



The European Research Council: Vision, Strategy, and Challenges

Professor Fotis C. Kafatos
ERC President

CONFERENCE

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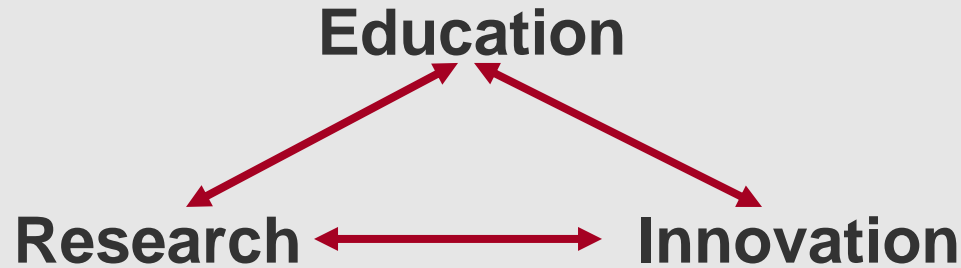
The European Research Council for a
policy of excellence: the first award
winners pave the way



*The European Research Council: **Vision,** Strategy, and Challenges*



Europe Can Only Compete Through the Knowledge Triangle



Leadership in Science, the Endless frontier

Central Role in the Knowledge Triangle:
Education / Research / Innovation

E.g. Note the emergence of Molecular Medicine

Investment in excellent people & research
is an imperative, not an option



To Become More Competitive, Europe Must



- Generate, Attract and Retain Top Talent
- Integrate and Internationalize our Efforts
- Encourage and Trust the Young
- Create Attractive Career Paths
- Create a Competitive “Champions League”
that sets standards



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Central concepts

- ERC consists of an **independent** Scientific Council
- **Supported** by a Dedicated Implementation Structure
- Debate: ERC under the European Commission or Article 171?
 EC solution (Executive Agency) adopted, to be reviewed 2009
- EC guarantees ScC autonomy /ERC functionality
- **Review of the structure of ERC planned for 2009**



The Scientific Council

Members & Role

22 highly respected researchers reflecting the wide scope of European research and scholarship

- Proposed by an independent identification committee
- Appointed by the Commission (for 4 years, renewable once)



Role:

- Establishes:
 - Scientific strategy
 - Annual programmes and calls, evaluation structure
- Controls quality of operations and management (?)
- ERC Executive Agency to be fully established in 2009



ERC strategy

- Keep it simple, flexible and focused
- **“Starting Grant”**: Opportunities for young investigators
- **“Advanced Grant”**: Support for leading scientists
- **Promote excellence** irrespective of nationality, age, or field
- **The 3 “Rs”** – *recruit, repatriate, retain*
- Trust the dynamic of science
- **Encourage interdisciplinarity**



First Call for Starting Grants: Unexpected, huge participation

- Call launched February 2006, deadline April 2007
- Budget 300 Mi€
- Two-stage evaluation
- 9167 applications from 88 nationalities
- 559 top PIs selected for Phase 2 evaluation
- Female / male applicants: 30/70%
- ~300 funded
- Large number of comparable candidates could not be included (budget limitation)



ERC Advanced Grant Rules (From 2008)

- Any field of research
- Active researchers with a track-record of significant research achievements in the last 10 years
- Researchers of any nationality, to establish research activity in any Member State or Associated Country
- Depending on the subject, the level of grants may be up to 3.5M€ for a period of 5 years
- ERC funds 100% of the total direct costs + 20% overhead
- Level of grant determined by peer review evaluation



ERC Grants: Portability



ERC Grants are portable:

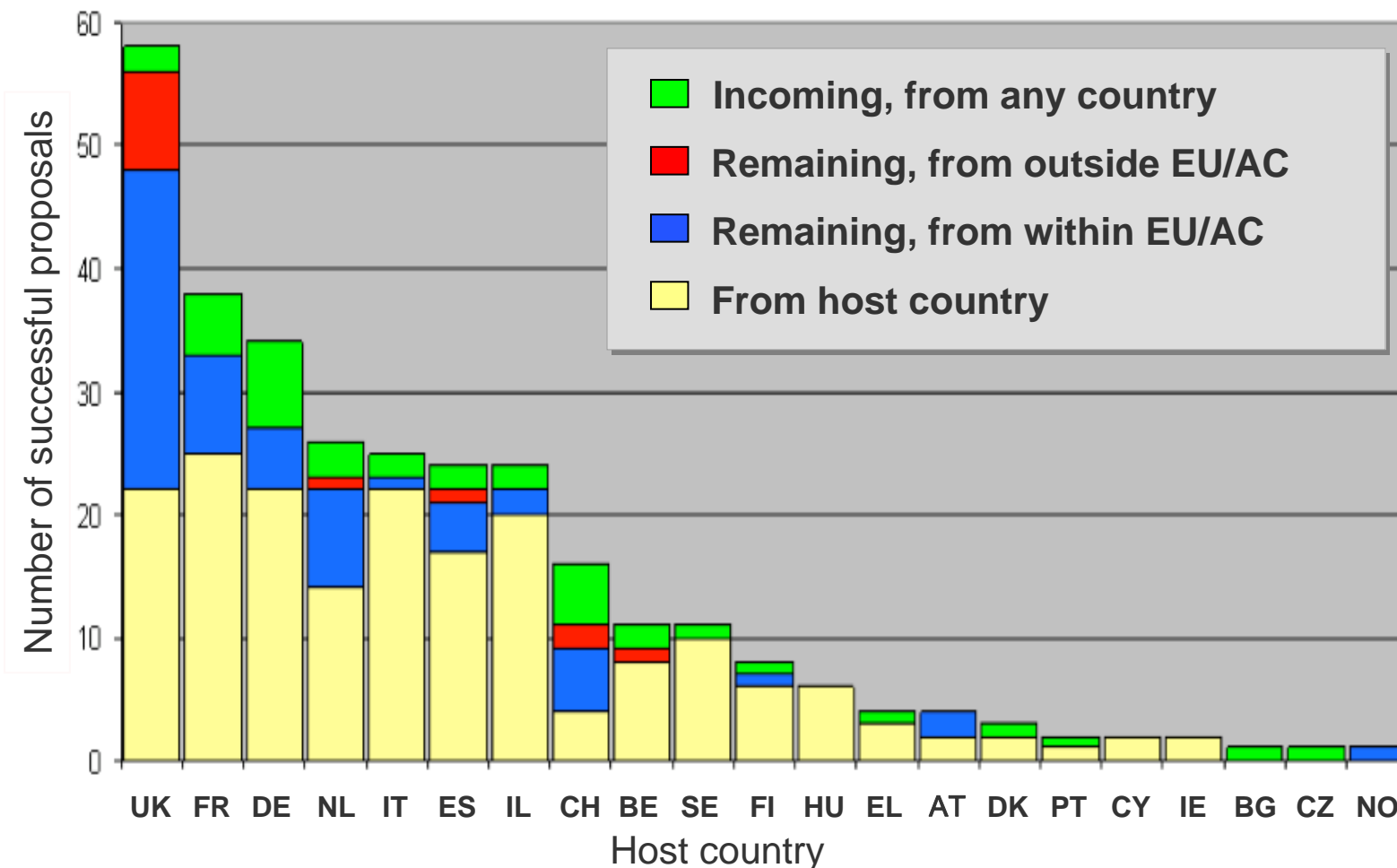
- *“Money follows the researcher”*
- *PI is entitled to transfer the grant to another institution, normally after a minimum 2 years at the sponsoring institution*
- *Proper justification and ERC approval required*



