



EUROPEAN
COMMISSION

Community research

FP7 Info Day ***Bratislava***

7. VII. 2011

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Overview

- **Work Programme designed to support the “Innovation Union” and “A Digital Agenda for Europe” initiatives (EUROPE 2020 and HORIZONT 2020 / FP8)**
- **A single call for proposals common to DG INFSO and DG R&I !**

- **Integrating Activities**

- addresses the Innovation Union Commitment 4: *"opening of Member State operated research infrastructures to the full European user community"*

- **Construction – Preparatory Phase**

- addresses the Innovation Union Commitment 5: *"By 2015 (...) have completed or launched the construction of 60% of [the ESFRI projects]"*

- **Support to policy development**

- addresses the Innovation Union Commitment 32: *"to step up European Union cooperation on the roll-out of the global research infrastructures"*

Overview of budget (M€)

| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Total (M€) |
|---------------------------------------|------------|------------|------------|------------|------------|-----------|------------|-------------|
| FP7 budget ¹ | 210 | 234 | 330 | 360 | 310 | 95 | 176 | 1715 |
| Contribution from Associated States | 9 | 13 | 14 | 18 | 12 | 8 | 8 | 82 |
| - Administrative expenses (estimated) | 12 | 11 | 16 | 16 | 13 | 10 | 10 | 88 |
| - Contribution to RSFF | 40 | 0 | 30 | 30 | 50 | 0 | 50 | 200 |
| Operational credits | 167 | 236 | 299 | 331 | 260 | 93 | 122 | 1508 |

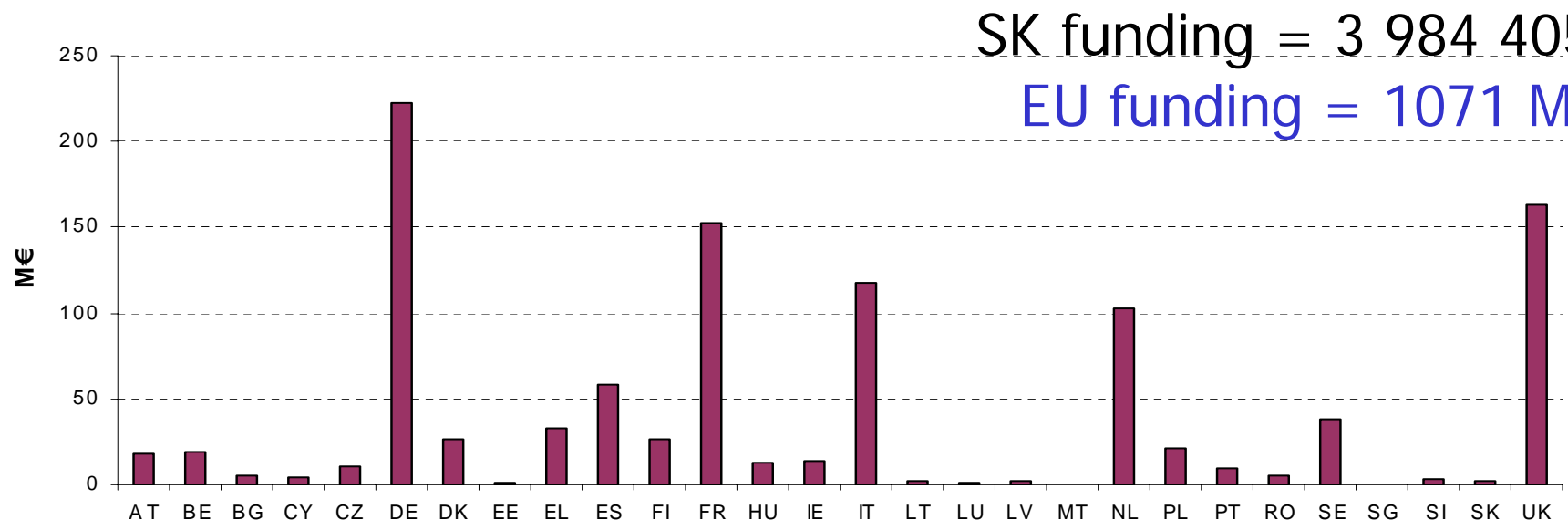
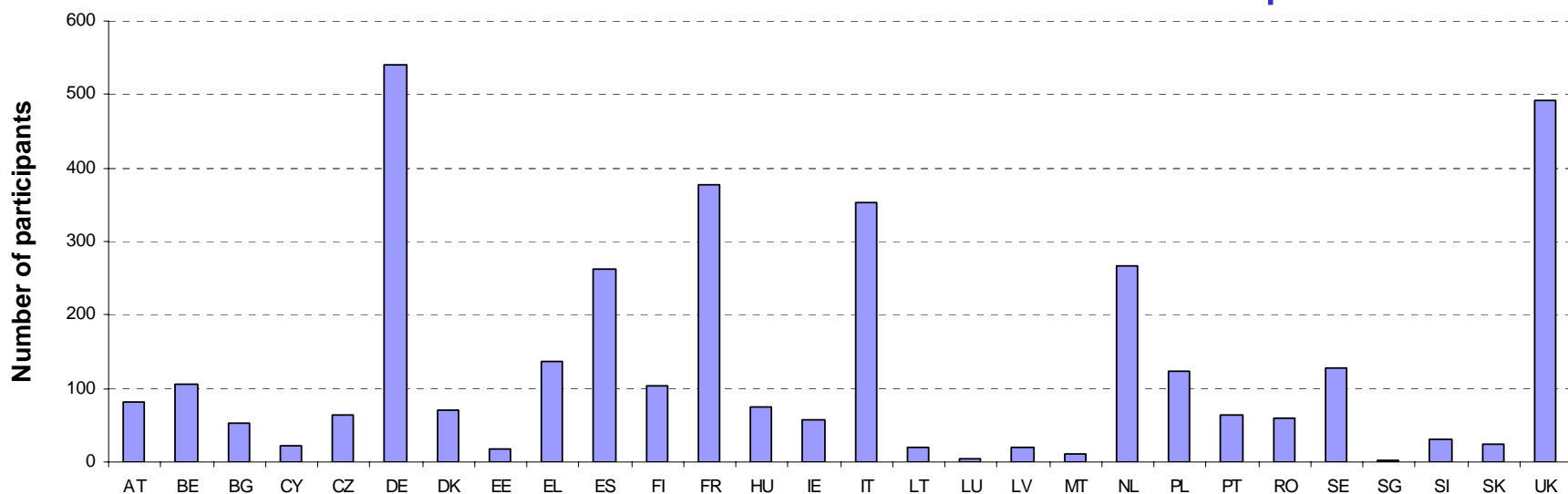
¹ Decision No 1982/2006/EC of European Parliament and Council concerning FP7

