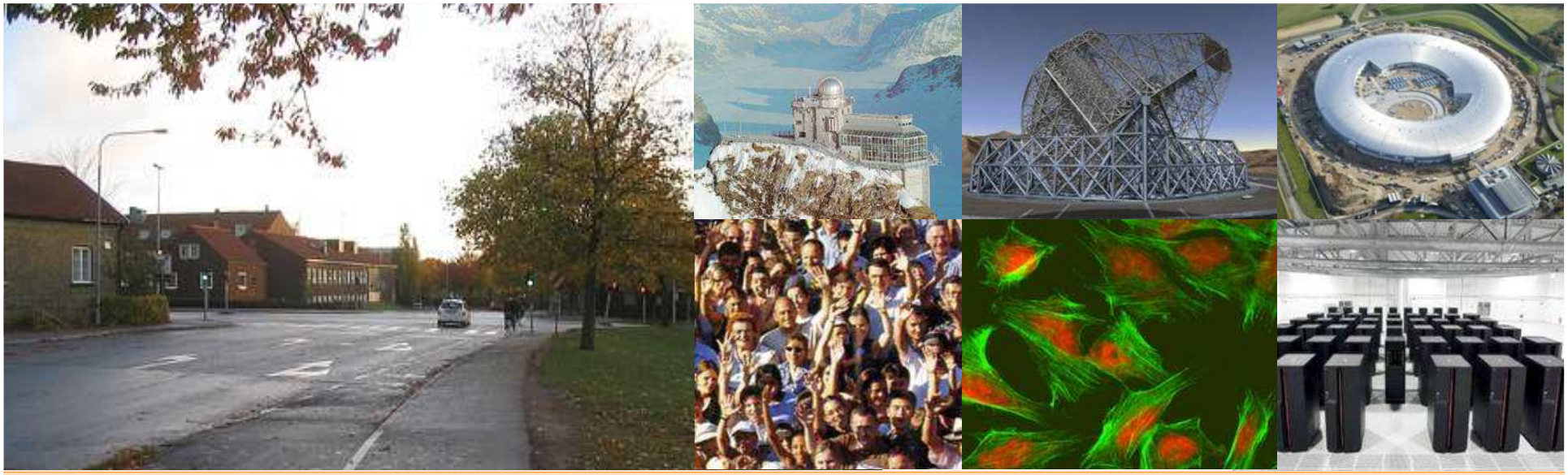


The Transnational Access Activities within the Community Framework Programmes

Oct 2009 – Hervé PERO, European Commission

EUROPEAN COMMISSION
Community research

Basics of the development of the European Research Area

The ERA concept combines:

- a European "internal market" for research, where researchers, technology and knowledge freely circulate;
- an effective European-level coordination of national and regional research activities, programmes and policies;
- initiatives implemented and funded jointly.

EUROPEAN COMMISSION
Community research

The FP is in support of ERA

World-class research infrastructures

Key element of the Lund declaration adopted on 8 July 09

- Essential for Europe's researchers to stay at the forefront of research development
- Key component of Europe's competitiveness in "frontier" research

Key Challenges:

- *Overcoming fragmentation in Europe*
- *Coping with increasing costs / complexity*
- *Improving efficiency of (and access to) research services, incl. e-infrastructures*

Which could be the factors affecting or related to the transnational access to RIs of pan-European interest?

Key factor 1

Capacity (or not) to develop a *favorable environment* for EU research (not just national) and TA

EUROPEAN COMMISSION
Community research

A Community legal framework

- The FP is a framework, but not sufficient
- Recent entry into force of **ERIC** (Aug 09)
  - Based on art. 171 EC Treaty, that allows the Community to set up European entities necessary for efficient execution of Community RTD programmes
  - The regulation provides a legal tool for entities with legal personality recognized in all MS, with a spirit of a truly European venture, and flexible enough

Legal tool allowing more efficient pooling of resources (linked with excellence) as well as easier mobility within Europe

Key factor 2

Willingness (or not) to support attraction, education and mobility of researchers at European level

EUROPEAN COMMISSION
Community research

Since 1987 …

Transnational Access allowing effective mobility of researchers

- A fundamental part of the Research Infrastructures action over successive Framework Programmes

  ➔ to provide access to researchers, free of charge, to the best facilities to conduct top-level research

  ➔to open up national facilities transforming them into hubs of the EU scientific landscape

- Implemented through Individual Transnational Access contracts (FP2, FP3, FP4, FP5 and FP6) and Integrated Infrastructures Initiatives (FP6 and FP7)
- Covering an increasing number of facilities

EUROPEAN COMMISSION
Community research

Environment and Earth Sciences

EUFAR

An Integrating Activity for Airborne Research in Environmental and Geo-sciences

➔ will provide the scientific users with access to **14 research aircrafts**

EUROPEAN COMMISSION
Community research

Physics and Astronomy

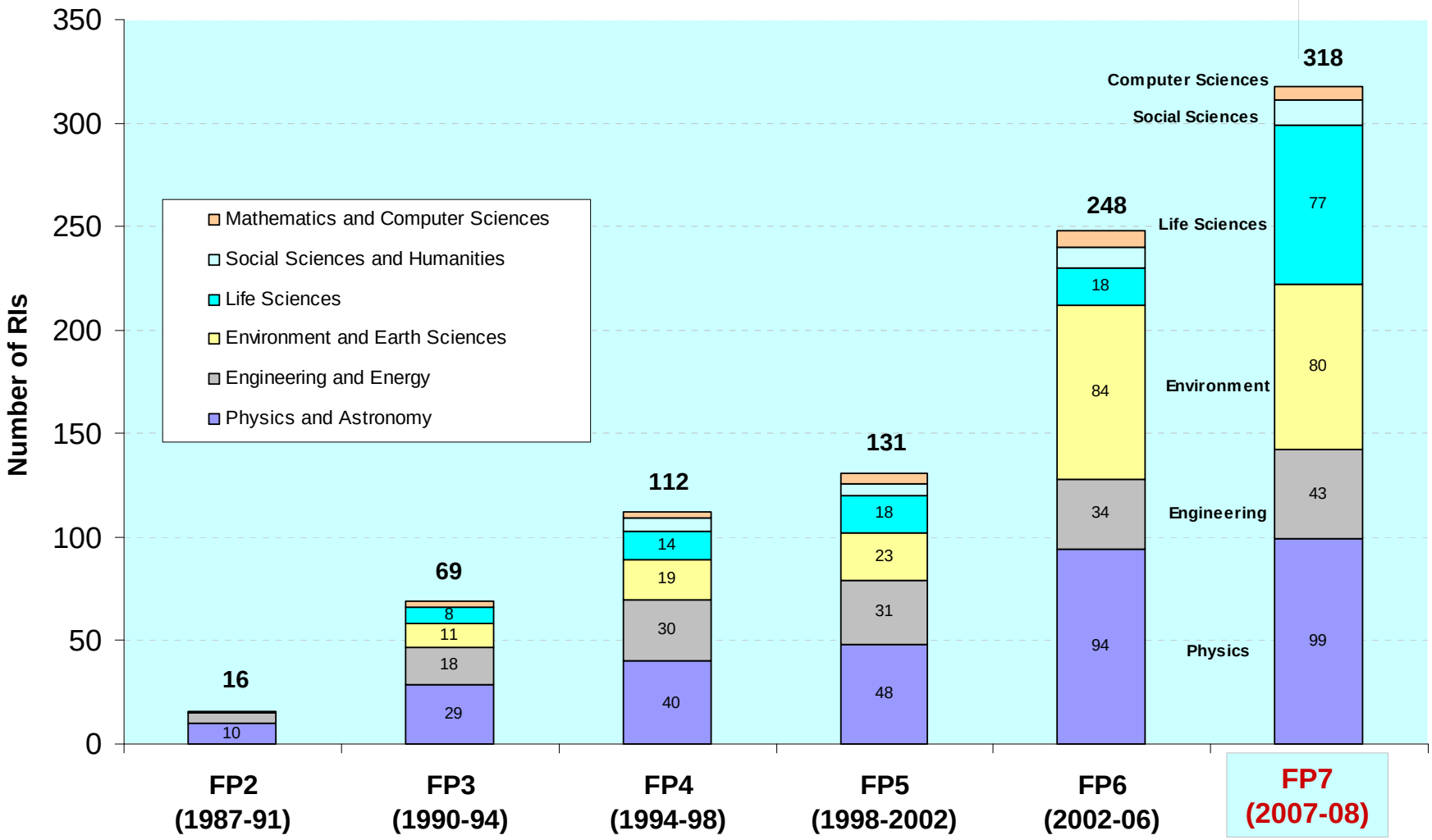
ELISA

European Light Sources Activities – Synchrotrons and Free Electron Lasers

➔ will provide the scientific users with access to **15 synchrotrons and free-electron lasers**