ERC / National Funding Organizations Interactions

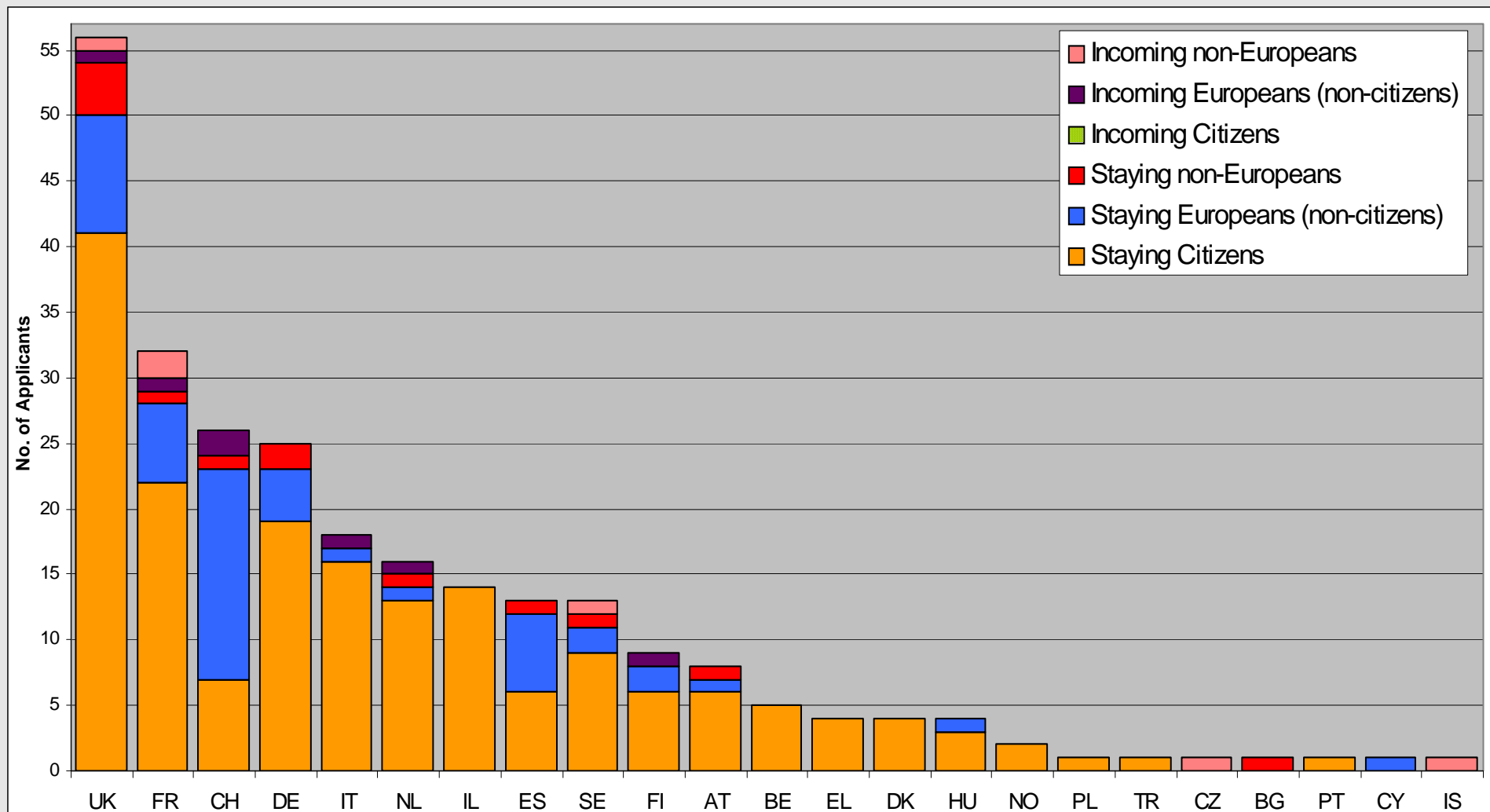
- **Mutual support and cooperation**
- NFO responsible for building up excellence in the national research community
- ERC responsible for building up excellence across Europe without regard to nationality
- **Substantial opportunities for synergy**
- E.g., national support for StG runners-up (CH, IT, SE, FR, CY, AT, Flanders, ...)
- NFO contributes National Detached Experts
- ERC preselects worthwhile candidates for NFO

StG Finalists: mobility of researchers (top 300 proposals)





AdG Finalists: mobility of researchers (top 256 proposals)