Budget used per call

| Call N° | DG | Call ID (deadline) | Support to existing RIs (M€) | | Support to new RIs (M€) | | | Support to policy development (M€) | TOTAL (M€) |
|--|----------------|-----------------------|-----------------------------------|------------------------------|-------------------------|-------------------------------|---------------------------|---------------------------------------|---------------|
| | | | <i>Integrating Activities</i> | <i>ICT based e-Infra</i> | <i>Design Studies</i> | <i>Const. Preparatory</i> | <i>Const. Implem.</i> | | |
| 1 | RTD / INFSO | Infra-2007-1 | | 44 | 29 | 147 | | 8 | 227 |
| 2 | INFSO | Infra-2007-2 | | 50 | | | | 13 | 63 |
| 3 | RTD | Infra-2008-1 | 278 | | | | | 4 | 281 |
| 4 | INFSO | Infra-2008-2 | | 115 | | | | 0 | 115 |
| 5 | INFSO | Infra-2009-1 | | 4 | | | | 5 | 10 |
| 6 | RTD | Infra-2010-1 | 168 | | | 44 | | 5 | 217 |
| 7 | INFSO | Infra-2010-2 | 0 | 85 | | | 20 | 10 | 115 |
| 8 | RTD | Infra-2011-1 | 108 | | 18 | | 32 | 6 | 164 |
| 9 | INFSO | Infra-2011-2 | | 72 | | | 18 | 5 | 95 |
| 10 | RTD / INFSO | Infra-2012-1 | 116 | | | 22 | 20 | 18 | 177 |
| 11 | INFSO | Infra-2013-1 | | 39 | | | | | 39 |
| Named beneficiaries, studies, expert contracts | | | | | | | | | 5 |
| Total (M€) | | | 670 | 409 | 46 | 213 | 90 | 75 | 1508 |