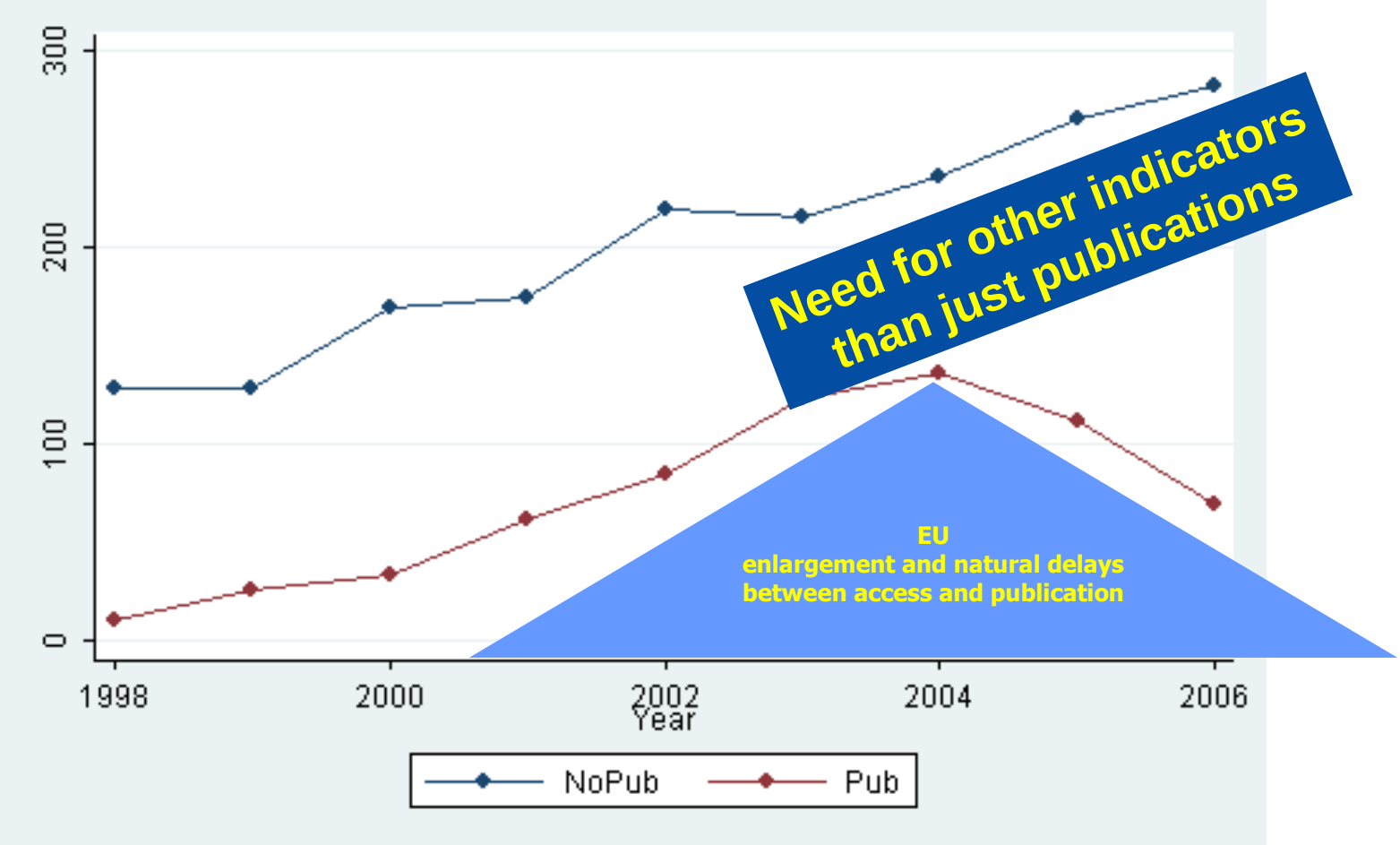
EUROPEAN COMMISSION
Community research

Positive evolution as shown by the number of RIs supported for Transnational Access at EU level (per scientific domain)



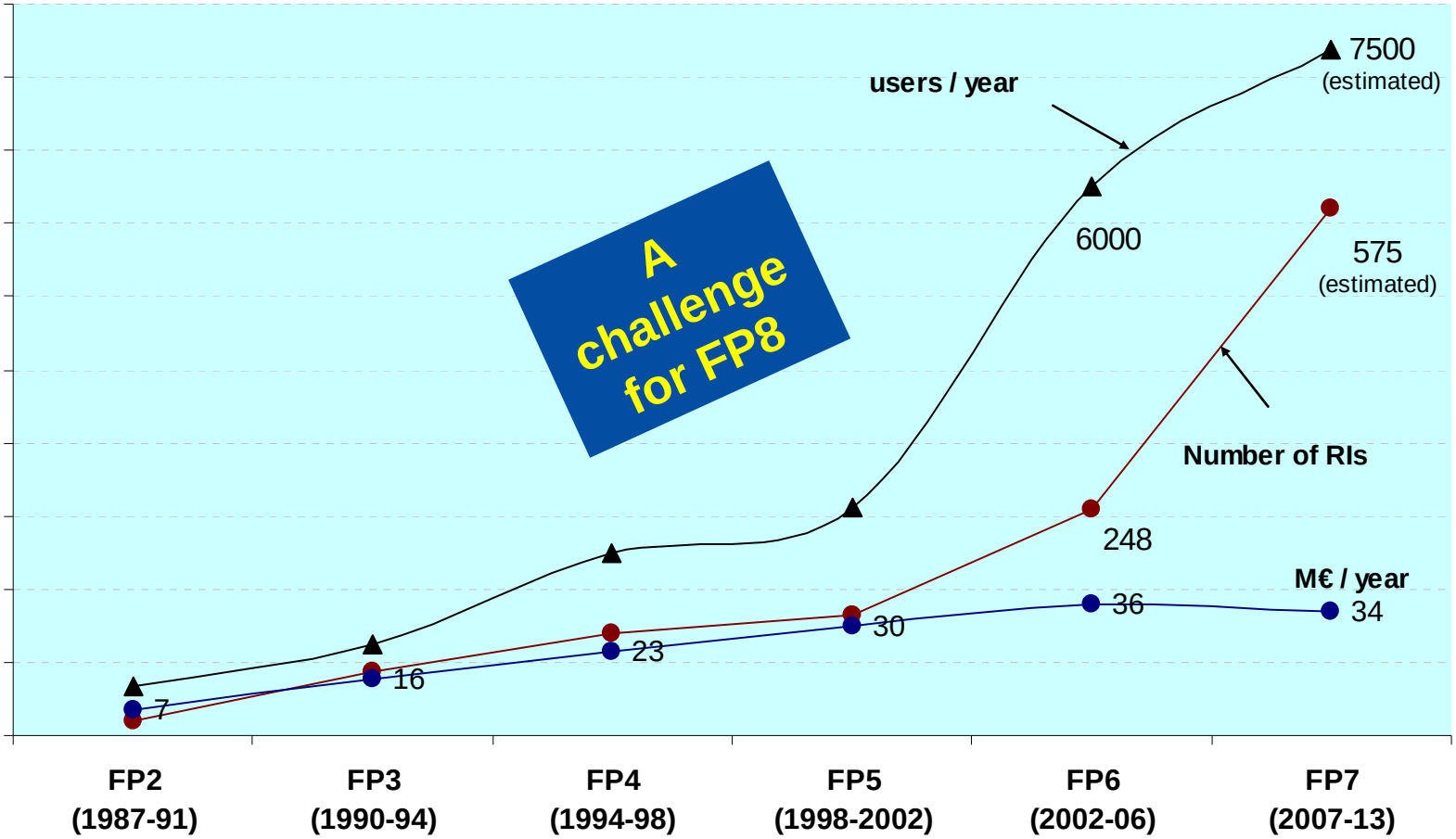
EUROPEAN COMMISSION
Community research

… and increased used of RIs for training of scientists and engineers as shown by the evolution of non-publication related access within a major EU synchrotron (ELETTRA) during the last 10 years



EUROPEAN COMMISSION
Community research

… but a problem of overall funding as shown by the evolution of the budget related to transnational access related actions from FP2 to FP7



Key factor 3

Capacity (or not) to *work together* to face increasingly complex problems costly solutions

EUROPEAN COMMISSION
Community research

Analysis (FP6 2002-2006) of Transnational access activities

Sources of information

- Annual reports: databases with user's data and amount of access provided; so far 193 DB related to the annual reports of 24 ***I3*** and 33 ***TA*** contracts
  - 10 700 user projects
  - 24 000 users
  - 225000 supported days of stay
- On-line "user group questionnaire": to monitor individual contracts and assess the quality of services provided by the RI to the scientific community