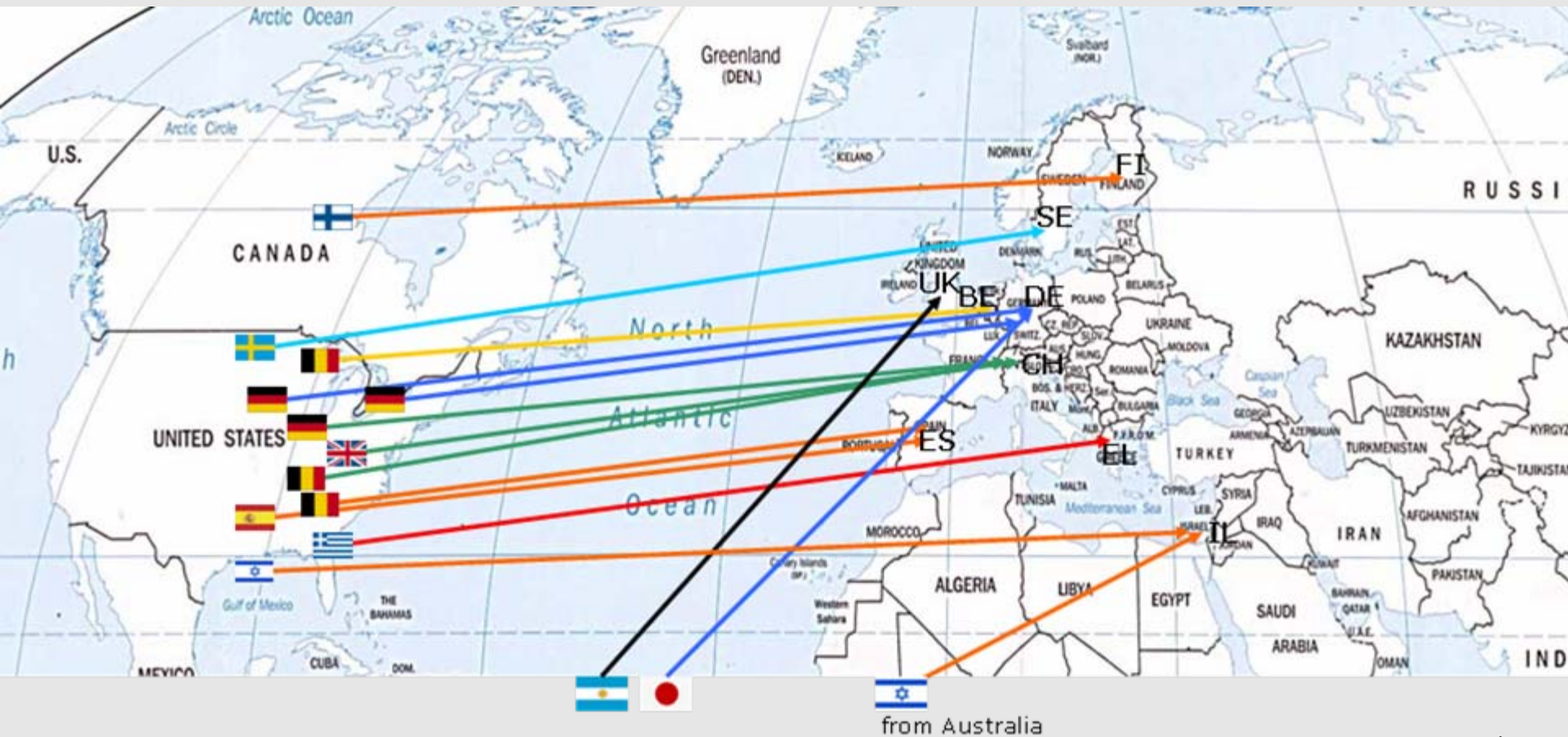




2007 Starting Grants



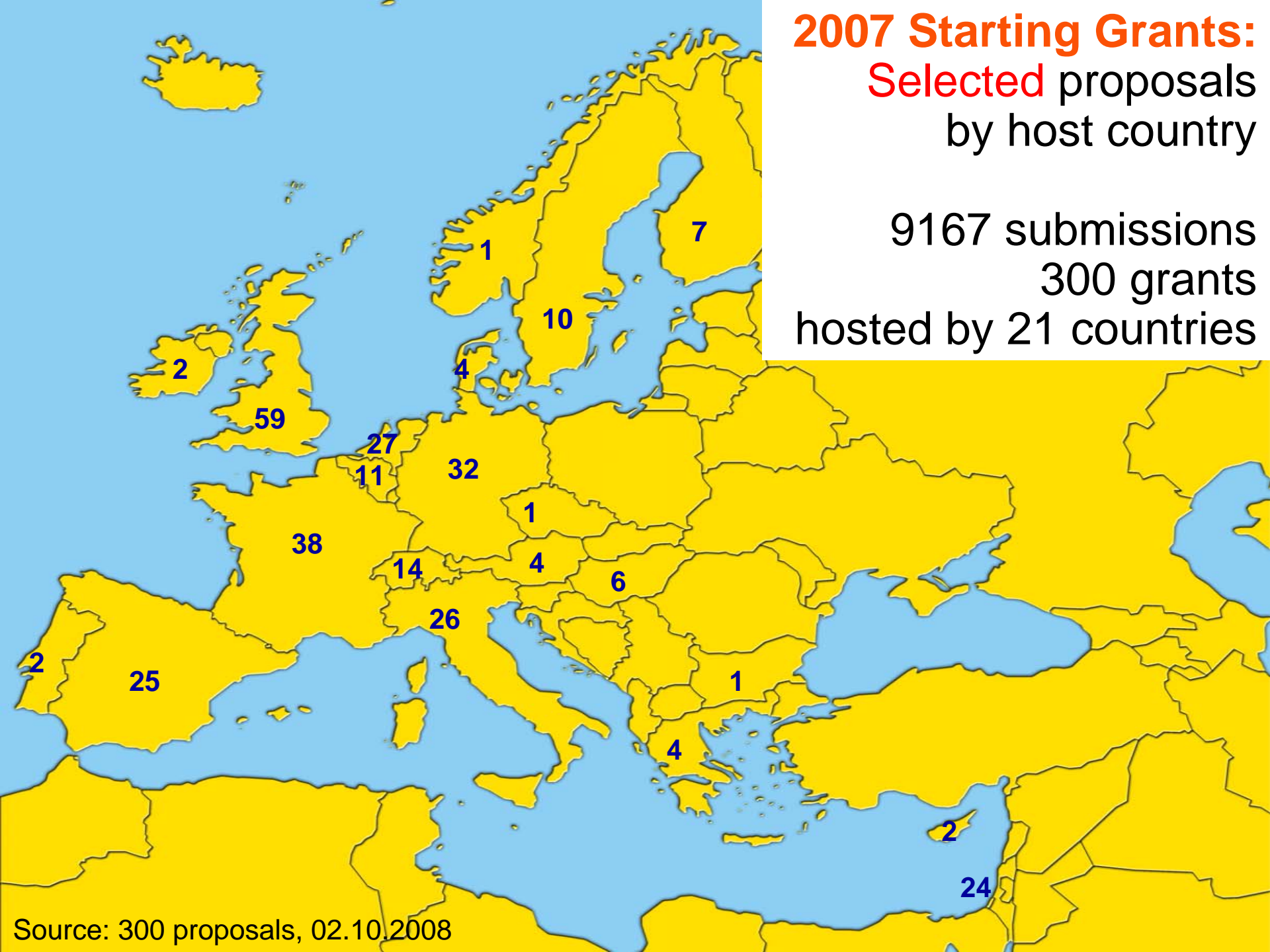
Repatriation and Recruitment to Europe (5%)