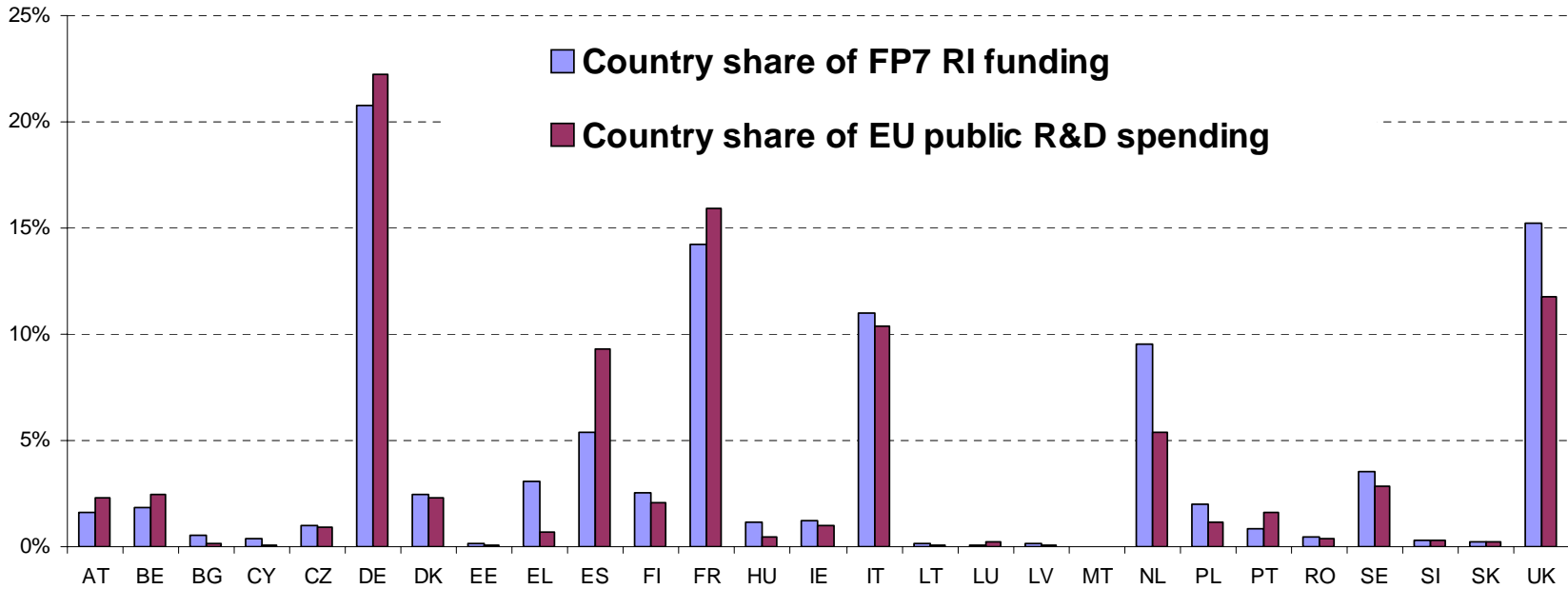
Member States

Participants = 3562

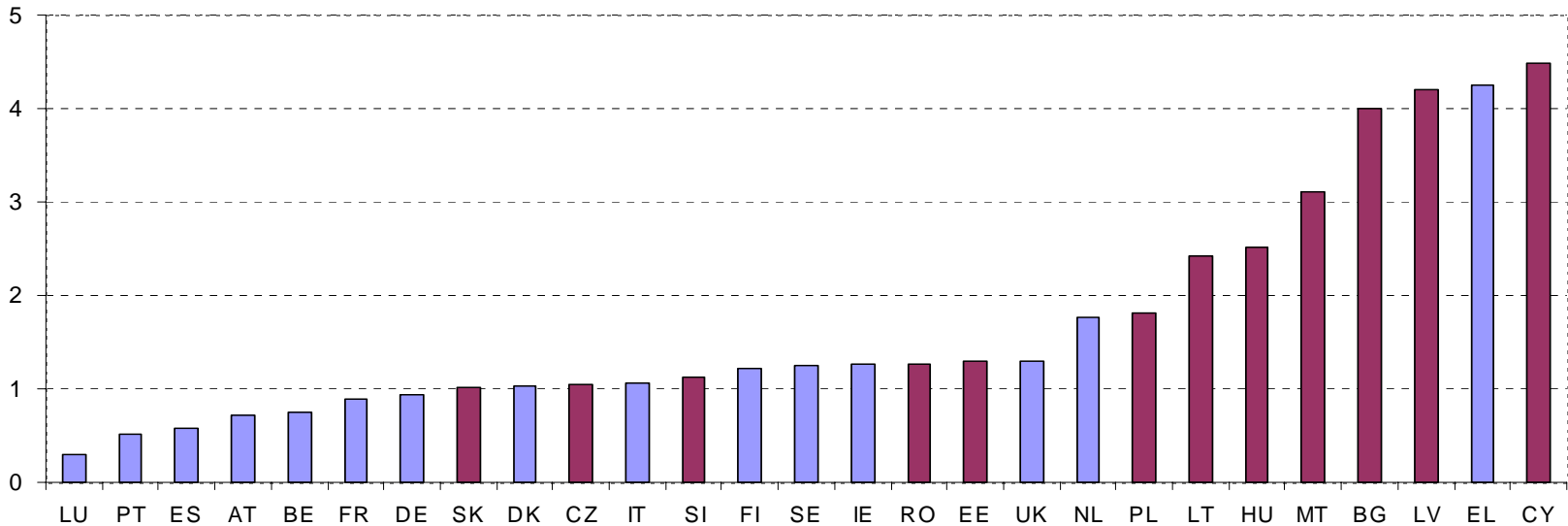


SK funding = 3 984 405 €

EU funding = 1071 M€



Country share FP7 RI funding / Country share of EU public R&D spending



| Line of action/Activity | Funding scheme(s) | EUR million indicative |
|---|---|------------------------|
| 1.1 Support to existing research infrastructures | | |
| 1.1.1 Integrating Activities | Combination of Collaborative projects and Coordination and Support Actions (CP-CSA) <i>The requested EU contribution shall not exceed EUR 10 million</i> <i>Proposals must address all the 3 categories of activities of the I3 model</i> | 30.00 |
| + 78.50 M€ | | |
| 1.2 Support to new research infrastructures | | |
| 1.2.2 Construction of new infrastructures (or major upgrades) – Preparatory Phase | Combination of Collaborative projects and Coordination and Support Actions (CP-CSA) | 22.30 |
| 1.2.3 Construction of new infrastructures (or major upgrades) – implementation phase | | 20.00 |
| 1.3 Support to policy development and programme implementation | | |
| INFRA-2012-3.1: International cooperation with the USA on common data policies and standards relevant to global research infrastructures in the environment field | Coordination and Support Actions (CSA-CA or CSA-SA) | 2.00 |
| INFRA-2012-3.2: International cooperation with the USA on common e-infrastructure foundations relevant to global research infrastructures | | 1.00 |
| INFRA-2011-3.3: Coordination actions, conferences and studies supporting policy development, including international cooperation, for e-Infrastructures | | 13.00 |

Integrating Activities

Characteristics

- A specific **work package on innovation**, whenever appropriate, in all Integrating Activities (and Preparatory Phase projects) covering activities such as reinforcing links with companies that drive innovation
