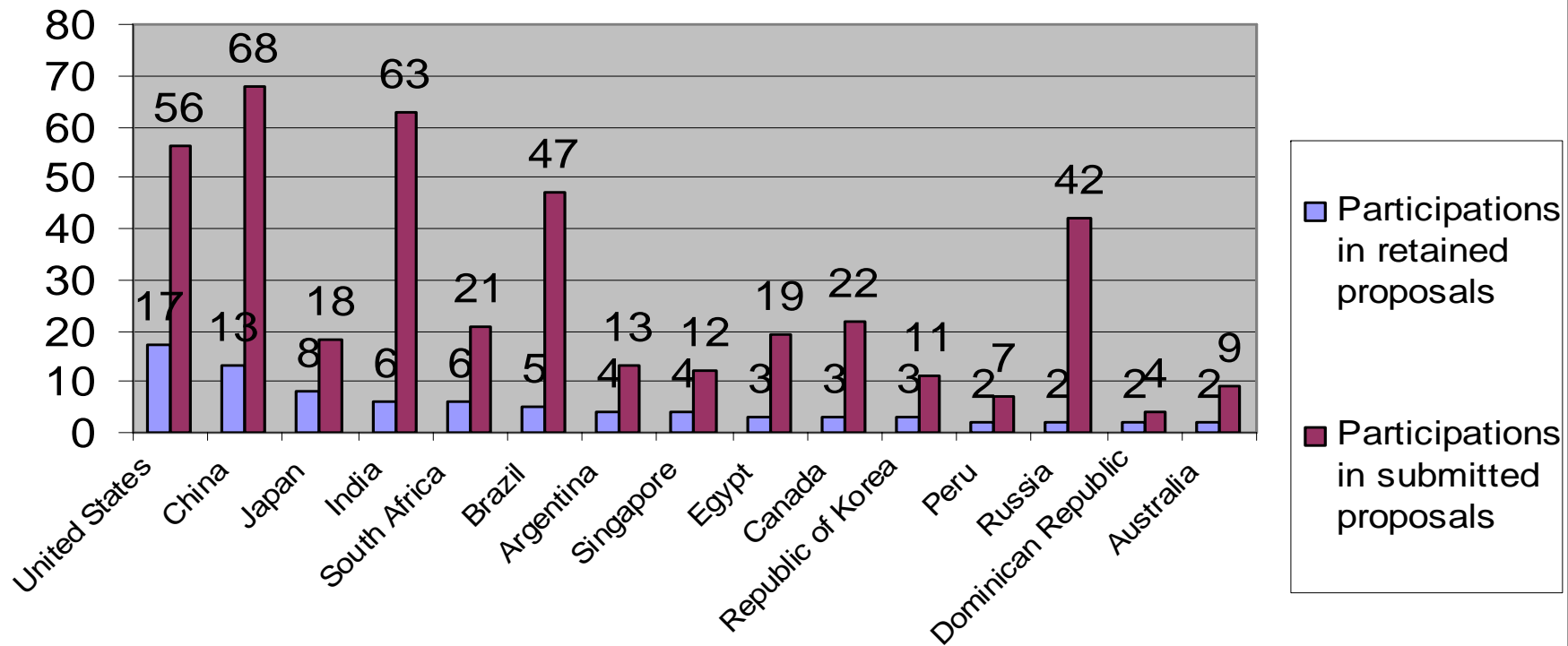
- Decrease of
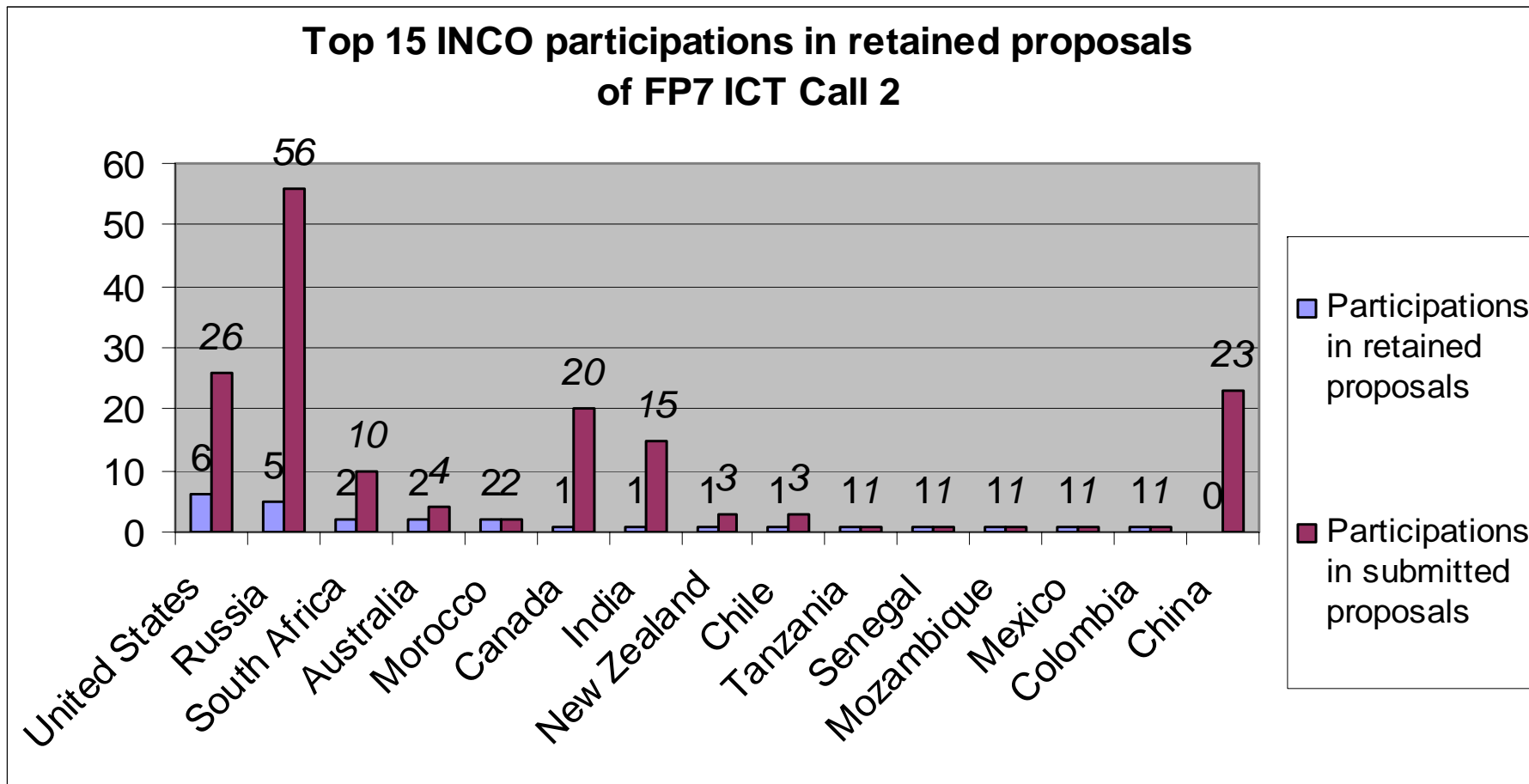US, Canada, Japan