from Australia

2007 Starting Grants: Selected proposals by host country

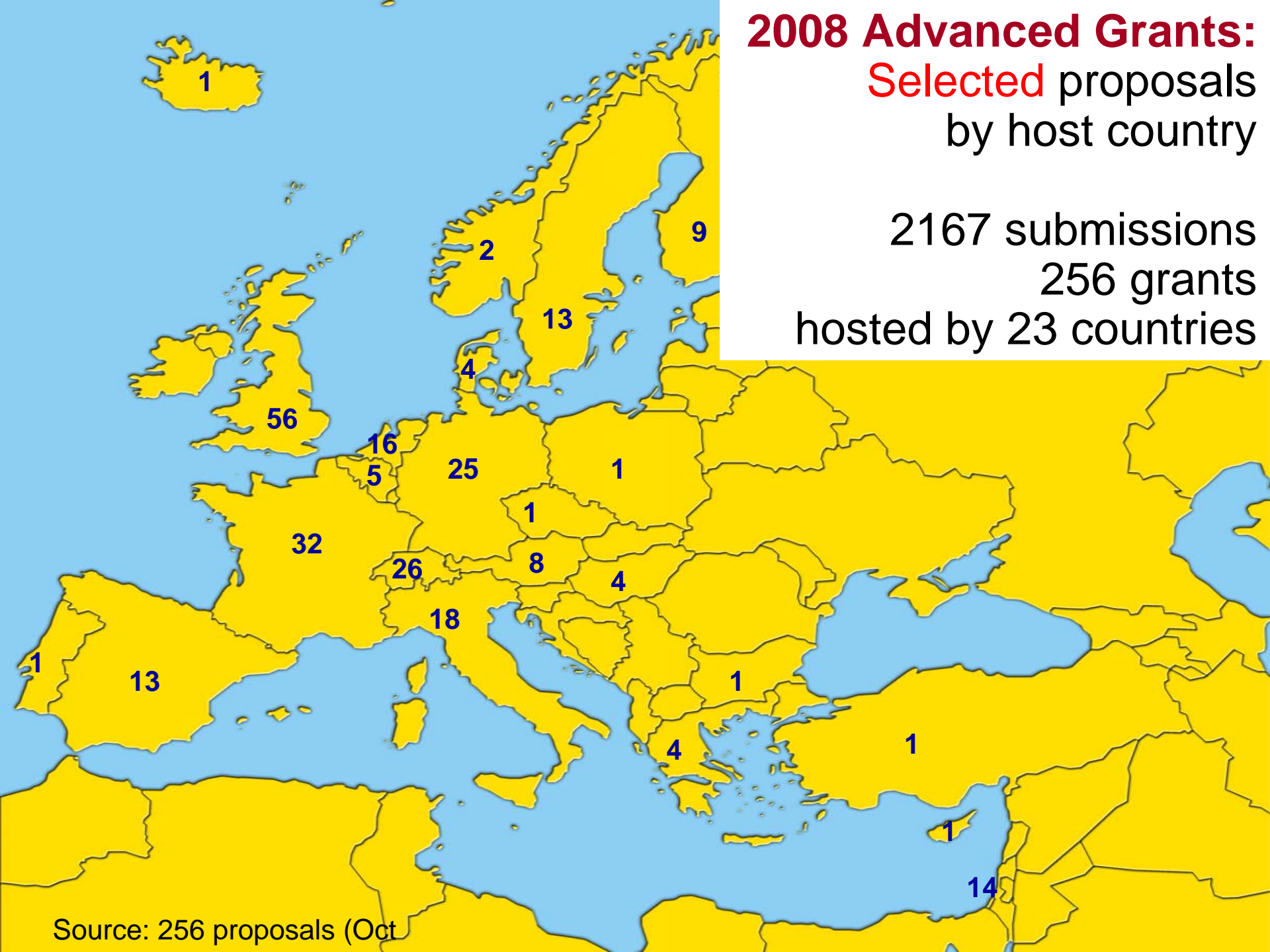
9167 submissions
300 grants
hosted by 21 countries