 - activities to reinforce the **partnership** with industry, e.g. transfer of knowledge and other dissemination activities,
 - activities to foster the **use by industrial researchers, involvement of industrial associations in consortia or in advisory bodies.**
- Maximum EC contribution (48 months)
 - 10 M€ (eligibility criterion)
- Total indicative budget: $30 + 78.5 = 108.5$ M€ /final in FP7

● Topics

- **3. RIs for archaeological datasets and related technologies**
- **5. Facilities for translational research in medicine**
- **10. Plant Genetic Resources Centres**
- **11. Fixed point open ocean observatories**
- **12. Research Vessels**
- **15. Research Infrastructures for Earth System modelling**
- **18. Carbon Capture and Storage (CCS) facilities for energy research**
- **21. RIs for integration of processing, analysis and characterisation of nano-scale materials and structures**
- **24. RIs for Research Infrastructures for optical/IR astronomy**
- **25. RIs for High-Resolution Solar Physics**
- **+ Synchrotron radiation sources and Free Electron Lasers**

See www.tuke.sk/ist

Integrating Activities

Modification 2

- **The OPTICON proposal will not be funded for financial reasons (overall score: 12.5)**
- **It is proposed to introduce a topic for “Research Infrastructures for optical/IR astronomy”**
- **This topic would replace topic “24. RIs for Planetology” following the recommendations from the expert group consulted at the December meeting**

Integrating Activities

Modification 3

- **The CECILIA proposal will not be funded for financial reasons (overall score: 13)**
- **It is proposed to add a topic “**Synchrotron radiation sources and Free Electron Lasers**”**
- **However with a maximum EU contribution of 10 M€**