EUROPEAN COMMISSION
Community research

User group questionnaire

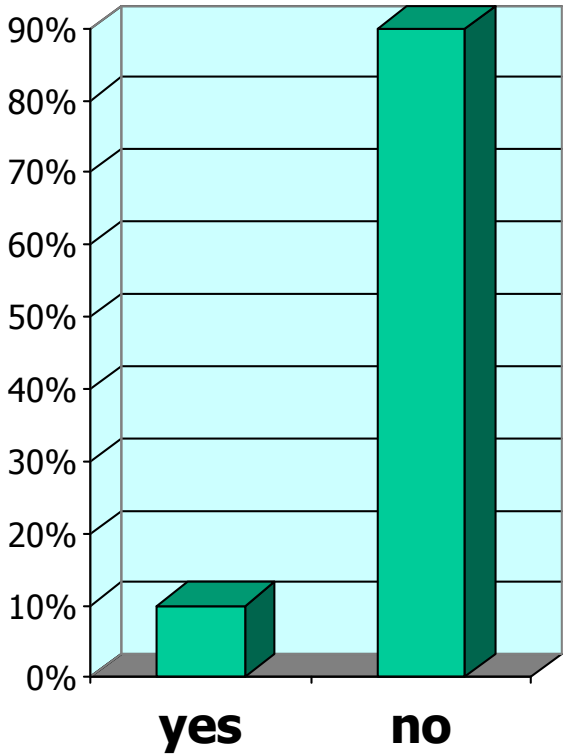
- Questionnaire available at

  http://www.cordis.lu/infrastructures/questionnaire.htm

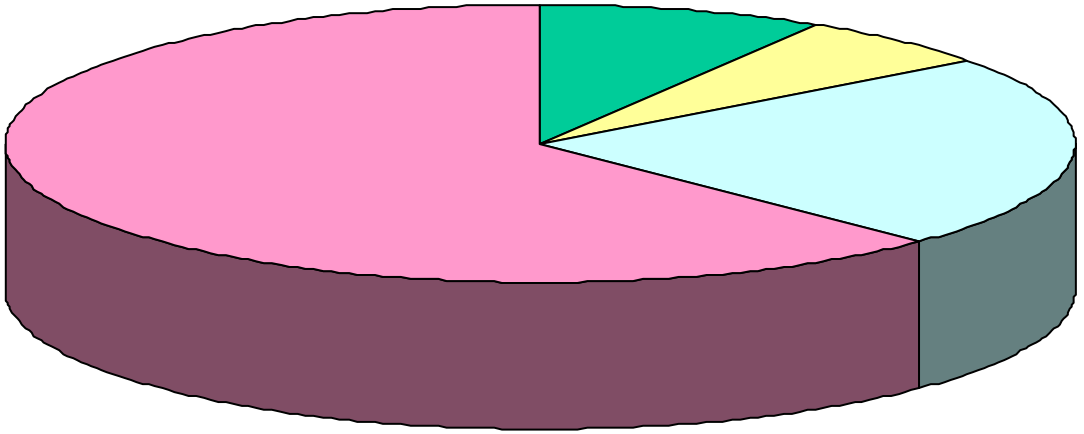
- Up to now 5050 filled questionnaires
- Used to produce statistics to monitor individual contract implementation …
- and General statistics too

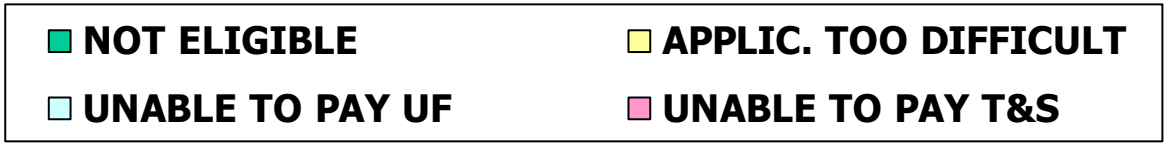
EUROPEAN COMMISSION
Community research

Are the users able to carry out their research on the RI without EC support?



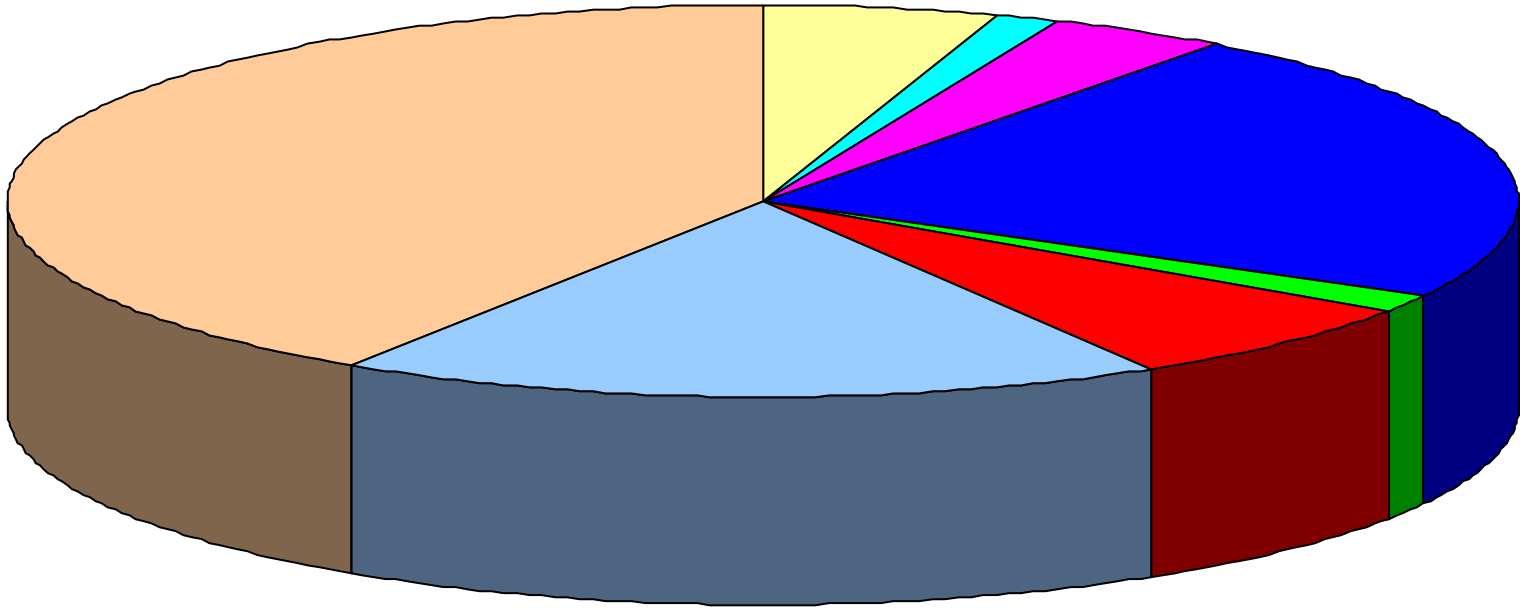
When no, why?