Source: 300 proposals, 02.10.2008

2008 Advanced Grants: Selected proposals by host country

2167 submissions
256 grants
hosted by 23 countries

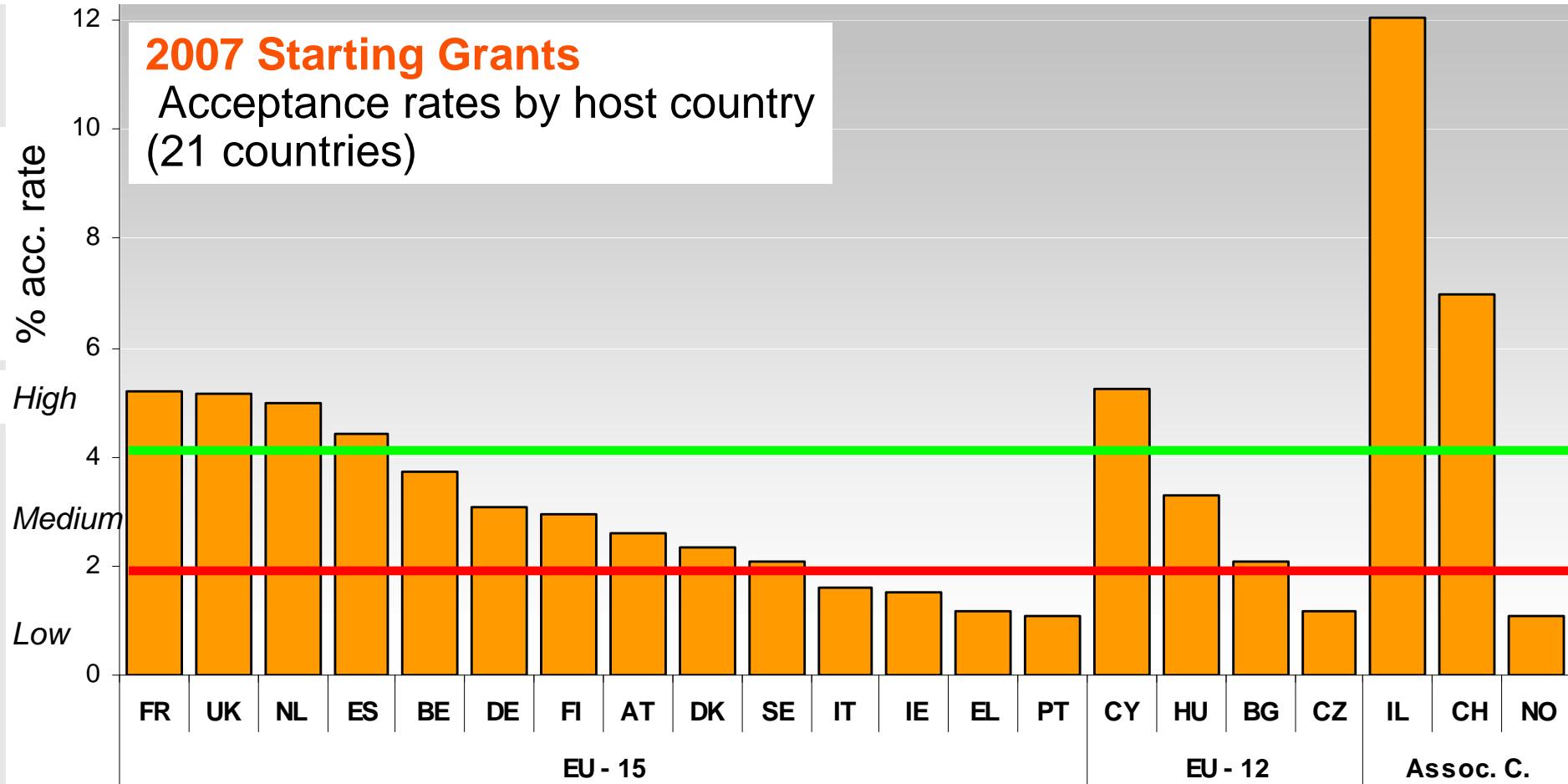


Source: 256 proposals (Oct



Fostering pan-European competition among individual scientists

Country's population, economy, # of submissions not pertinent:
Fundamental commitment of ERC to *individual excellence*



Source: All submitted proposals (9167) and 300 selected proposals (02.10.2008)



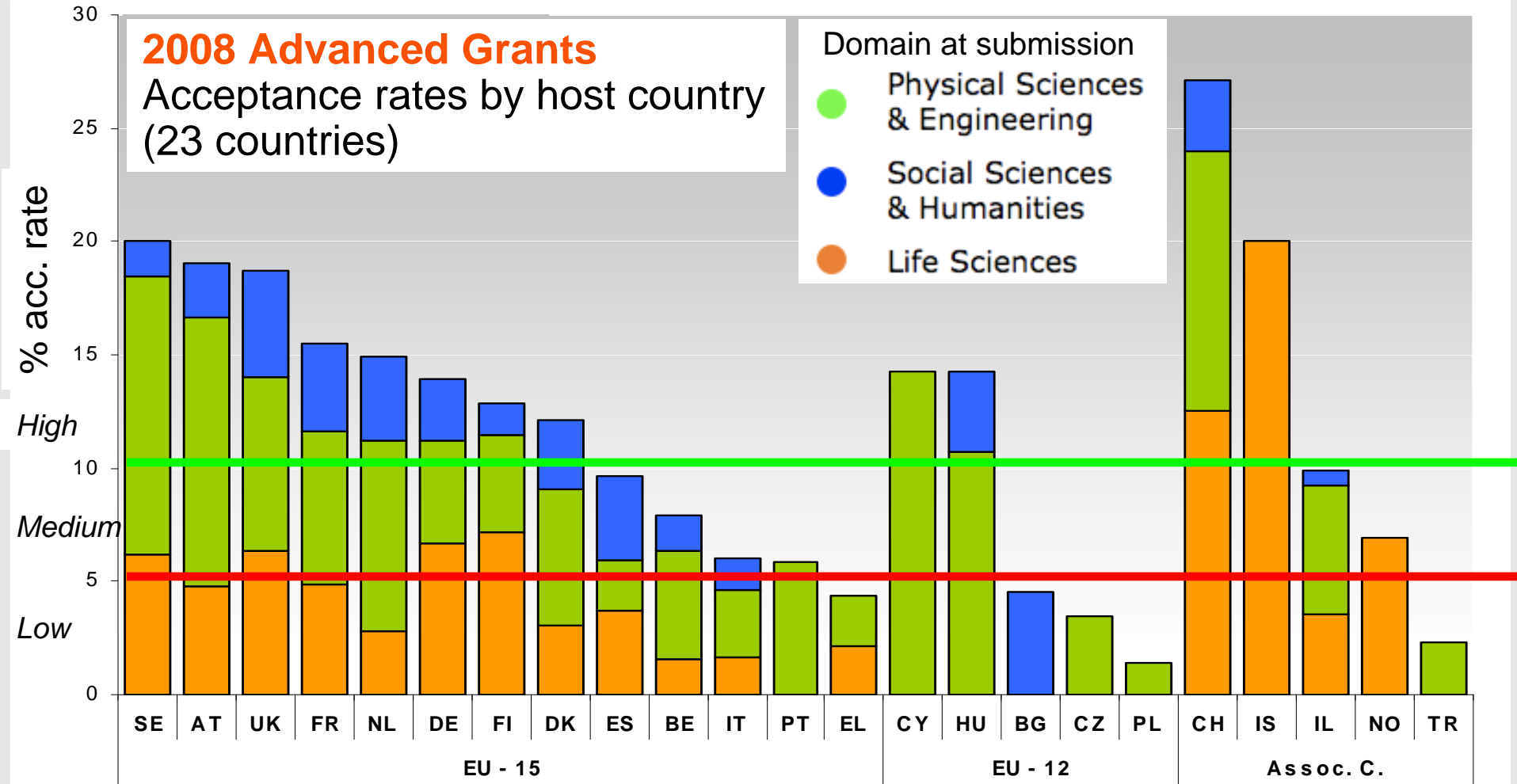
Fostering pan-European competition among individual scientists

