

ERC: from the 2007 “experience” to a more reasonable calls & the AdG 2010 call

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Unit A1: Support t the ERC Scientific Council

Ideas Programme Workshop
Athens, 20 January 2010



The European Research Council



ERC Calls 2007 – 2009: an overview

What is the ERC?

ERC is a new type of funding body in Europe to support excellence in future research open, individual-team designed competition

Legislation

- A Scientific Council with 22 members
- Support by the ERC Executive Agency
- A significant budget (1.1 billion €/year)
- Excellence is the only valid criterion

Strategy

- Support for the individual scientist – no networks!
- International peer-review
- No predetermined subjects (bottom-up)
- Support of frontier research in all fields of science and humanities

The ERC paradigm

- A radical shift in policy: pan-European competition to advance excellent ideas of individuals
- Support for excellent individual researchers to push the frontiers of science
- Support for the early independence of young researchers
- Industry participation is welcome

ERC offers a new partnership in Europe

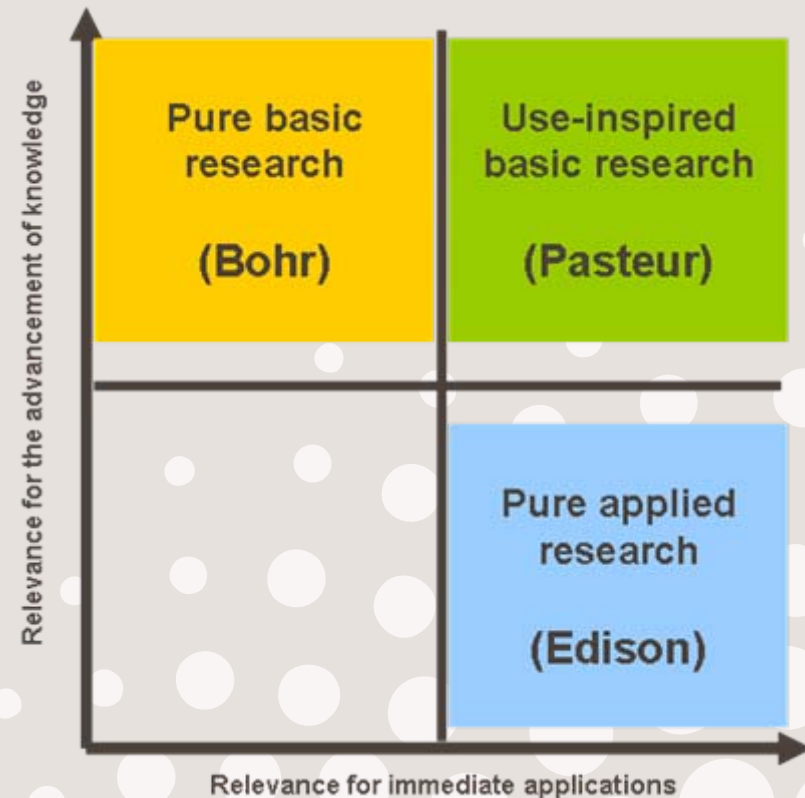


- From individual to institutional excellence: committed to scientific excellence while helping dynamic institutions that successfully attract high-level researchers
- Raising standards throughout Europe: ERC acts as a catalyst for reforms in research funding policies in Europe