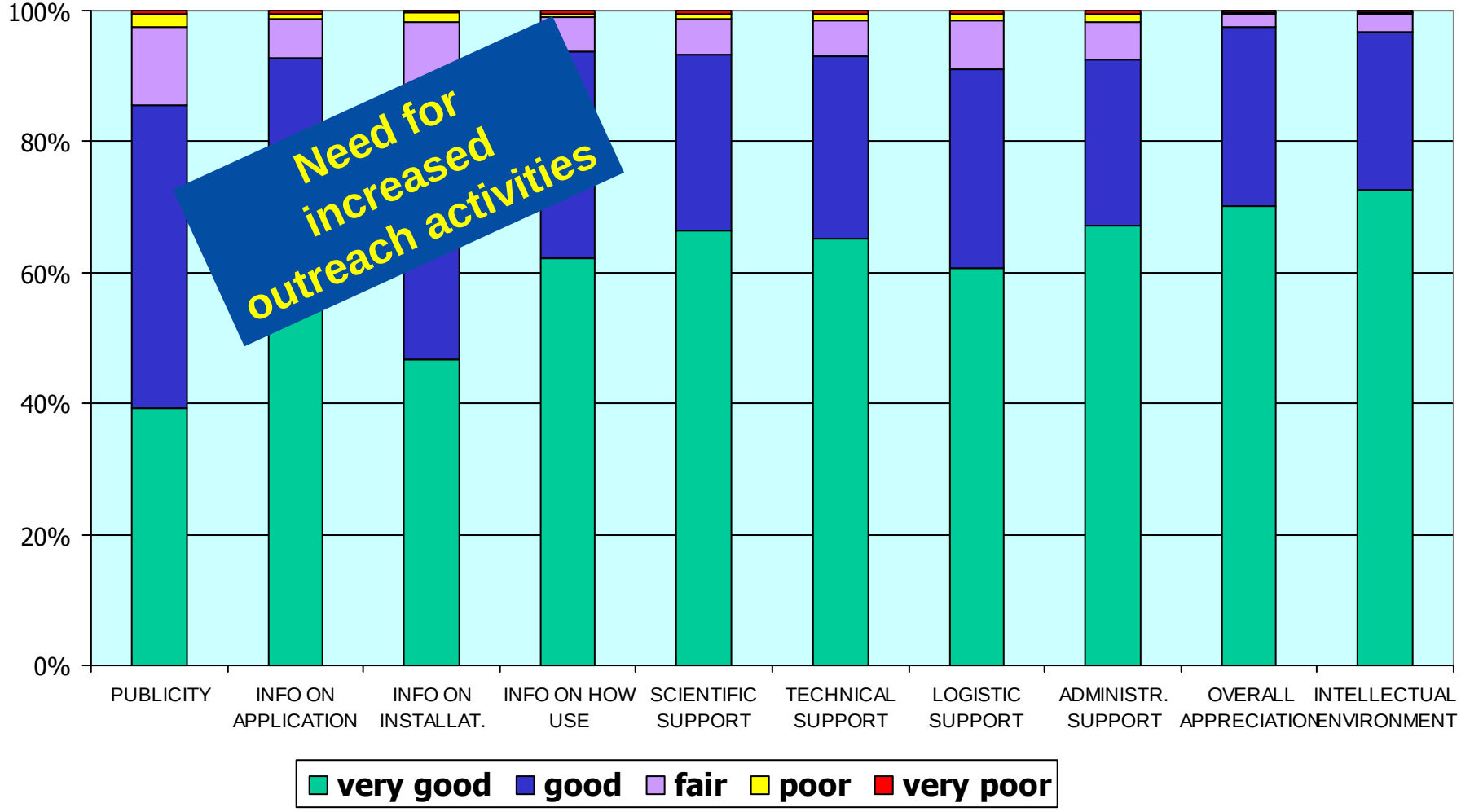
EUROPEAN COMMISSION
Community research

Where users find out about access opportunities?