2008 Advanced Grants

Acceptance rates by host country (23 countries)

Domain at submission

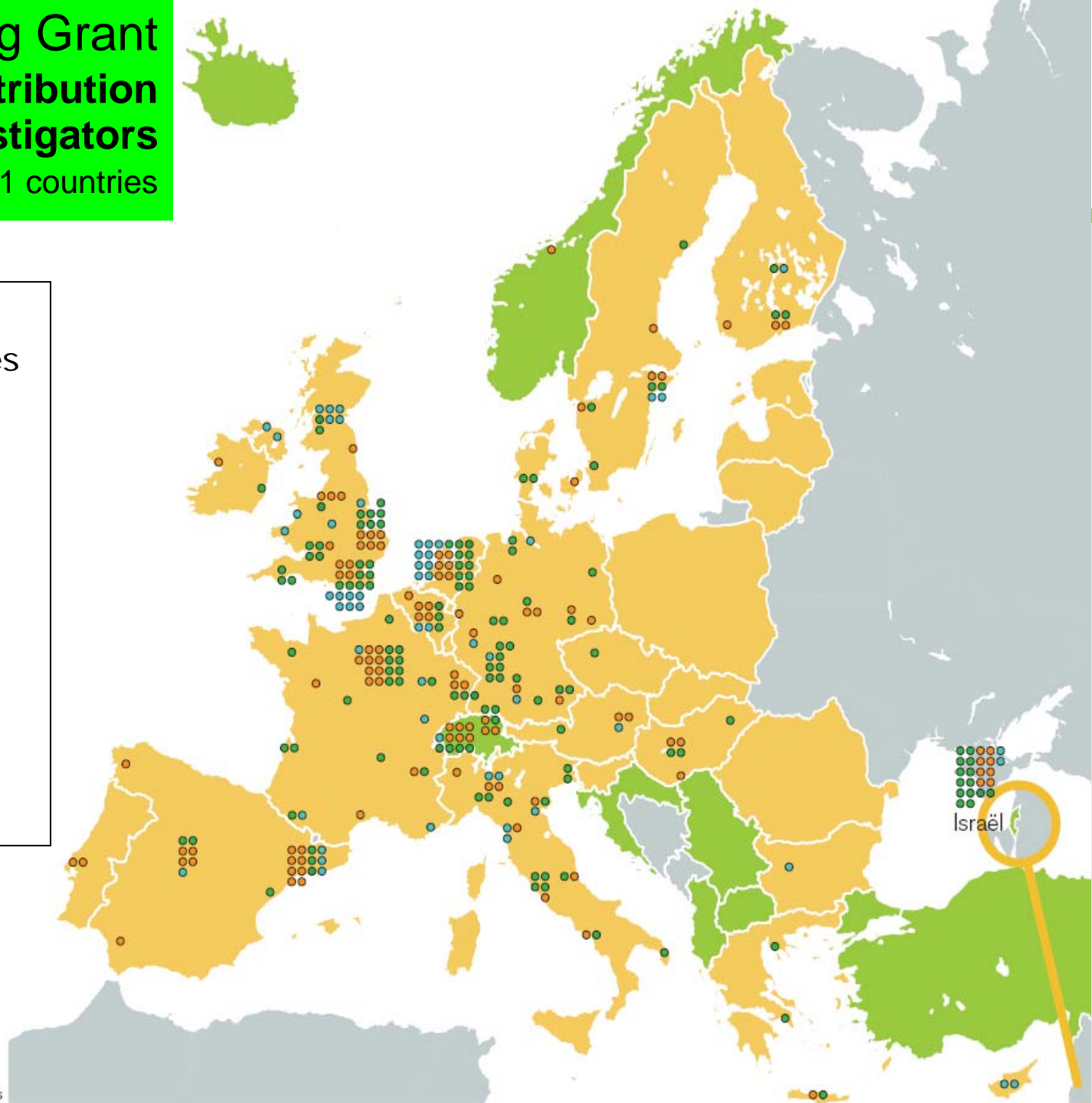
- Physical Sciences & Engineering
- Social Sciences & Humanities
- Life Sciences