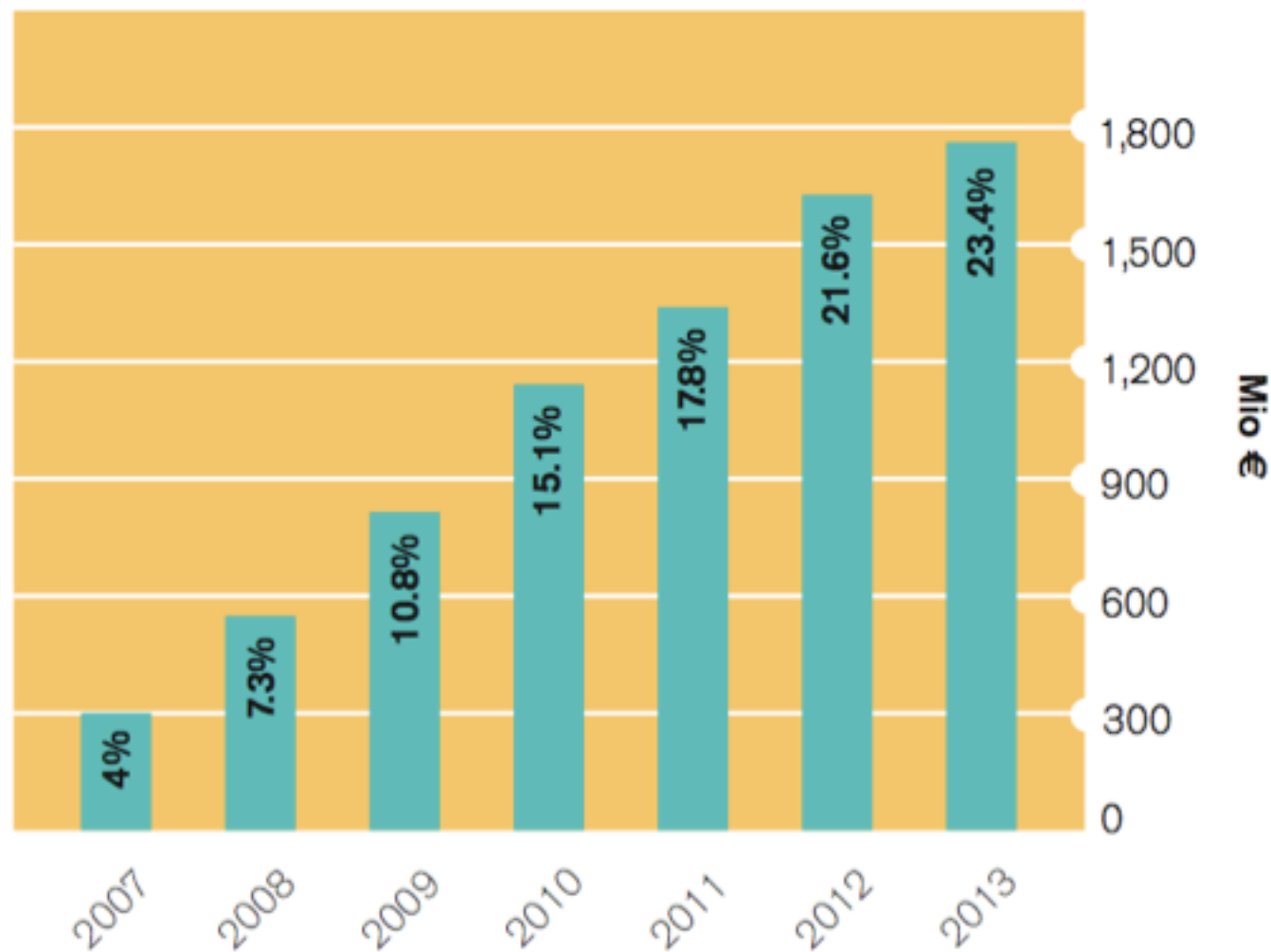
No distinction made between basic research and basic technology

- “Frontier research” responds to the blurring boundaries between basic and applied research
- “Frontier technology” emerges often in the course of basic research
- If picked up, frontier technologies travel well: across research fields and out of the lab





ERC budget increases by € 250 M€ / year





ERC budget € 1 billion/year (on average)

ERC budget

Averages to **€ 1 billion/year**



Less than 0.5% of R&D spending
In Europe



Compare with US institutions

NSF → **\$ 6.85 billion** (2009)

NIH → **\$ 30.5 billion** (2009)

Annual R&D budget



The ERC keeps its strategy simple, flexible and focused!