Belarus: from 5 to 6

FP7 ICT Call 1

Top 15 INCO participation in FP7 ICT Call 1

Belarus: 0 retained (3 proposals)

FP7 ICT Call 2

Top 15 INCO participations in retained proposals of FP7 ICT Call 2

Belarus: 0 retained (3 proposals)

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FP7 and ICT

The indicative breakdown (€ million) of FP7

Ideas: €7460
Cooperation €32 365
JRC: €1751
Euratom: €2751
Capacities: €4217
People: €4728

FP7 Capacities Programme

JRC
1751 M€

Euratom
4062 M€

Cooperation
32413 M€

**Capacities
4097 M€**

People
4750 M€

Ideas
7510 M€

**Research Infrastructures
42% - 1715 M€**

Dev. of policies
INCO

Science
in Society

**e-Infrastructures
572 M€**

Regions of Knowledge

SMEs

Research Potential
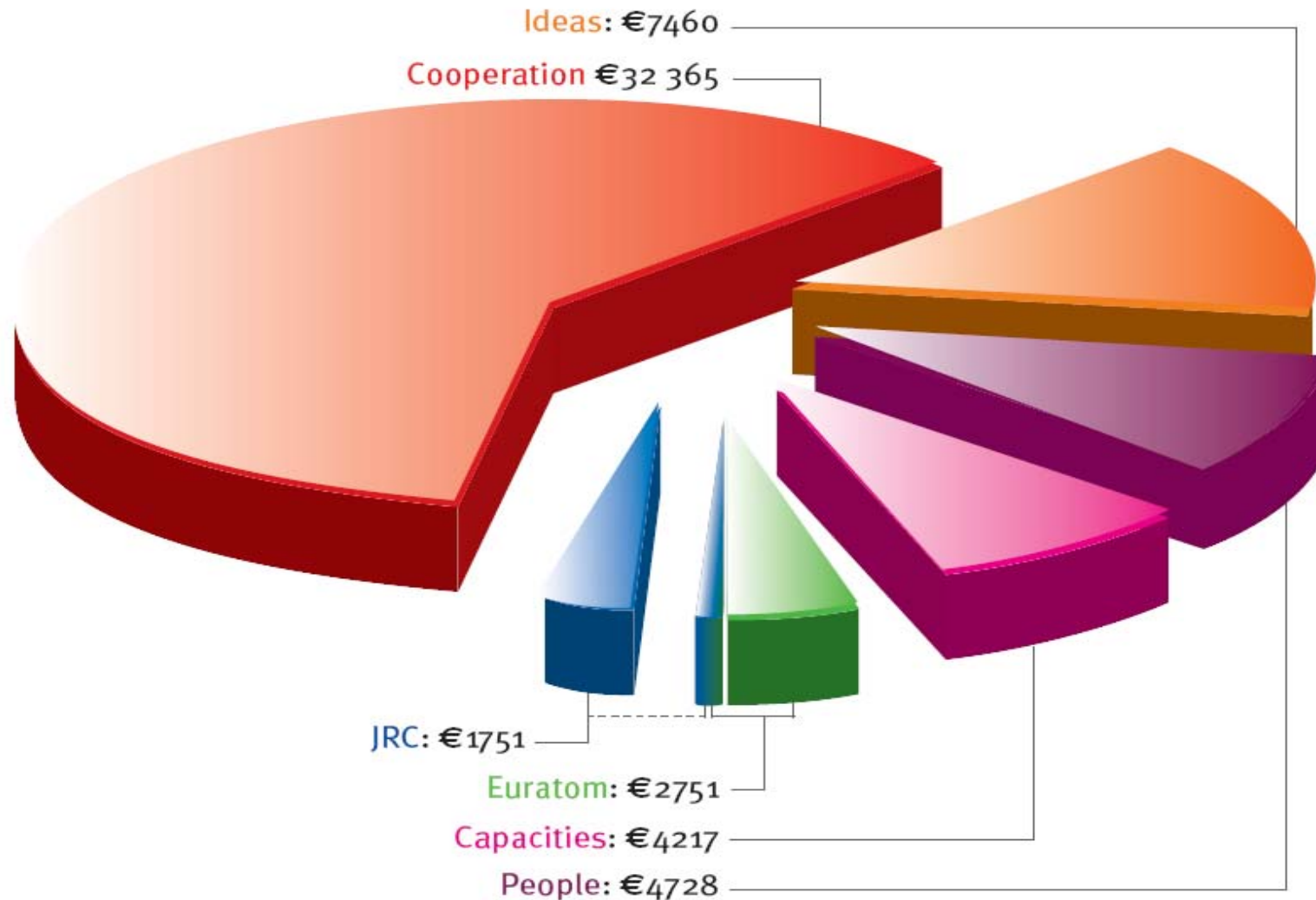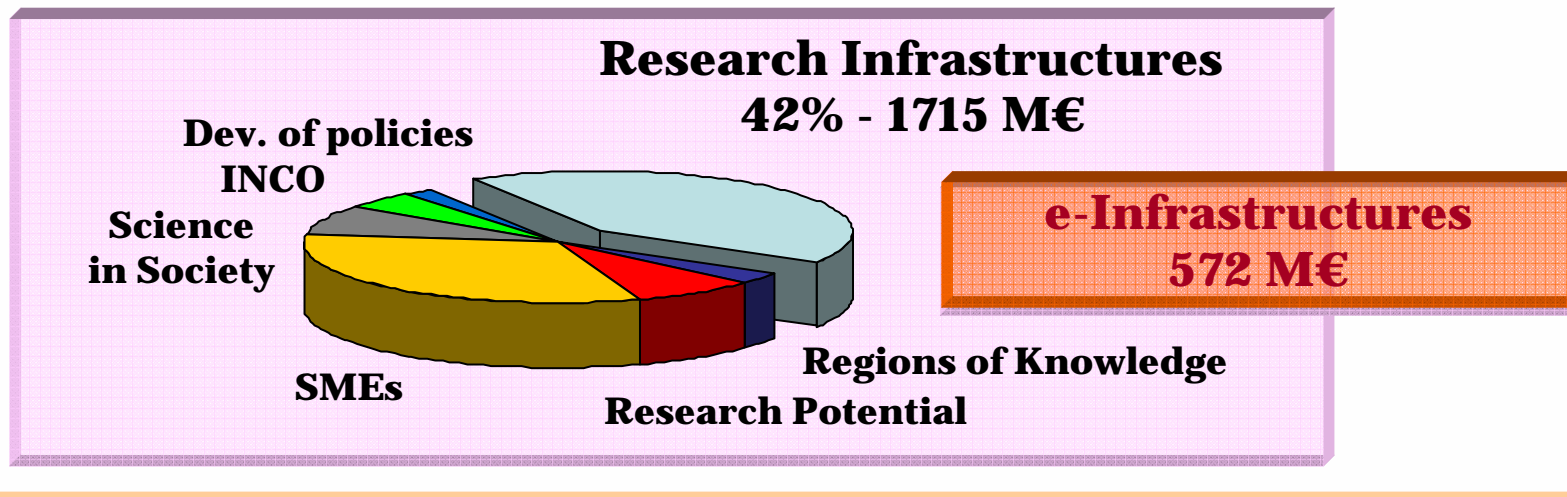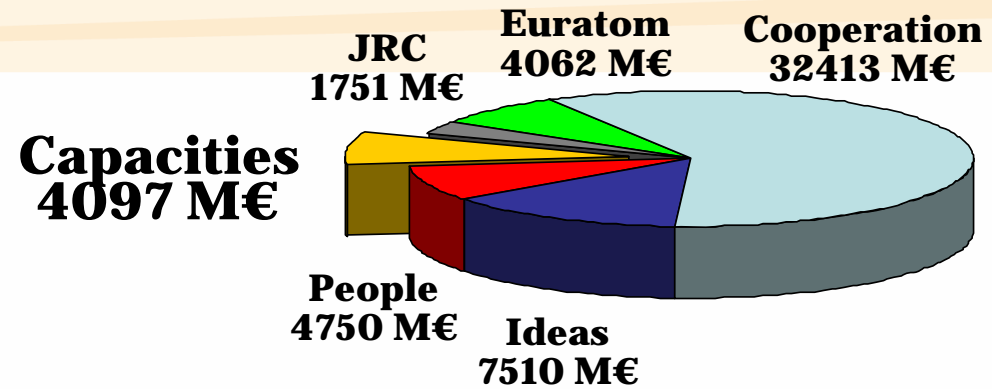
Connectivity between Research & Education Networks