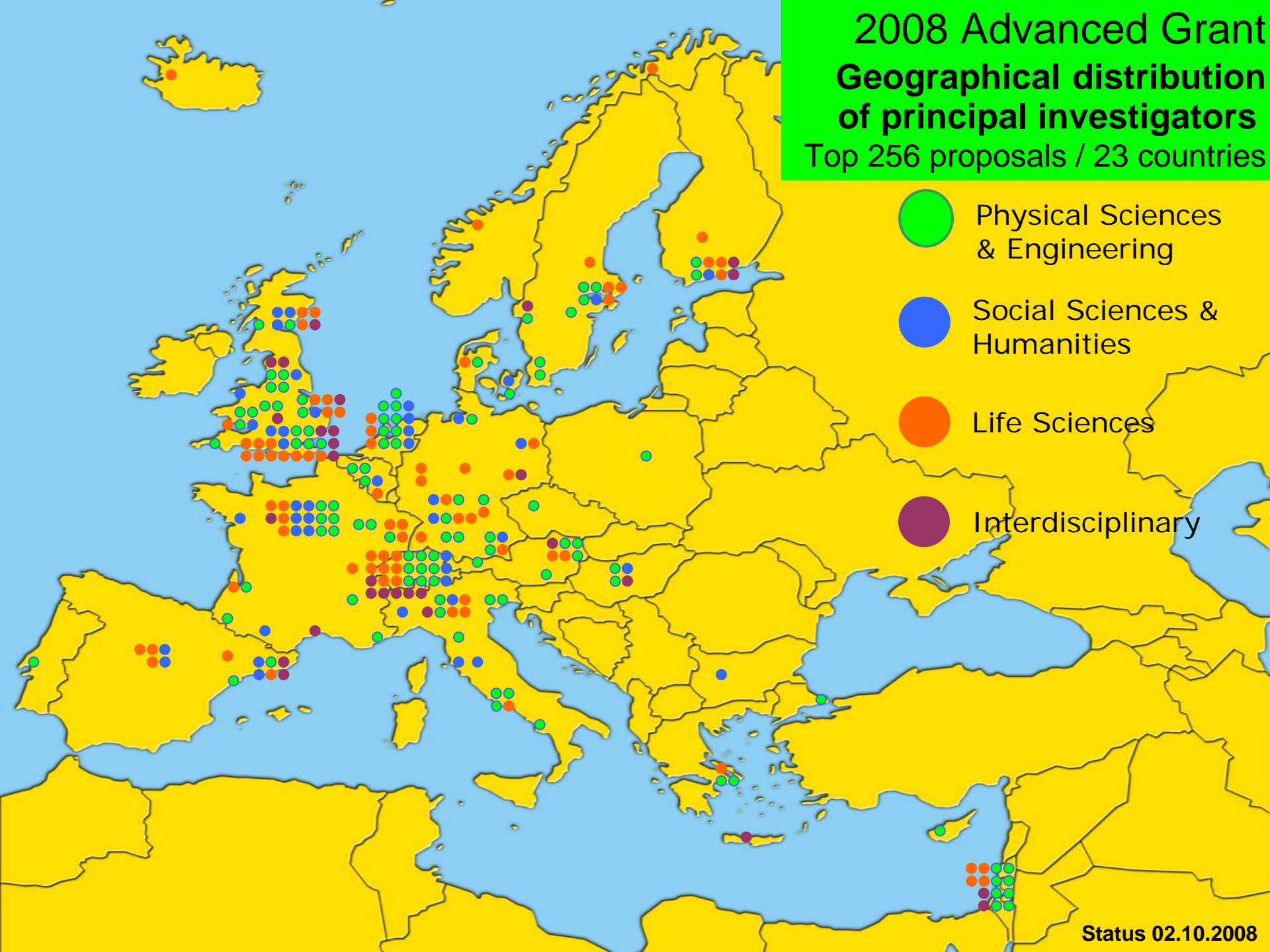
2007 Starting Grant Geographical distribution of principal investigators

Top 300 proposals / 21 countries

- Physical Sciences & Engineering
- Social Sciences & Humanities
- Life Sciences



2008 Advanced Grant Geographical distribution of principal investigators Top 256 proposals / 23 countries





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Challenge # 1



Large demand / limited funding / runners up?

	Submitted proposals	Funded proposals	Success rate	Fundable proposals of excellent quality, but beyond budget
StG	9167	304	3.3%	100-250
AdG	2167	~276 (*)	12.7%	110-350

(*) 256 by EU funds + 20 (est.) by AC funds

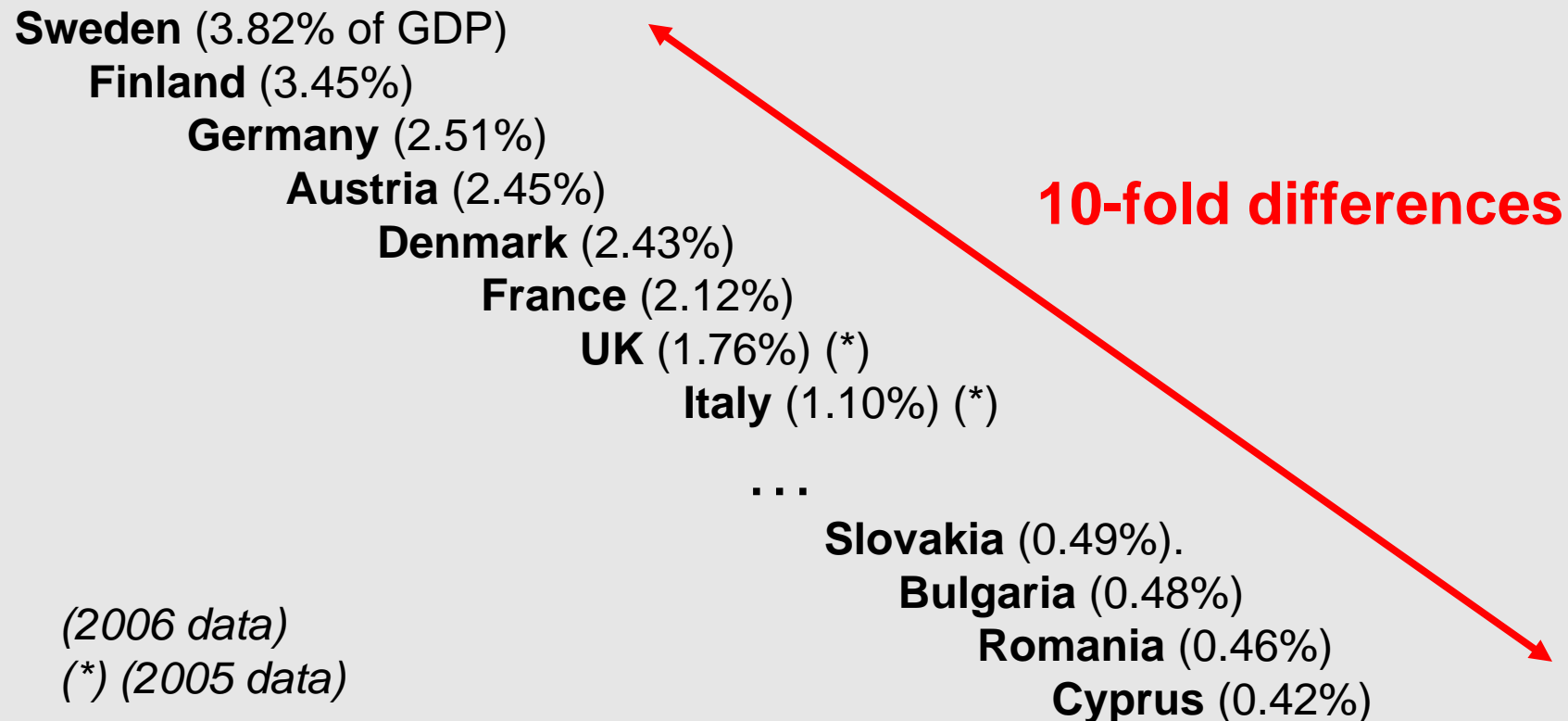


Challenge # 2

Low national funding in some countries

Europe must be competitive as a continent,
but also as individual member states

% GDP spent on R & D in EU27





Challenge # 3

European Research Council



Repatriating Europeans & recruiting non-Europeans

Many researchers willing to repatriate, but often, home countries do not offer attractive opportunities