Construction - Preparatory Phase

- **6 topics (ROADMAP 2010 / ESFRI):**

- **INFRA-2012-2.2.1. EU-SOLARIS** - The European Solar Research Infrastructure for Concentrating Solar Power
- **INFRA-2012-2.2.2. WindScanner** - The European WindScanner Facility
- **INFRA-2012-2.2.3. ECCSEL** - European Carbon Dioxide Capture and Storage Laboratory Infrastructure
- **INFRA-2012-2.2.4. ISBE** - Infrastructure for Systems Biology - Europe
- **INFRA-2012-2.2.5. MIRRI** - Microbial Resource Research Infrastructure
- **INFRA-2012-2.2.6. ANAEE** - Infrastructure for Analysis and Experimentation on Ecosystems
- *MYRRHA - Multipurpose hybrid Research Reactor for High-tech Applications > EURATOM*

- **Indicative budget of 22.3 M€**

Contribution to RSFF

- **A contribution from the Capacities Specific Programme of 40 M€ was foreseen under WP2012, and of 10 M€ under WP2013**
- **Modification:**
 - **No contribution to RSFF in 2012**
 - **Potential contribution of 40 + 10 M€ in 2013, following the re-assessment of the RSFF usage for research infrastructures by the end of the year**
- **In line with the conclusions of the **Competitiveness Council** of 9 March 2011 and of the **RSFF interim evaluation****

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High Performance Computing (HPC) Implementation phase

- **Third implementation phase of PRACE**
- **Piloting joint pre-commercial procurement**
- **Deploying services for industrial users, including SME's**
- **Scaling of applications and development of new utilities and algorithms to address major socio-economic challenges**
 - **Open licensing of new tools**
- **Broaden training and outreach activities to:**
 - **engage more user communities**
 - **Ensure human resources in HPC**

Support to policy development - CSA

1. Reinforcing the cooperation with the USA in jointly addressing global scientific challenges through interoperable RI across the Atlantic

Topic 3.1: International cooperation with the USA on common data policies and standards relevant to global research infrastructures in the environment field

Development should be related to (but not exclusively):

- Space weather (e.g. EISCAT – AMISR)
- Atmospheric observatories (e.g. ICOS – NEON)
- Ocean observatories (e.g. EMSO – OOI)
- Tectonics-related observatories (e.g. EPOS – Earthscop)

Topic 3.2: International cooperation with the USA on a common e-infrastructure for scientific data:

Establish an EU-US cooperation platform on scientific data infrastructure for access and interoperability to ensure persistent availability of data across scientific domains and organisation boundaries.

Collection of requirements, sharing of approaches for standardisation and mechanisms for networking of experts.