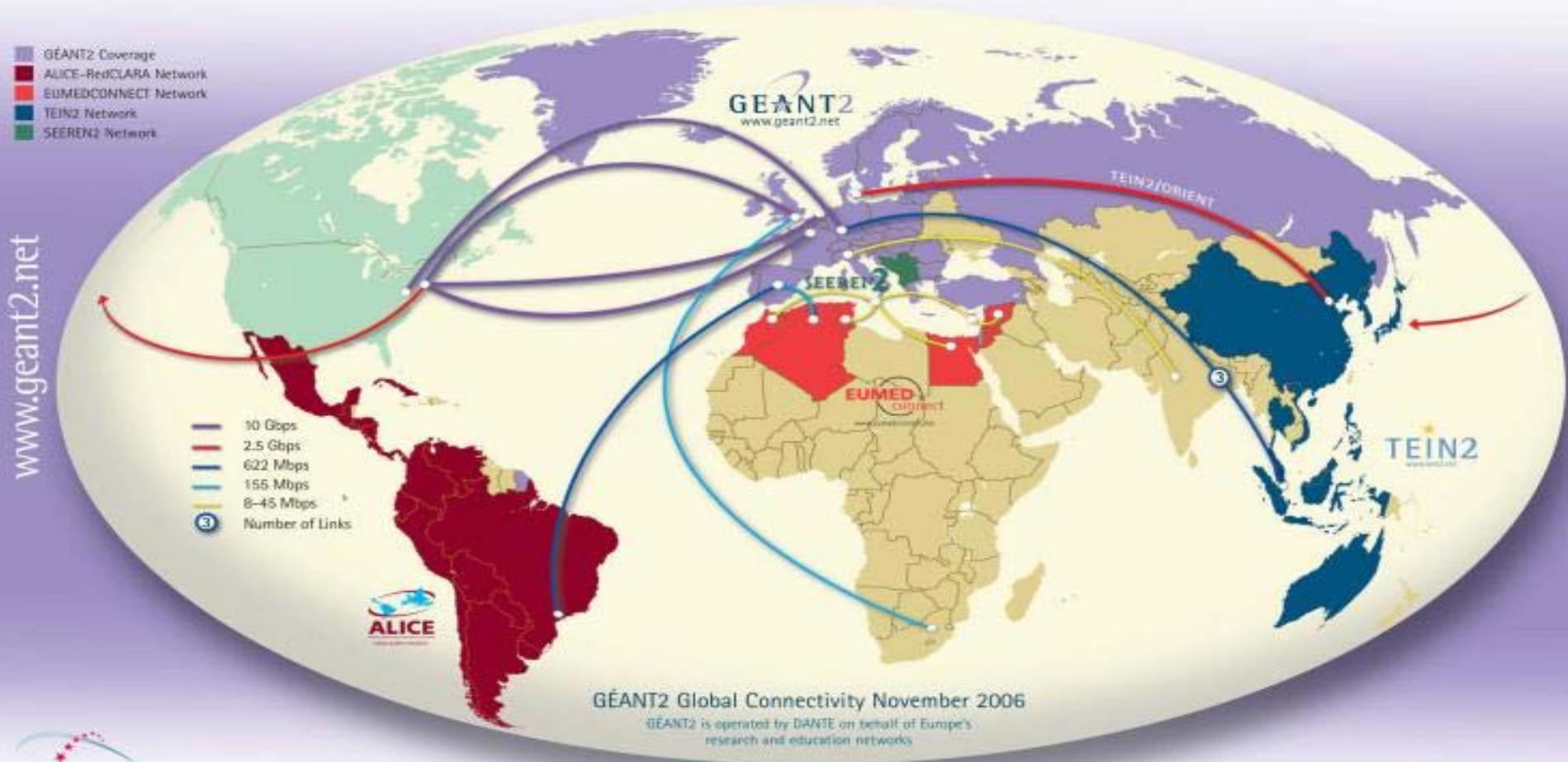- GEANT2 - European Research Network linking NRENs, nearly 4000 universities in 34 countries