EUROPEAN COMMISSION
Community research

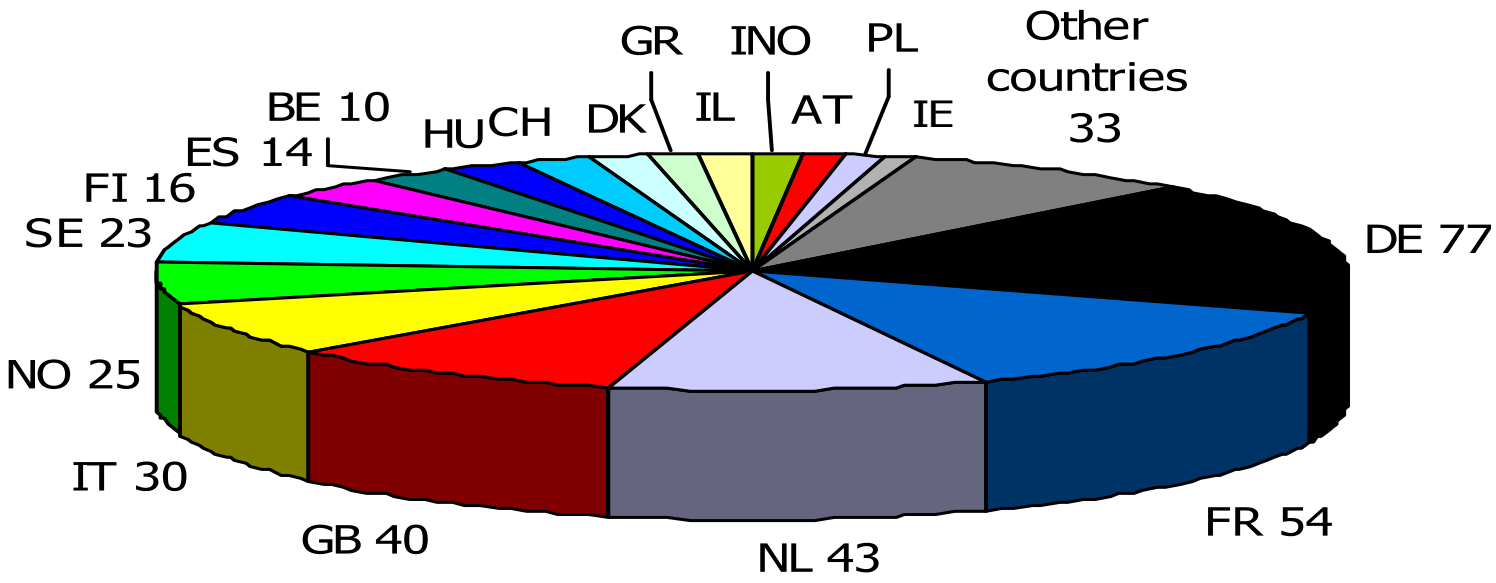
User's assessment of RI services



EUROPEAN COMMISSION
Community research

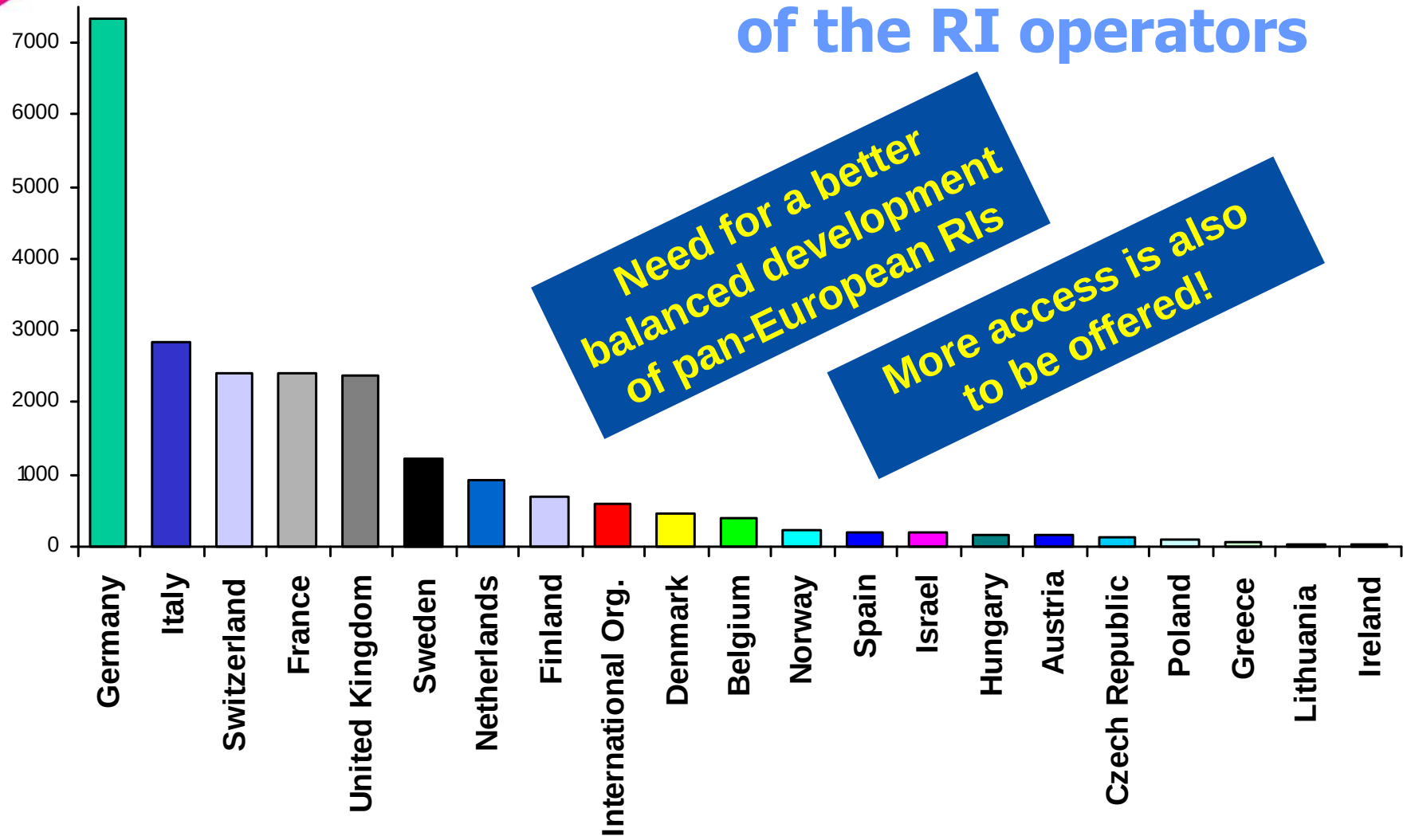
Analysis of Annual Reports

Supported Infrastructures/ Installations per country



EUROPEAN COMMISSION
Community research

Number of served users by country of the RI operators

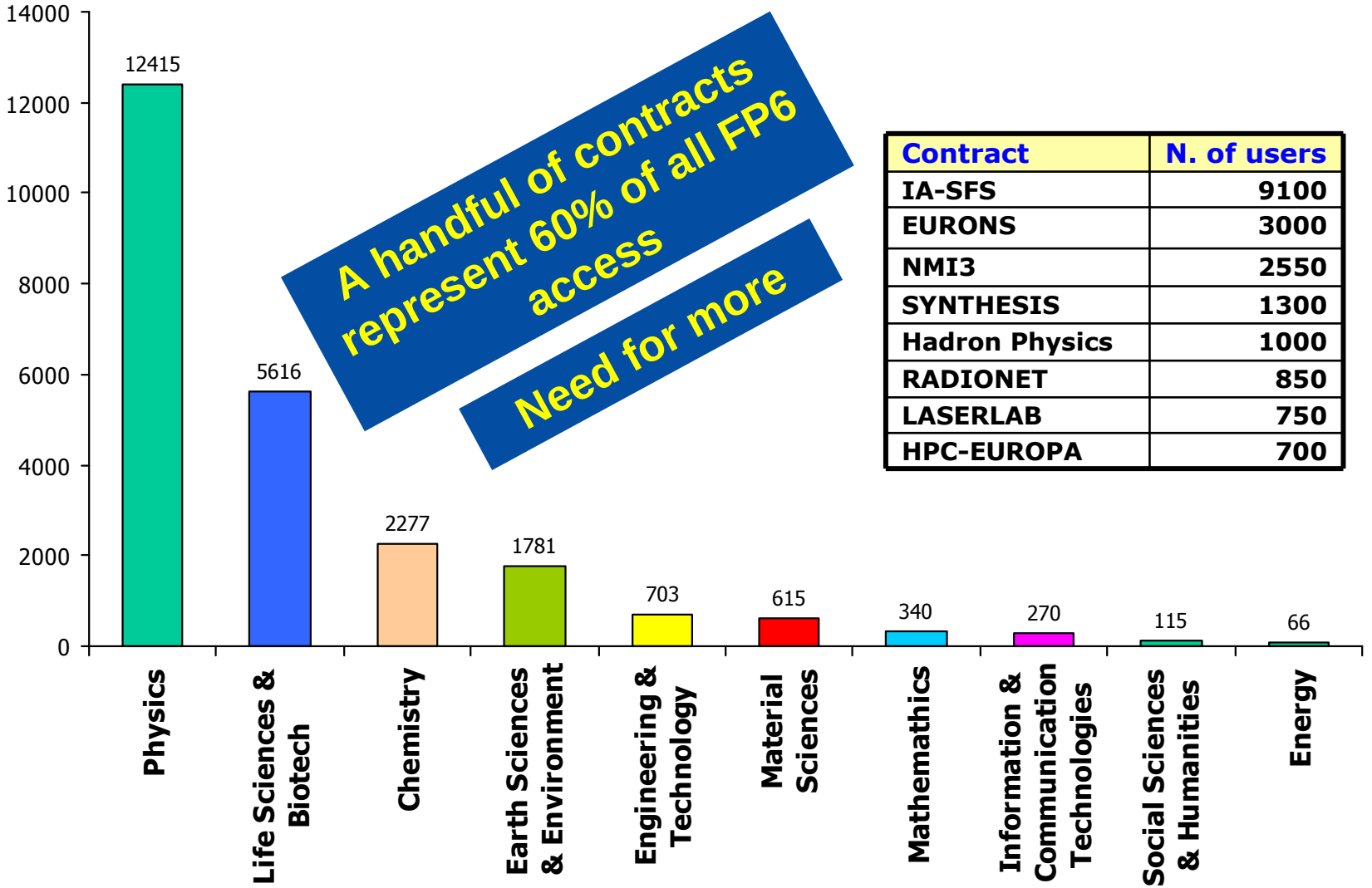


Need for a better balanced development of pan-European RIs

More access is also to be offered!

EUROPEAN COMMISSION
Community research

Distribution of users by main scientific background



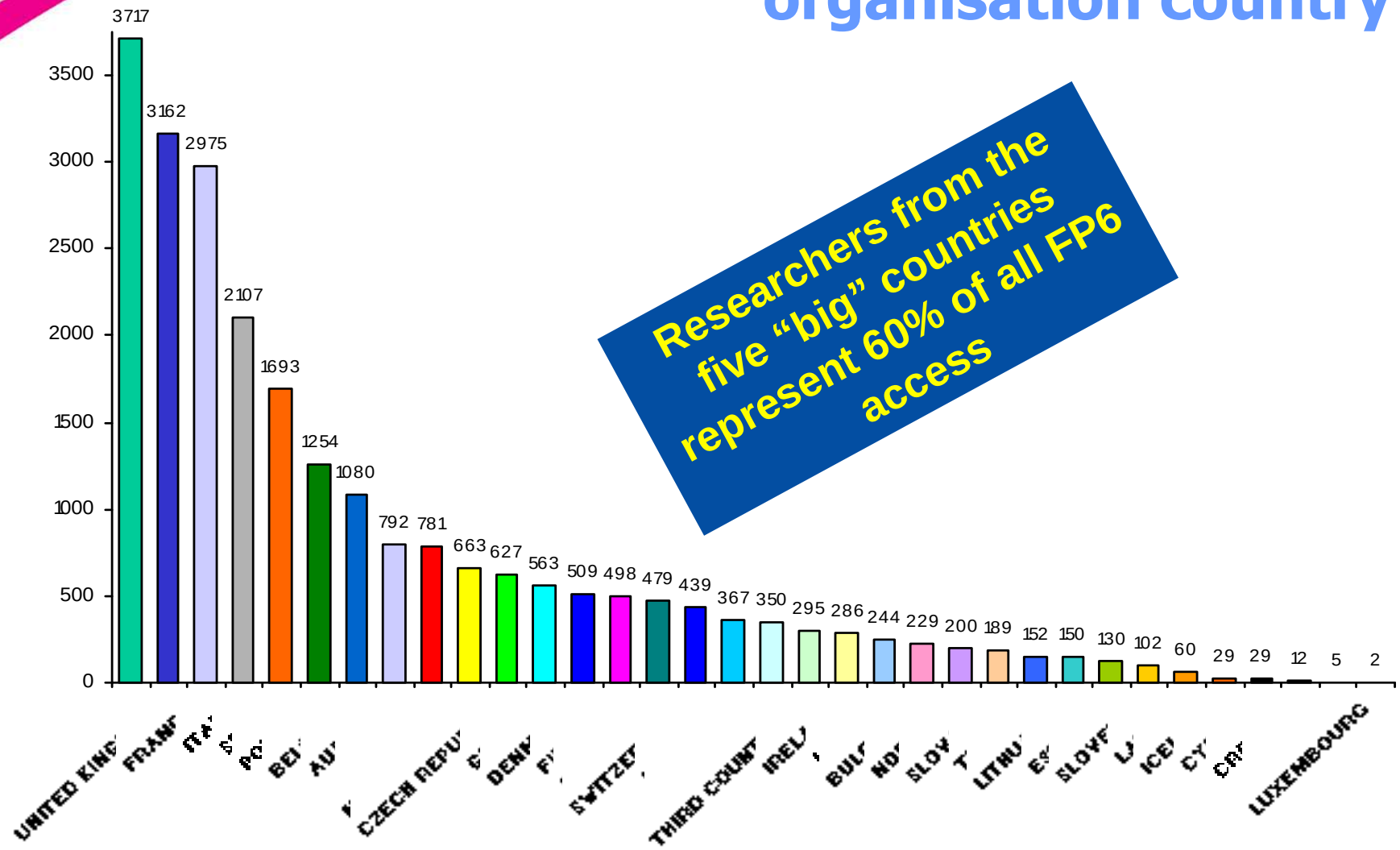
A handful of contracts represent 60% of all FP6 access

Need for more

Contract	N. of users
IA-SFS	9100
EURONS	3000
NMI3	2550
SYNTHESIS	1300
Hadron Physics	1000
RADIONET	850
LASERLAB	750
HPC-EUROPA	700