- **“Starting Grant”**: Support young(*) researchers (*) 2-10 yrs post-PhD
- **“Advanced Grant”**: Support leading(*) scientists (*) in past 10 yrs
- Promote excellence irrespective of nationality, age, or field
- Trust the dynamic of science
 - The ERC funds the individual PI (and his/her individual team)
 - Grants are portable
- Encourage interdisciplinarity by mainstreaming interdisciplinary projects

The ERC paradigm

- Frontier research based solely on scientific excellence 
 - researcher
 - proposal
- Open competition of outstanding individuals of all nationalities and ages willing to move, stay and do **research** in Europe
 - (*) minimum 50% time in Europe, 30% time on project
 - Europe = 39 countries of European Research Area (ERA)
- Generous funding for ambitious projects (up to €2 mil / €3.5 mil)
- No quotas per country/region, gender, etc.
- All fields supported: 3 Domains (Life Sciences, Physical Sciences & Engineering, Social Sciences & Engineering)

Two complementary funding schemes

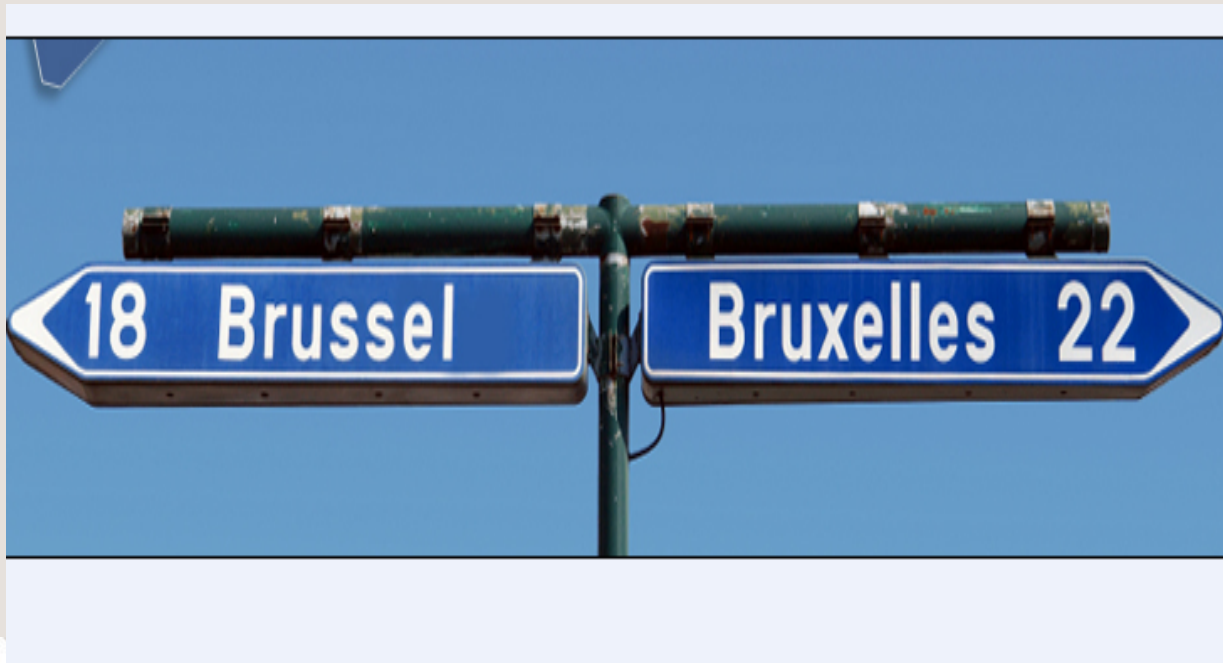
ERC Starting Grant (StG): attract & retain the next generation of independent research leaders - **up to €2.0 Mio for 5 years**

- Support researchers at the start of their independent research career and **establishing or consolidating their own independent research team** (or research programme)
- Provide a structure for **transition** from working under a supervisor to an independent research leader

ERC Advanced Grant (AdG): attract & reward established independent research leaders - **up to €3.5 Mio for 5 years**