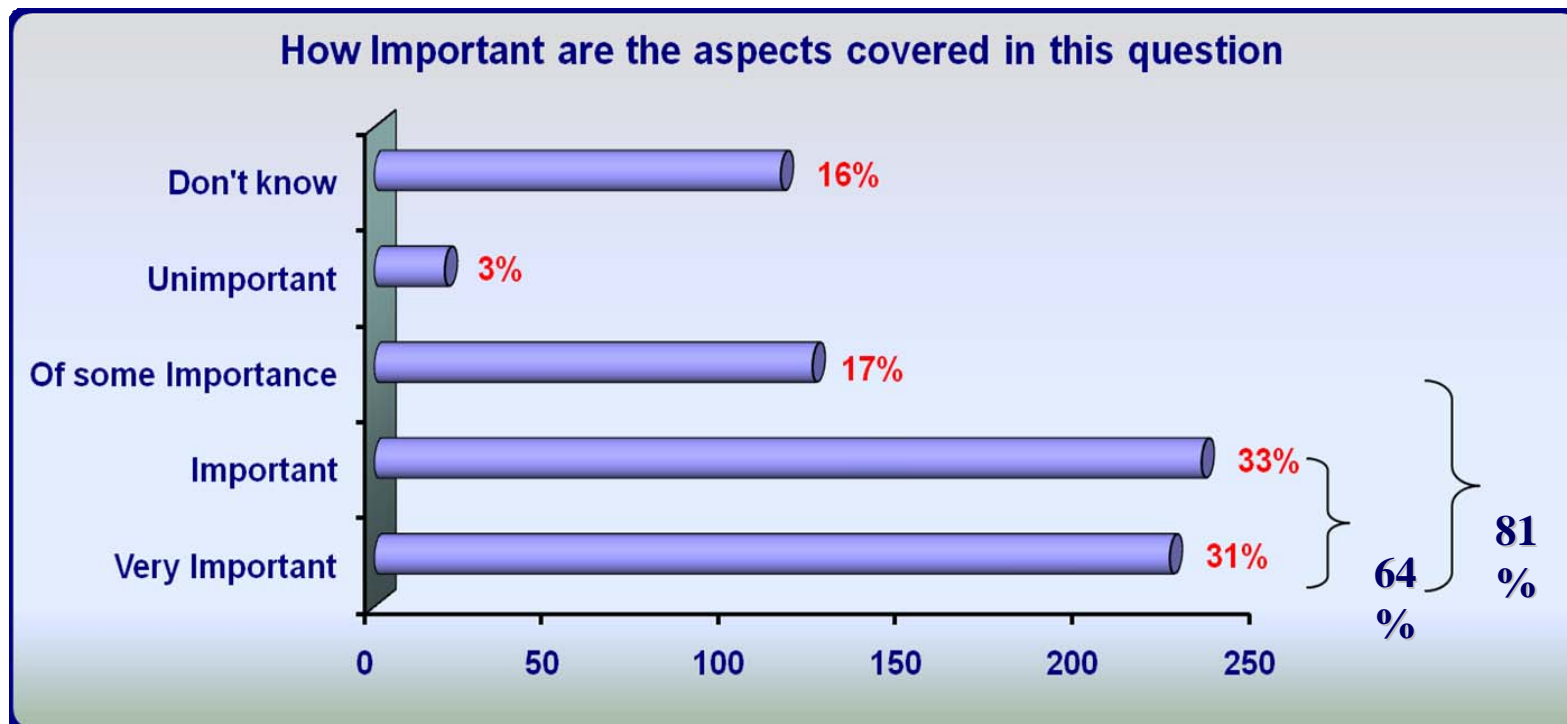
Monitor and analyse ICT infrastructure approaches in similar initiatives in Europe and US -> to lower access barriers.

2. Topic 3.3: Coordination actions, conferences and studies supporting policy development, including international cooperation, for e-infrastructures.

Strengthening the science base and the European Research Area

718 Responses

- **Q25: How should research infrastructures (including EU-wide e-infrastructure) be supported at EU level?**





ESFRI

(European Strategy Forum for Research Infrastructures)

- The role of ESFRI strongly underlined. Sufficient resources should be allocated to allow the **implementation** of the ESFRI roadmap projects and to secure their **long-term sustainability**.
- Regular **updates** of the **ESFRI roadmap** have to be aligned with the actions and objectives to tackle the grand societal challenges.
- Setting up of **Regional Partners Facilities** (RPFs) should be considered as a **key driver** for spreading excellence and innovation in the European regions.
- The existing ESFRI process should be open to **technology application** oriented research infrastructures.

European Technology Platforms / nowadays ~ 40!!

<http://cordis.europa.eu.int/technology-platforms/summaries.htm>

DG IS and Media (coordination):

1 ENIAC - European Nanoelectronics Initiative Advisory Council

2 Embedded Systems (ARTEMIS- Advanced Research and Technology for Embedded Intelligence and Systems)

3 The Mobile and Wireless Communications Technology Platform (eMobility)

4 Networked European Software and Services Initiative (NESSI)

5 The NEM Initiative - European Initiative on NETWORKED and ELECTRONIC MEDIA

6 European Technology Platform in Robotics – EUROP

7 PHOTONICS21 - Photonics for the 21st century

8 The Integral Satcom Initiative

(SK participation)

+ AAL169 initiative;

Selected European Technology Platforms from DG Research

MANUFUTURE - Platform on Future Manufacturing Technologies

Global Monitoring for Environment and Security

Aeronautics and Air Transport

Technology Platform on Sustainable Chemistry

The European Hydrogen and Fuel Cell Technology Platform (HFP)

Innovative Medicines for Europe

The European Space Technology Platform (ESTP)

The European Construction Technology Platform (ECTP)

**EuMaT - European Technology Platform for Advanced Engineering
Materials and Technologies**

ERTRAC European Road Transport Research Advisory Council

ERRAC European Rail Research Advisory Council

The European : Steel Technology Platform + Aluminium TP

**SMR - Sustainable mineral resources (mining, material, metallurgy and
products)**

The European Technology Platform on Industrial Safety

Food European Technology Platform " Food for Life"

To implement parts of the Strategic Research Agendas of
ENIAC and ARTEMIS,
aligning fragmented R&D efforts at European level in the
fields of:

Nanoelectronics: ENIAC

OK

ENIAC Call 5 – 2011 /
6. 7. 2011 – 15. 9. 2011

addressing the needs of silicon-based
technologies & beyond

- shrinking of CMOS logic & memory devices
- development of value-added functions for
System-on-Chip or System-in-Package
solutions
 - equipment & materials
 - design automati



Embedded Intelligens and Systems: OK for Call 2012 !!