Working conditions and salaries vary widely within EU/AC

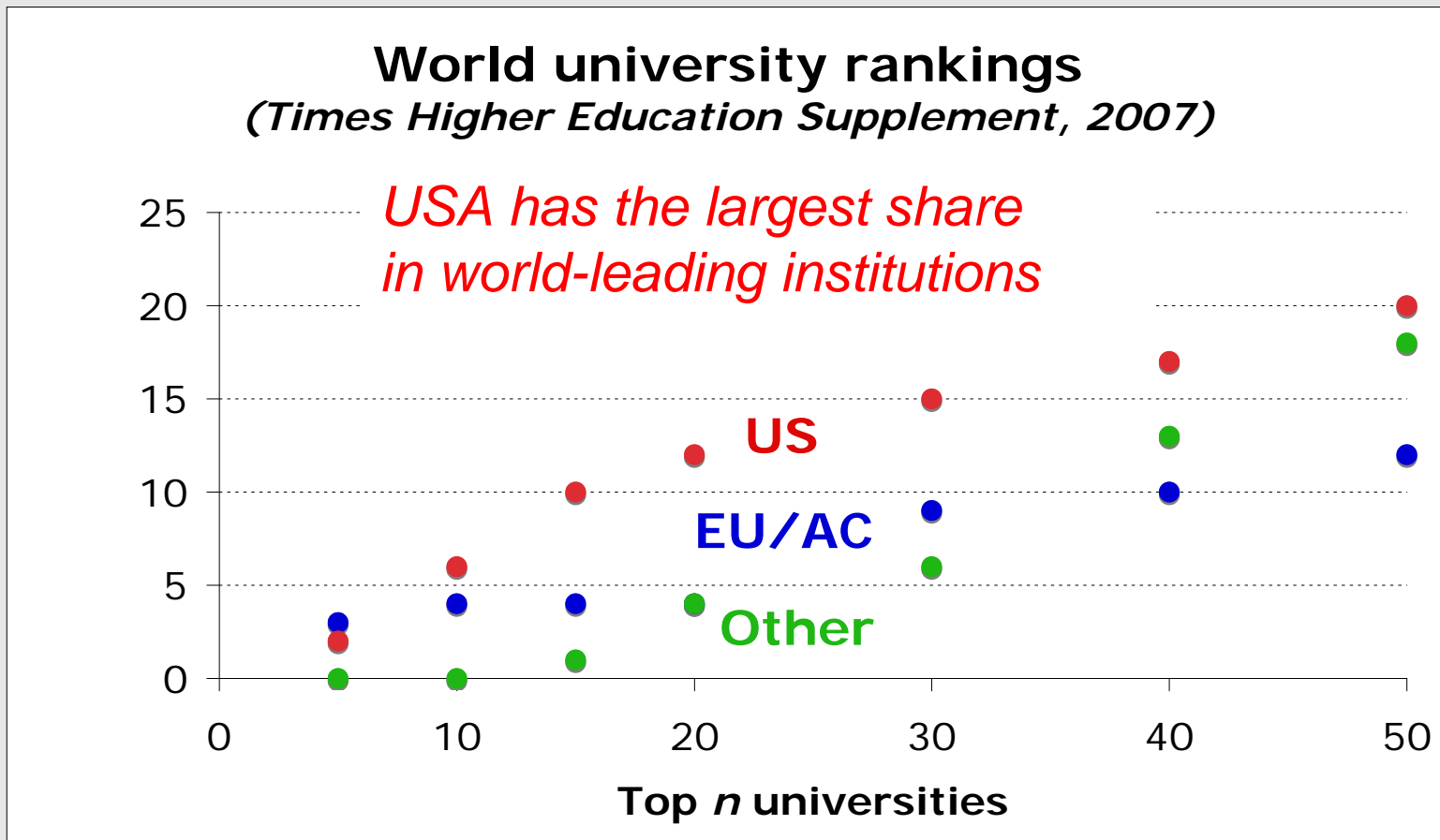
Individual countries need to do their part for making Europe competitive:
at the continental *and* national level



Challenge # 4

Ranking lists: Institutional reputation

There is much quality scattered in EU/AC, but only a limited number of world-leading institutions





External & Internal Challenges

The ERC has addressed effectively several external challenges.

The Commissioner, Director General and DIS have given us strong cooperation, support and autonomy.

We must now also tackle some challenges intrinsic to the present ERC structure.

Are fixed, general EC procedures compatible with the needed specific improvements in science policy?



Challenge # 5



Full operational autonomy for a world-leading ERC?

The EU has granted full autonomy to the ERC in matters of scientific strategy and design of the evaluation structure
&

The ScC is strongly focused on pursuit of excellence, simplifying and inventing new instruments as necessary

BUT

Some aspects of implementation are compromised by long-established “one-size-fits-all” EC legislation & procedures



Full success may depend on ERC autonomy,
not just in vision and strategy,
but also in implementation and ERC integration



Challenge # 5



Enhanced autonomy for a world-leading ERC

Continuous innovation is necessary,
in administration as well as in science

*“It is just as important
to make knowledge live and to keep it alive
as to solve specific problems.”*

(Albert Einstein, 1954)



Conclusions

- 1. ERC has succeeded in gaining European & worldwide recognition as a world-class research-funding agency*
- 2. ERC has made pioneering steps towards research innovation (e.g., interdisciplinarity) & attracted many very-high-quality proposals*
- 3. Success rate of applicants is limited by the current funding level*
- 4. Wide variations exist within EU/AC in excellence, research support, and institutional reputation*
- 5. Full success for ERC may require operational autonomy*