- Designed to **support excellent investigator-initiated frontier research projects** by established independent research leaders
- Targeting researchers who have already established their independence as team leaders and are **exceptional leaders in terms of significance of their research achievements** (in the last 10 years)

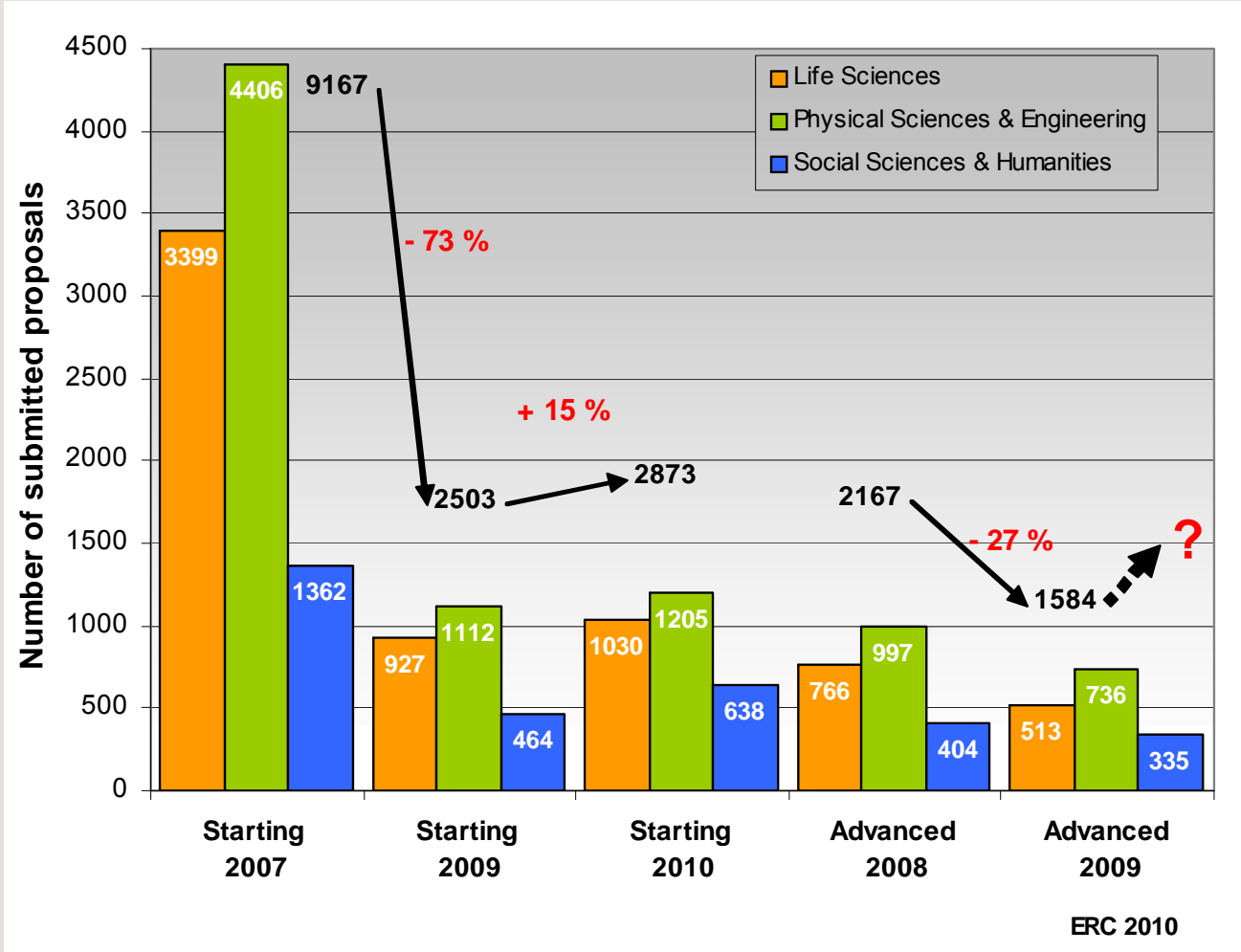
Consolidation and development of the current schemes