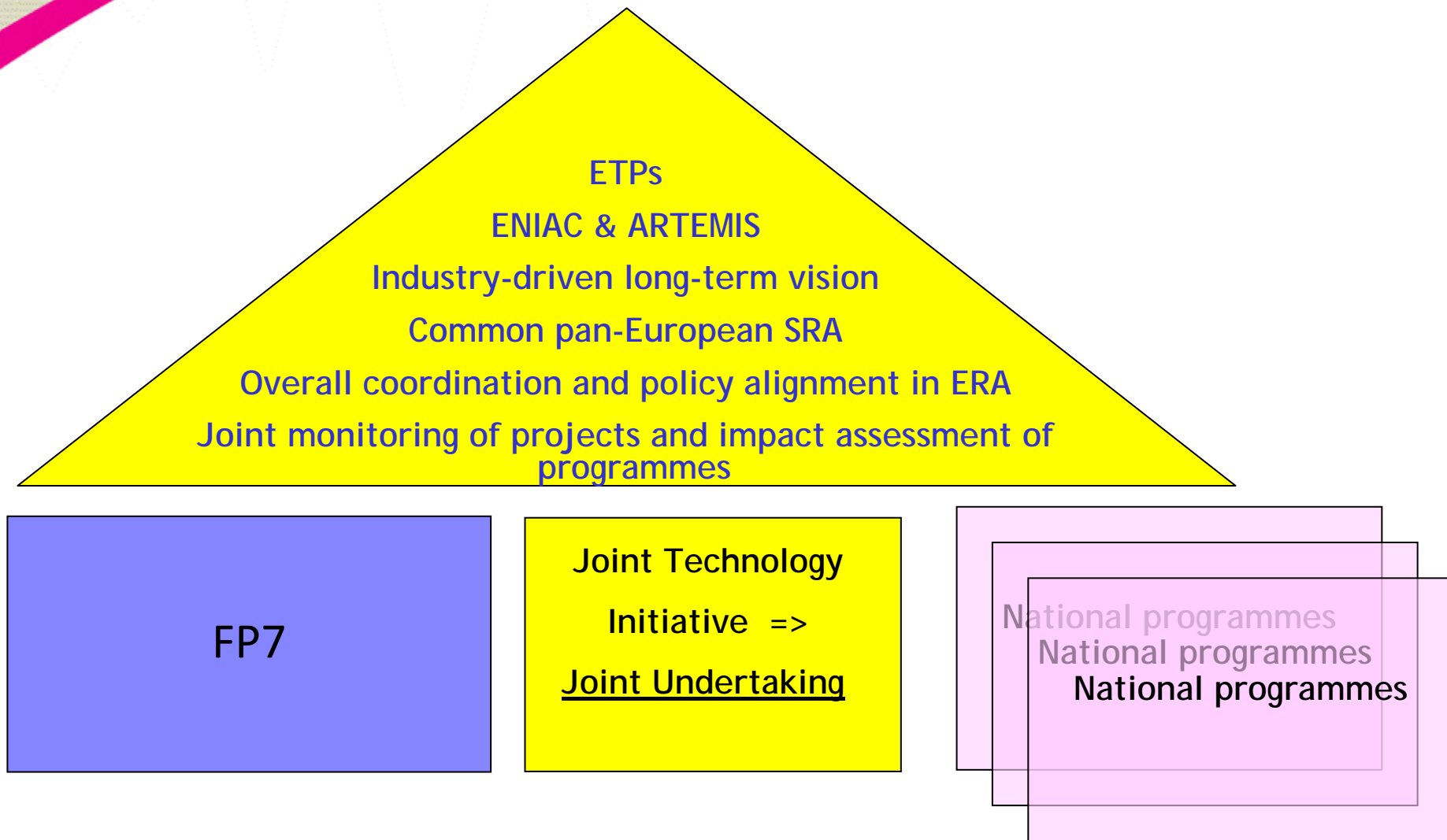
ubiquitous, interoperable & cost-effective embedded
systems