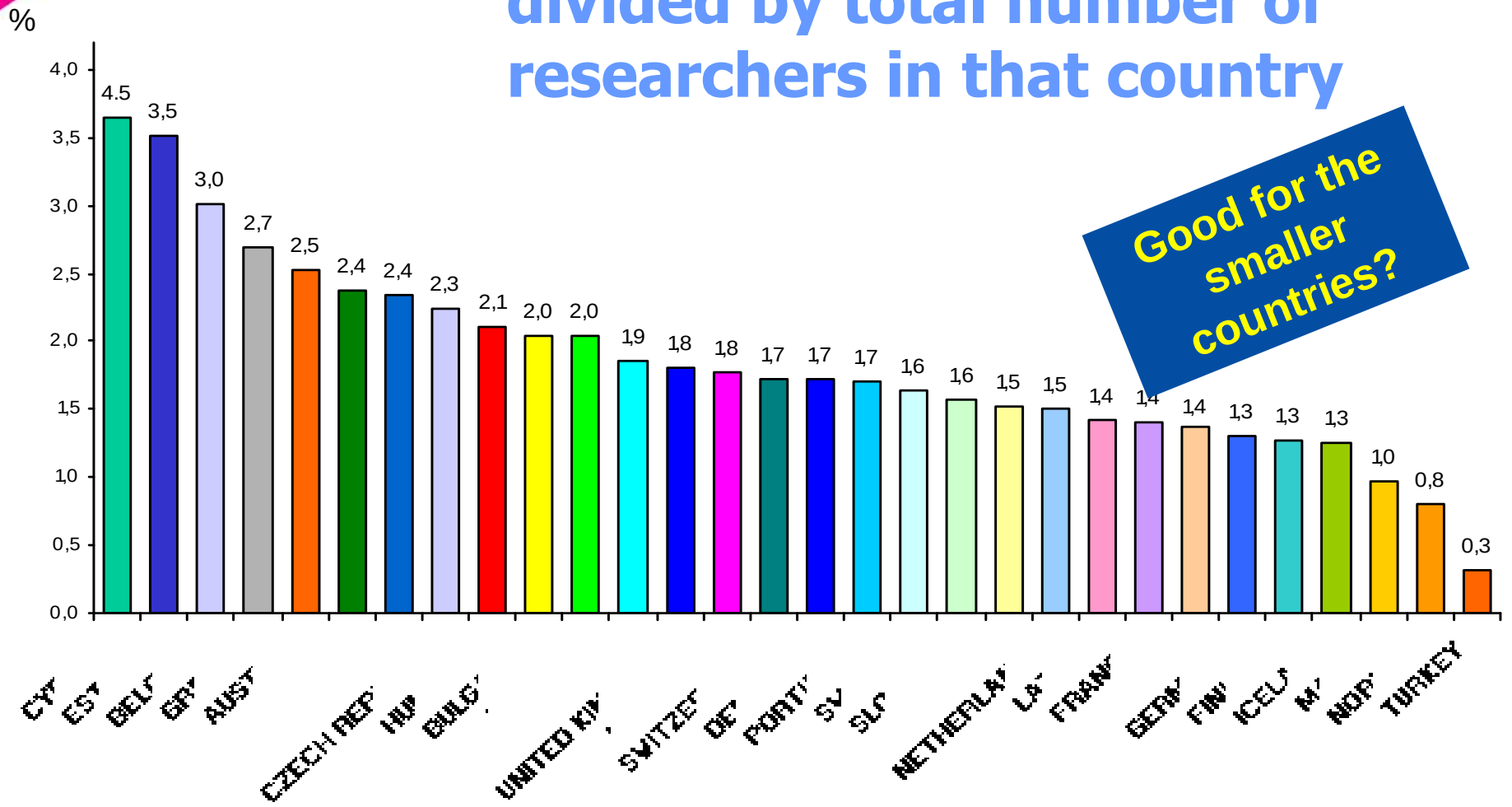
EUROPEAN COMMISSION
Community research

Distribution of users by organisation country



EUROPEAN COMMISSION
Community research

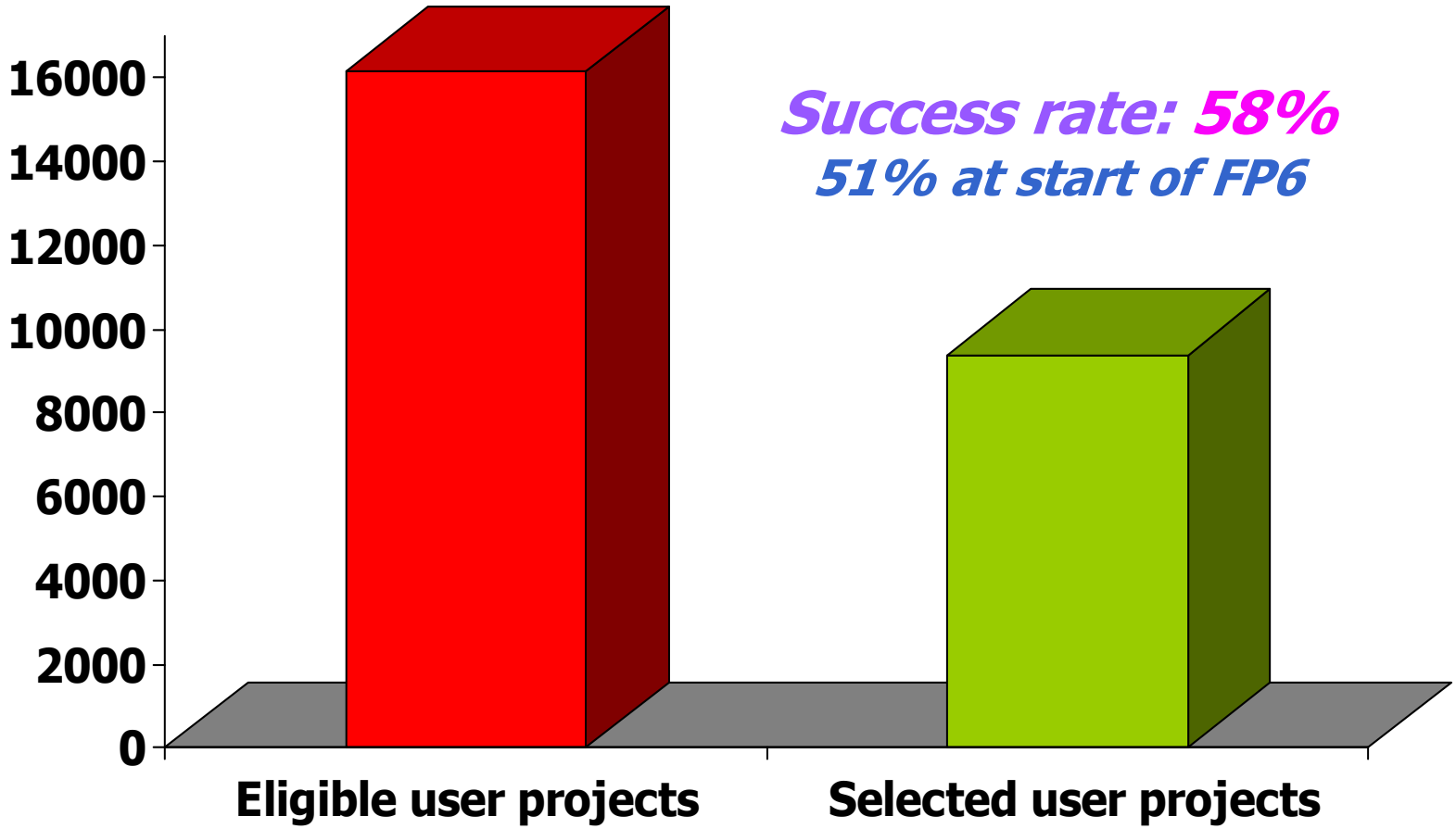
Distribution by country of number of supported users divided by total number of researchers in that country



Good for the smaller countries?