- Allows researchers to collaborate between them and to participate in international high level research

- Belarus enjoys connectivity (155 Mbps) via Poland

- TERENA Networking Conference 2008 hosted by BELNET, Bruges (Brugge) Belgium, 19-22 May 2008
  http://tnc2008.terena.org/
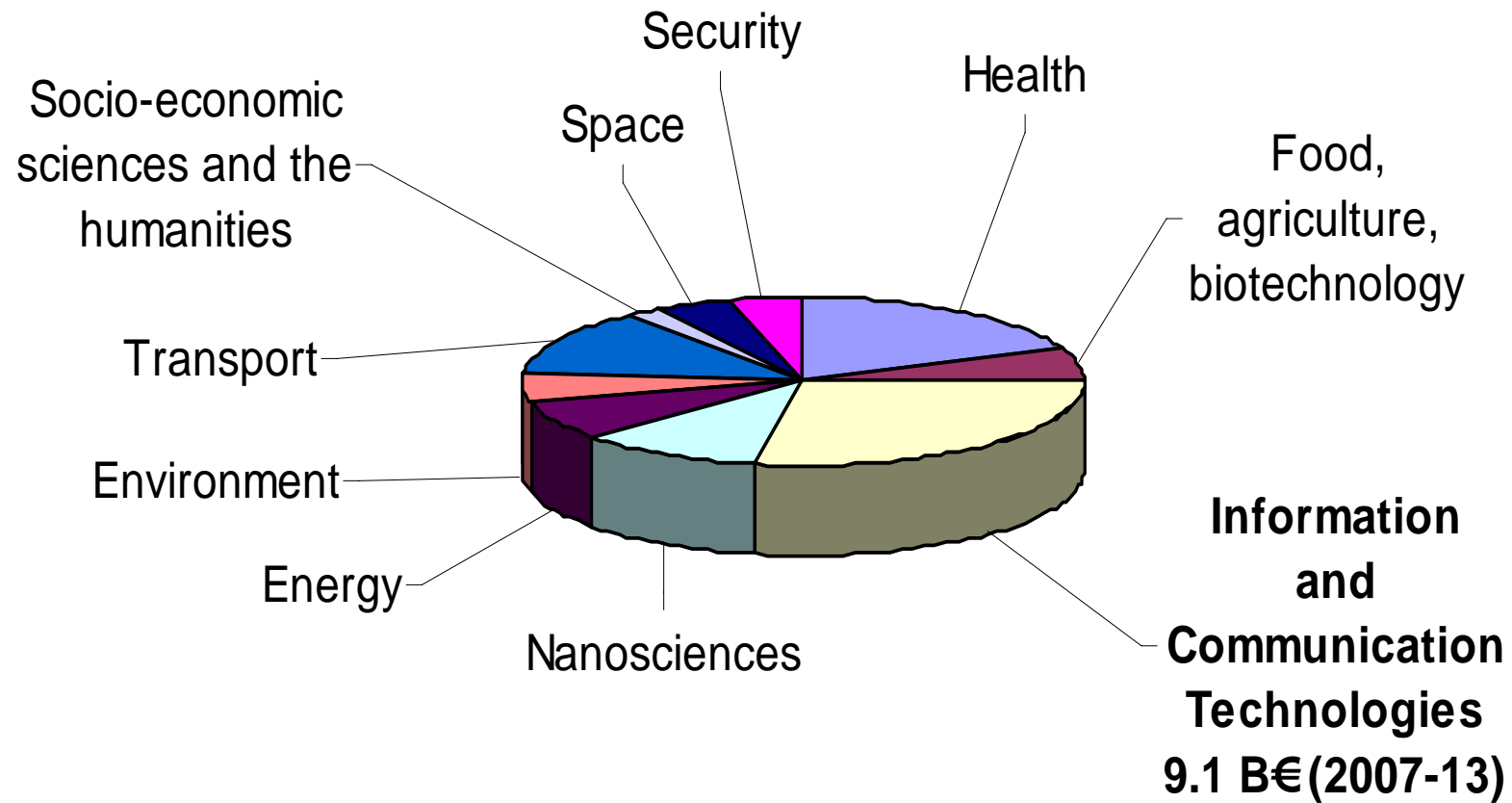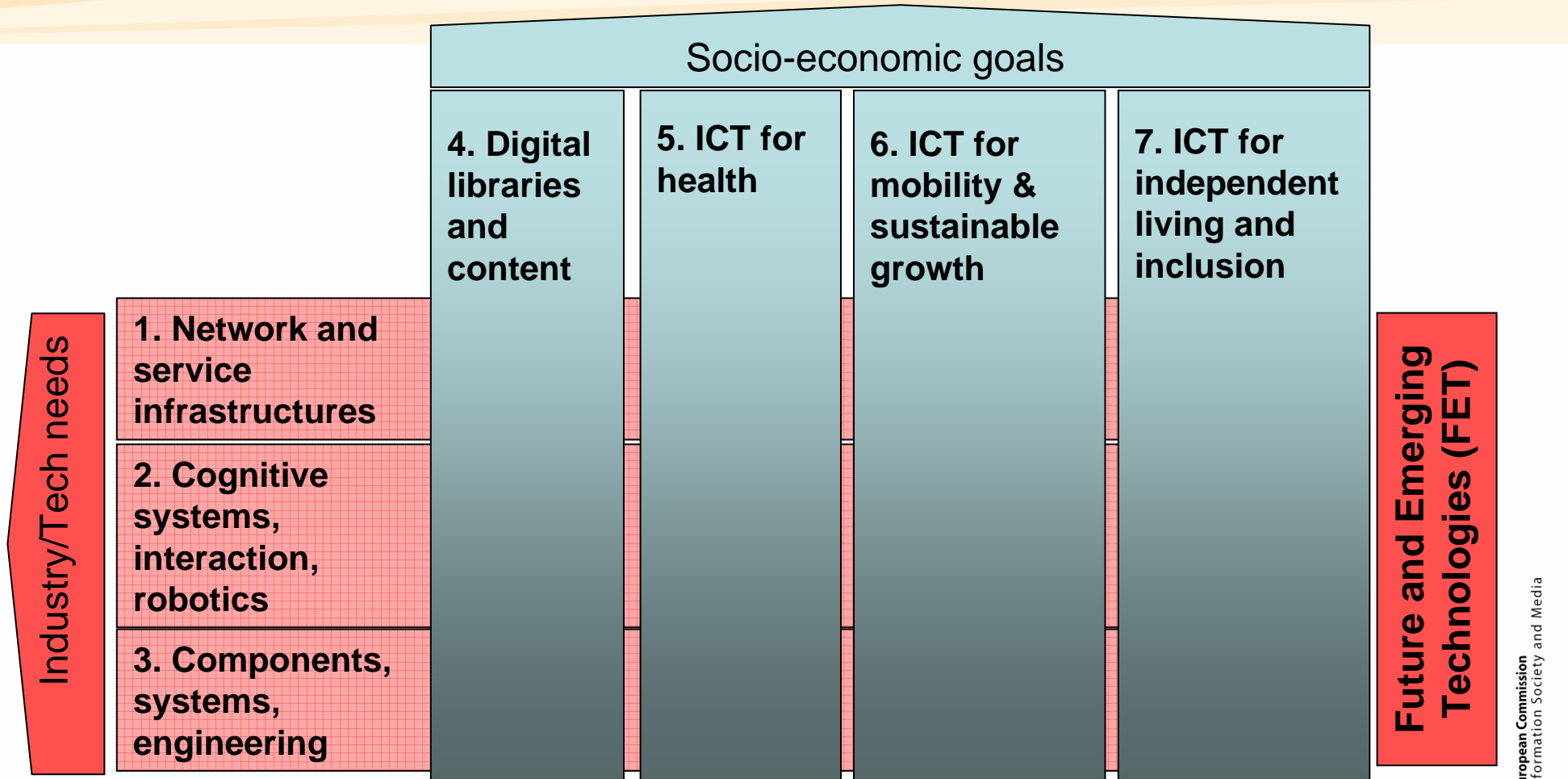
FP7 Cooperation Programme