- reference designs and architectures
- middleware for interoperability and seamless
connectivity
- integrated design software tools for rapid
development & prototyping





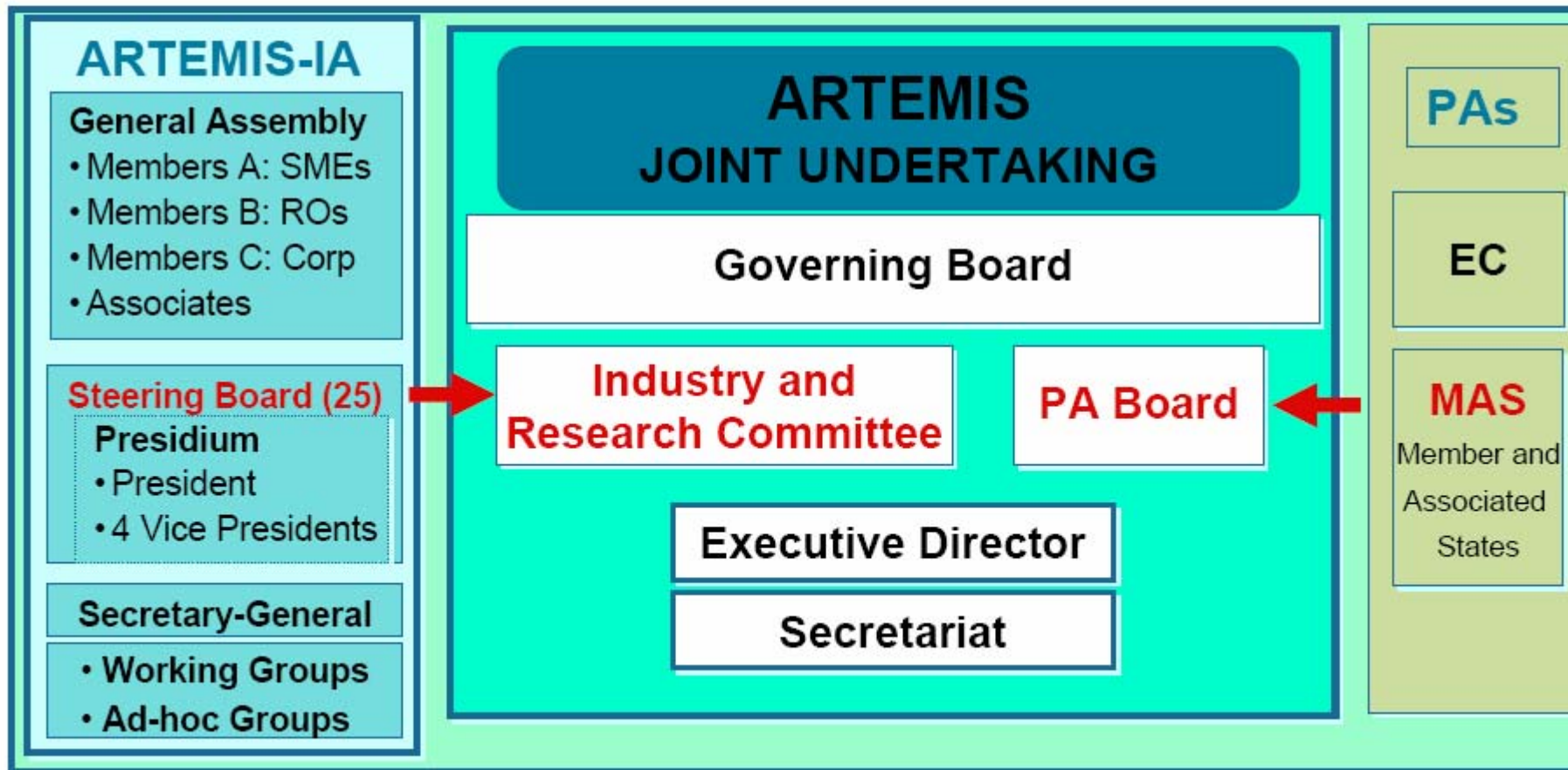
Koncepčná štruktúra pre ETP s JTI





Structure ARTEMIS Joint Undertaking

- “Industry” is represented by the ARTEMIS-IA
- “Public Authorities” (PAs) are represented by the PA Board





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