EUROPEAN COMMISSION
Community research

Success rate of user projects

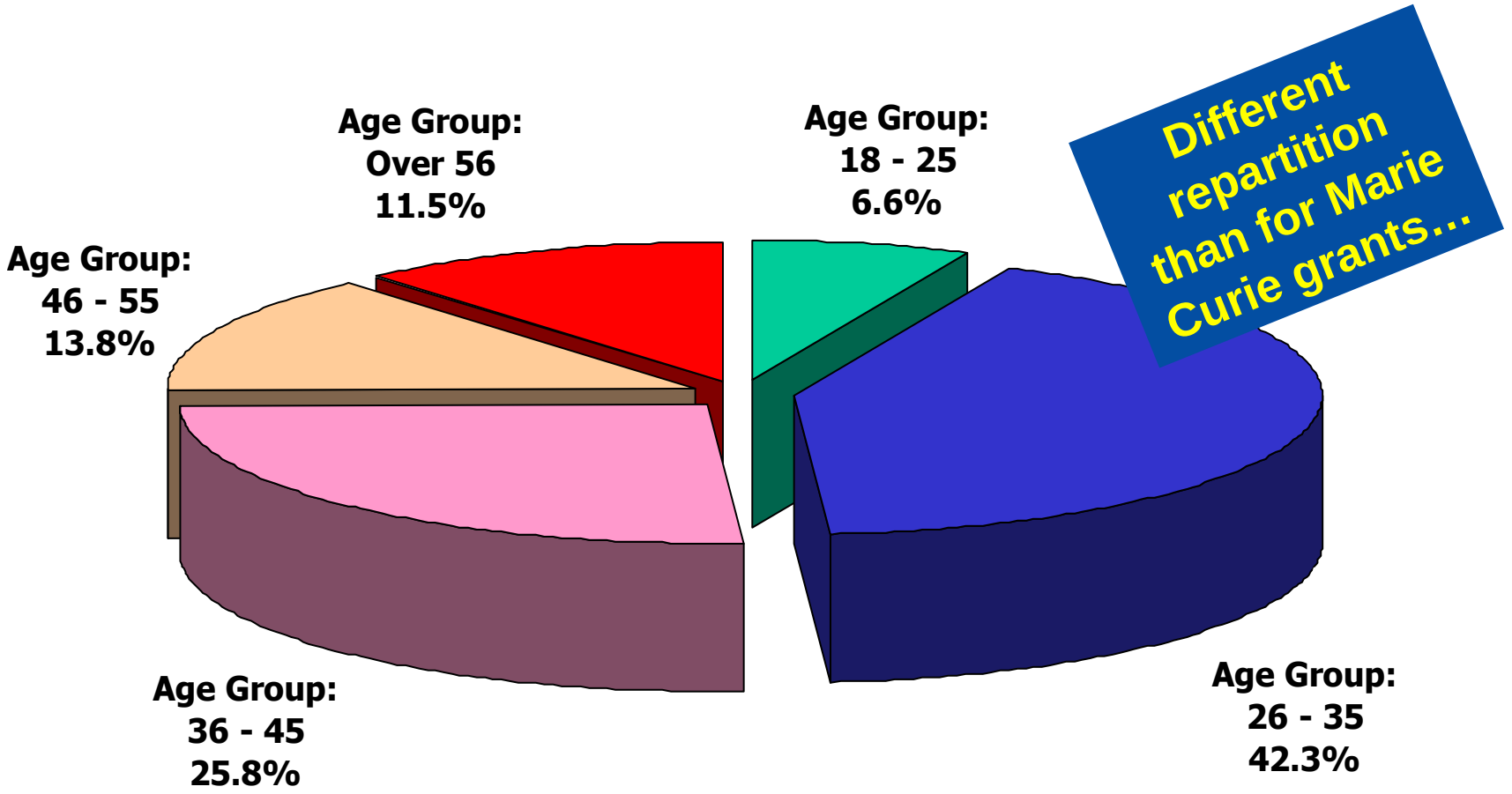


Success rate: 58%

51% at start of FP6

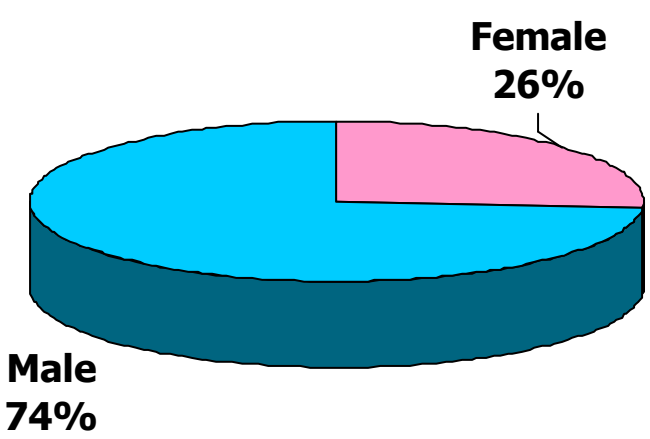
EUROPEAN COMMISSION
Community research

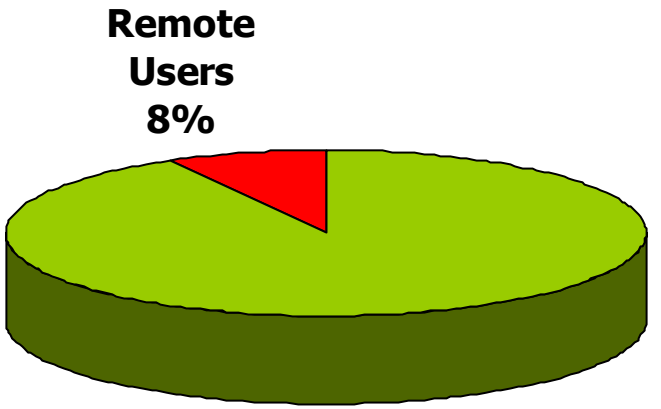
Distribution of users by age group
(as % of the total number of users)

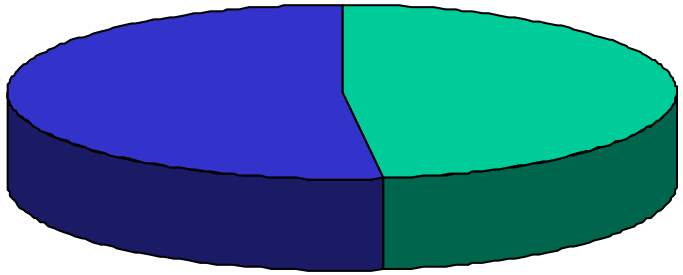


EUROPEAN COMMISSION
Community research

Distribution of users by gender and type







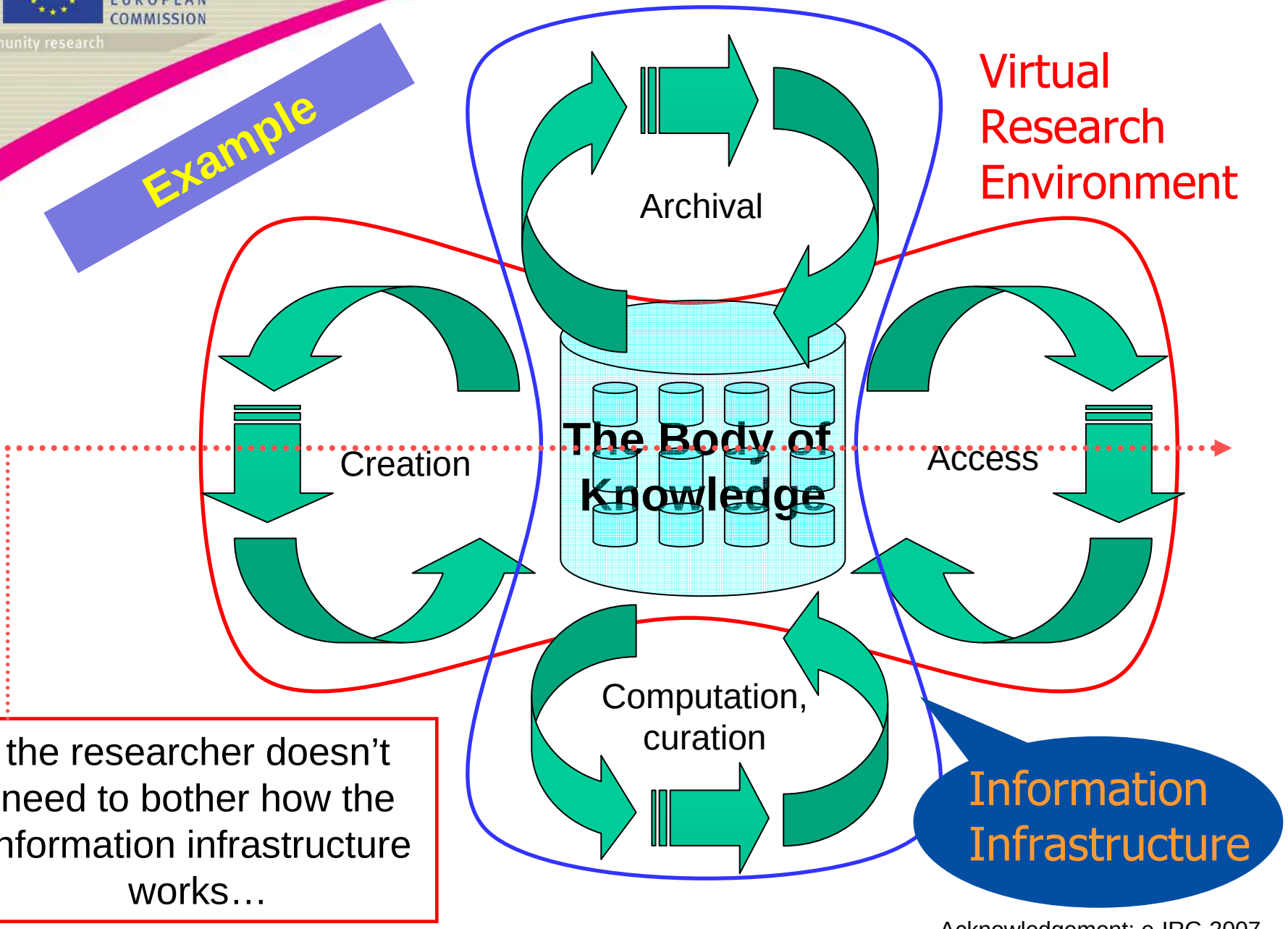
Strong potential for e-infrastructures

Key factor 4

Capacity (or not) to integrate scientific and e-infrastructures

EUROPEAN COMMISSION
Community research

Example



the researcher doesn't need to bother how the information infrastructure works…

Acknowledgement: e-IRG 2007

EUROPEAN COMMISSION
Community research

… the researcher needs to work within a consistent information infrastructure to avoid wasting money later on…

- Acquisition and Ingest .....ca. 42%
- Archival Storage & Preservation ....ca. 23%
- Access ca.35%

Ability to integrate research infrastructures (distributed RIs) as well as RIs and e-infrastructures?