Security

Space

Socio-economic sciences and the humanities

Health

Food, agriculture, biotechnology

Transport

Environment

Energy

Nanosciences

Information and Communication Technologies 9.1 B€ (2007-13)

FP7 ICT first Work Programme:
7 "Challenges"

Socio-economic goals

Industry/Tech needs

1. Network and service infrastructures

2. Cognitive systems, interaction, robotics

3. Components, systems, engineering

4. Digital libraries and content

5. ICT for health

6. ICT for mobility & sustainable growth

7. ICT for independent living and inclusion

Future and Emerging Technologies (FET)

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FP7 - Participation and funding opportunities for Belarus organisations

- EU Research Framework Programme
remains open for third country organisations

  - International Cooperation Partner Countries,
    including Belarus, receive funding

- International cooperation specifically encouraged in
several programme "objectives"

- Specific International Cooperation Actions (SICA)

- International support actions promoting participation
in FP7 (ICT Call 3!)

INTERNATIONAL COOP. ACTIONS
FP7 ICT Work Programme 2007/08

Third Country participation specifically encouraged/international cooperation mentioned

- FET Open + Proactive Initiatives
- ICT in support of the networked enterprise
- Secure, dependable and trusted infrastructures
- Networked media
- New paradigms and experimental facilities
- Critical Infrastructure Protection (Joint Call ICT/Security)
- Embedded systems design
- Networked media
- New paradigms and experimental facilities
- Next generation nanoelectronics components and electronics integration
- Photonic components and subsystems
- Networked Embedded and Control Systems
- ICT for cooperative systems
- ICT and ageing
- Accessible and inclusive ICT

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ICT Call 3
Closes: 8 April 2008, 265 M€

|	Budget
Challenge 2:	
1. Cognitive systems, interaction, robotics	97 M€
Challenge 4:	
1. Digital libraries and technology-enhanced learning	50 M€
2. Intelligent content and semantics	50 M€
FET	
4. Science of complex systems for socially intelligent ICT	20 M€
5. Embodied intelligence	20 M€
6. ICT forever yours	20 M€
Horizontal support actions	
International cooperation	5 M€
Trans-national co-operation among NCPs	3 M€

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Challenge 2: Cognitive systems, Interaction, Robotics – 97 M€

Artificial systems which can perceive and interact robustly, in open-ended, (mainly) physical environments, and have smart / cognitive / intelligent / natural / intuitive features.