Acknowledgement: alliance for permanent access

Key factor 5

Capacity (or not) to manage the RI eco-system

RIs of pan-European interest require professional management throughout their life-cycle (from preparation to decommissioning).

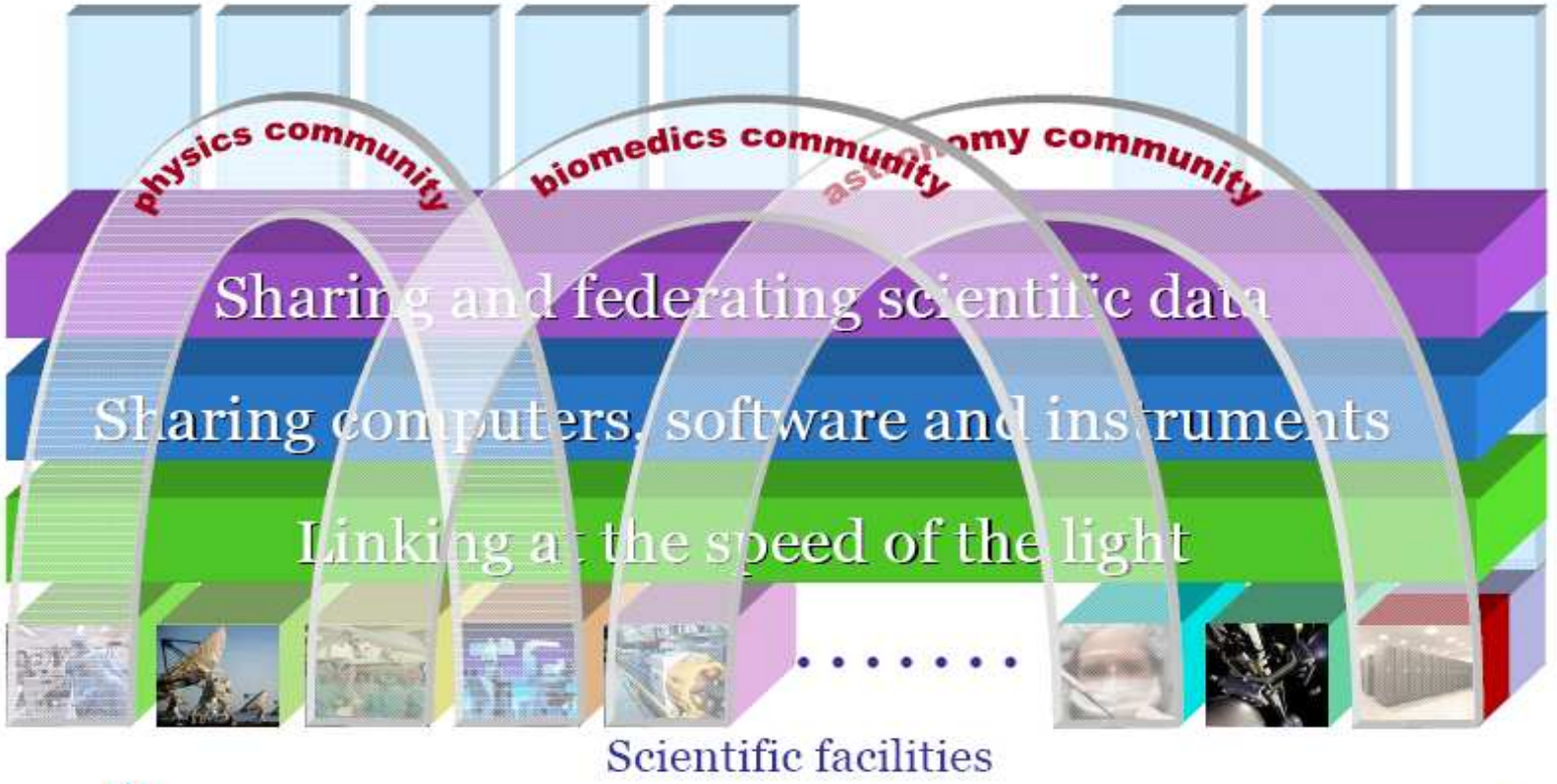
This entails a wide range of activities: not only *providing access* to highly sophisticated equipment; also *training* people, participating in *technology development*, and may be responsible for establishing standard operation procedures

Extract of the 2007 ERA expert group

EUROPEAN COMMISSION
Community research

e-Infrastructures interconnecting communities

Call closing on November 24, 2009



e-infrastructure

European Commission
Information Society and Media

EUROPEAN COMMISSION
Community research

Willingness to develop an 'eco-system' of Research Infrastructures within ERA

a) Large (single-sited) facilities
b) Distributed European Facilities
c) Network of national facilities

Based on

a) a consistent roadmap from the European stakeholders
b) Links with universities & schools
c) Network of industrial suppliers / users

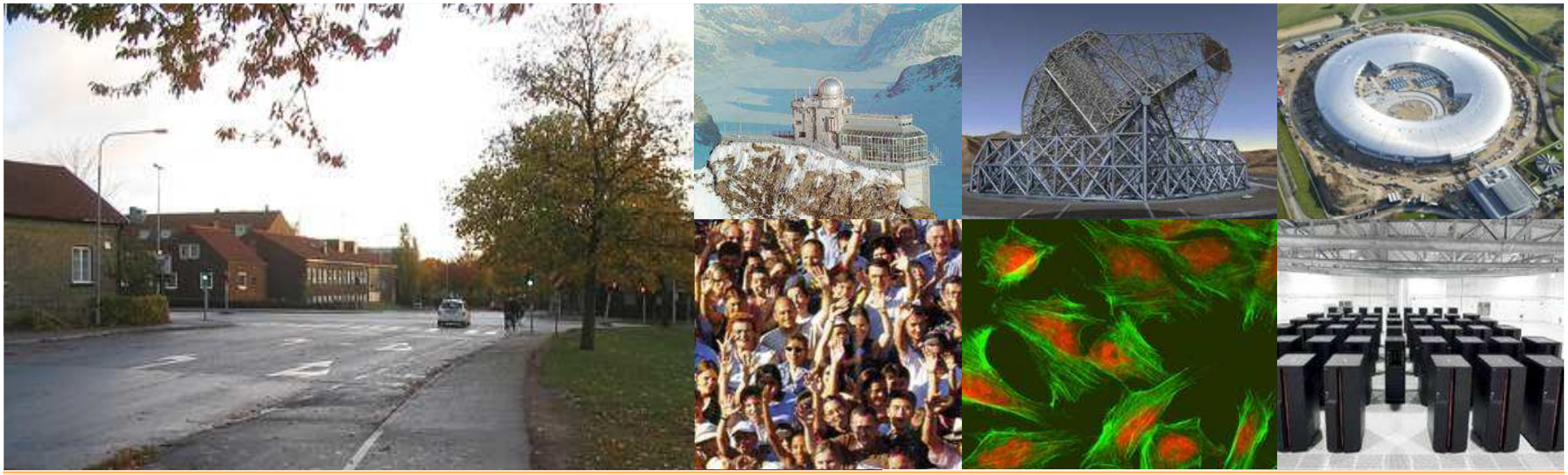
To conclude…

According to the analysis of the Key factors for efficient RIs within the ERA, my vision is optimistic

- ✓Positive trends for the legal environment
- ✓A real growing "market" for use of RIs
- ✓Willingness for Open Access
- ✓Integrating e- + research infrastructures
- ✓A new style of management is arising

… but…

- ✓**Need to continue developing an ERA vision**
  (national protectionism isn't over)
- ✓**Need for public funds for Open Access**
  (this is long term investment)
- ✓**Need for a "regional" dimension of ERA**
- ✓**Integrating e- + research infrastructures**
- ✓**Need to support a new management style**
  (researchers are often keen of conservatism)



Thank you for your attention