Such systems could be:

- robots
- Stand-alone or networked devices (e.g. cameras, sensors), embedded or not
- Man-machine interfaces etc

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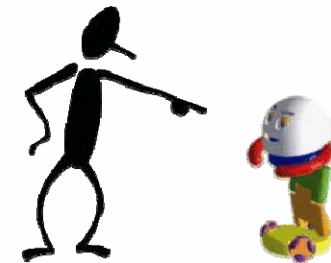
C-I-R focus

- **robots** handling different objects and operating autonomously or in cooperation with people

- **systems** (robotic or not) monitoring and controlling material or informational processes

- multimodal **interfaces** and interpersonal communication systems understanding language, gestures
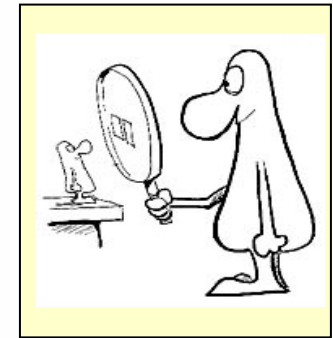
The emphasis is on scientific and technological advance and on developing new engineering principles based on solid theoretical foundations.

Activities, Funding Schemes, Contact

Activities:

➢ Research into systems design, engineering principles for artificial systems

➢ Structuring, road mapping and assessing research

➢ Co-ordination with national activities

Funding schemes:

➢ Collaborative research projects (90%)

➢ Networks of Excellence (8%)

➢ Support Actions (2%)

Contact: Hans-Georg.Stork@ec.europa.eu , INFSO E5

Challenge 4:
Digital Libraries and Content - 100 M€

- Harnessing synergies by linking content, knowledge and learning

  - **Availability of content** and its **long term accessibility**
  - More effective technologies for **creation, management and reuse of content and knowledge**
  - Scenarios for **creative use of content, acquisition and development of knowledge** - learning processes

- Key topics:
  - Digital Libraries (Objective 4.3)
  - Technology-enhanced Learning (Objective 4.3)
    do not try to artificially cover both!
  - Intelligent Content and Semantics (Objective 4.4)

Budget, Funding Schemes, Contact

- Funding Schemes:

  Cooperative Projects (IPs and STREPs) (87,5 M)
  Networks of Excellence (8,5 M)
  Coordination Actions/Support Actions (4 M)

- Contacts:

  Digital libraries and technology-enhanced learning
  Patricia.Manson@ec.europa.eu , INFSO E3

  Intelligent content and semantics
  Stefano.Bertolo@ec.europa.eu , INFSO E2

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Future & Emerging Technologies – FET

An incubator and pathfinder for new ideas and themes for long-term research in ICT

High risk research, offset by potential breakthrough with high technological and/or societal impact

Two complementary inter-linked schemes
FET Proactive + FET Open

FET Proactive
- Top-down approach
- Set of novel pre-defined themes

Open in ICT Call 3

FET Open
- Bottom-up approach
- Open to any research idea

Continuously open until end 2008

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ICT Call 3: FET proactive objectives

Contacts: INFSO F1

- **Science of complex systems for socially intelligent ICT**
  jose.fernandez-villacanas@ec.europa.eu

- **Embodied Intelligence**
  david.guedj@ec.europa.eu

- **ICT Forever Yours**
  (eternal systems, eternal/reliable access to knowledge,
  secure/dependable software)
  jean-marie.auger@ec.europa.eu

Budget: 20M€ per objective

ICT Call 3
Horizontal International Cooperation Actions

- Promotion of FP7 ICT Programme in selected third countries/regions
- Support to information society policy dialogues with partner countries
- Identification of cooperation opportunities in fields of mutual interest
- Coordination with international activities under FP7 Capacities Programme and national activities

Target regions: Eastern Europe and Central Asia (including Belarus), Western Balkan, Mediterranean Partner Countries, Latin America

Budget: 5 M€

Contact: klaus.pendl@ec.europa.eu , INFSO A4

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Future possibilities

- Work on 2009/2010 Workprogramme progressing

- Increased possibilities for international cooperation likely

- ICT calls for proposals for approx. 2 bn €

- **Next call to be published around Oct/Nov 2008**

- Presentation of ICT WP 2009/10 at
  ICT2008 Event, Lyon 25-27 November 2008

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Practical information

- http://cordis.europa.eu/fp7/ict/

- Be proactive and network

- Reply immediately to invitations

- Focus on your part of the work

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Conclusions

- Low but increasing Belarus participation (3 partners in FP5 IST, 6 in FP6 IST)

But

- High potential for cooperation
- Several possibilities now and in future (ICT Call 3, FET Open, WP2009/10, ...)

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More information

- FP6: cordis.europa.eu/ist/

- FP7 call information: cordis.europa.eu/fp7/

- FP7 ICT Programme : cordis.europa.eu/fp7/ict/

- klaus.pendl@ec.europa.eu