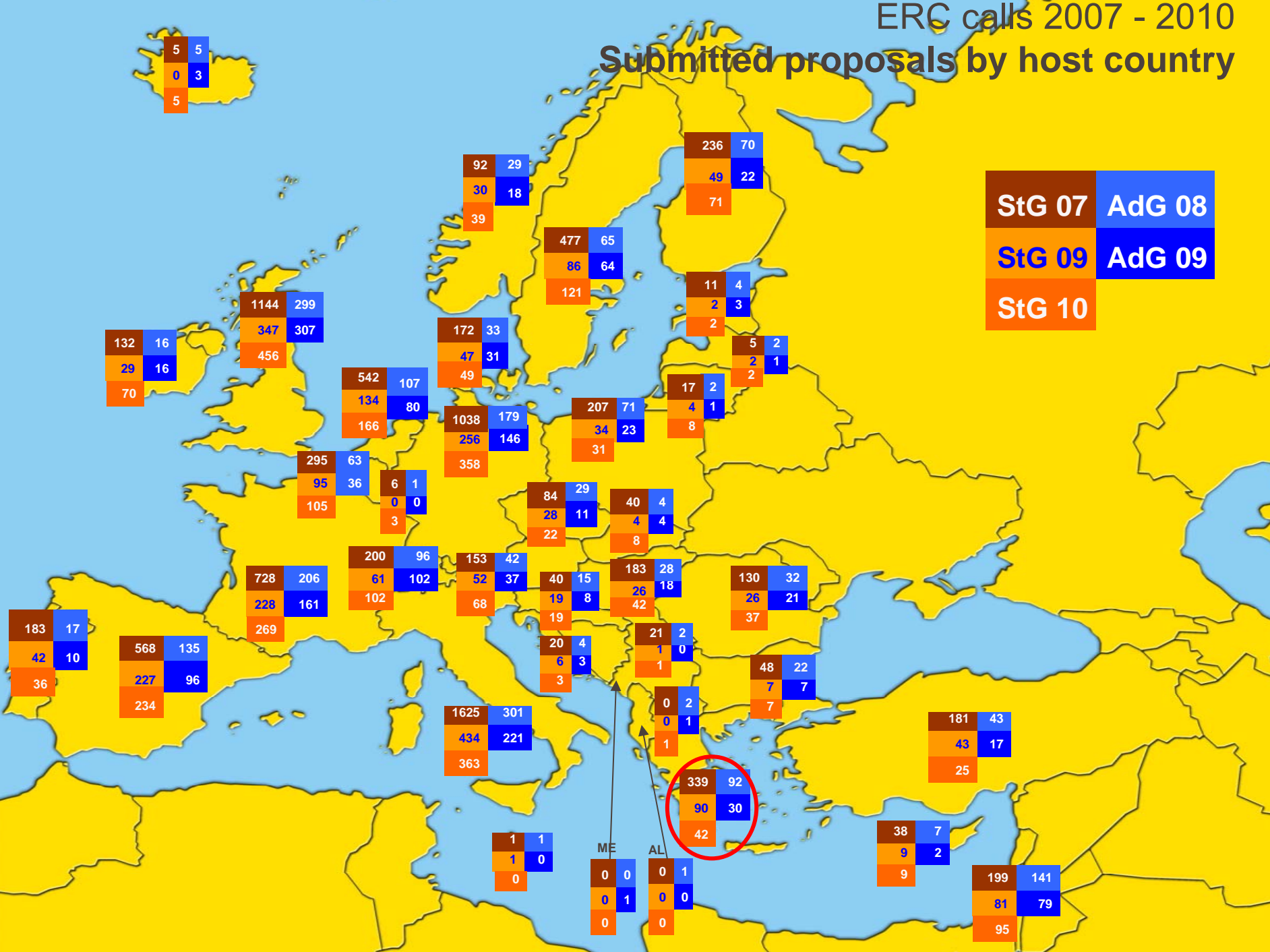


Submitted proposals by domain

Number of proposals

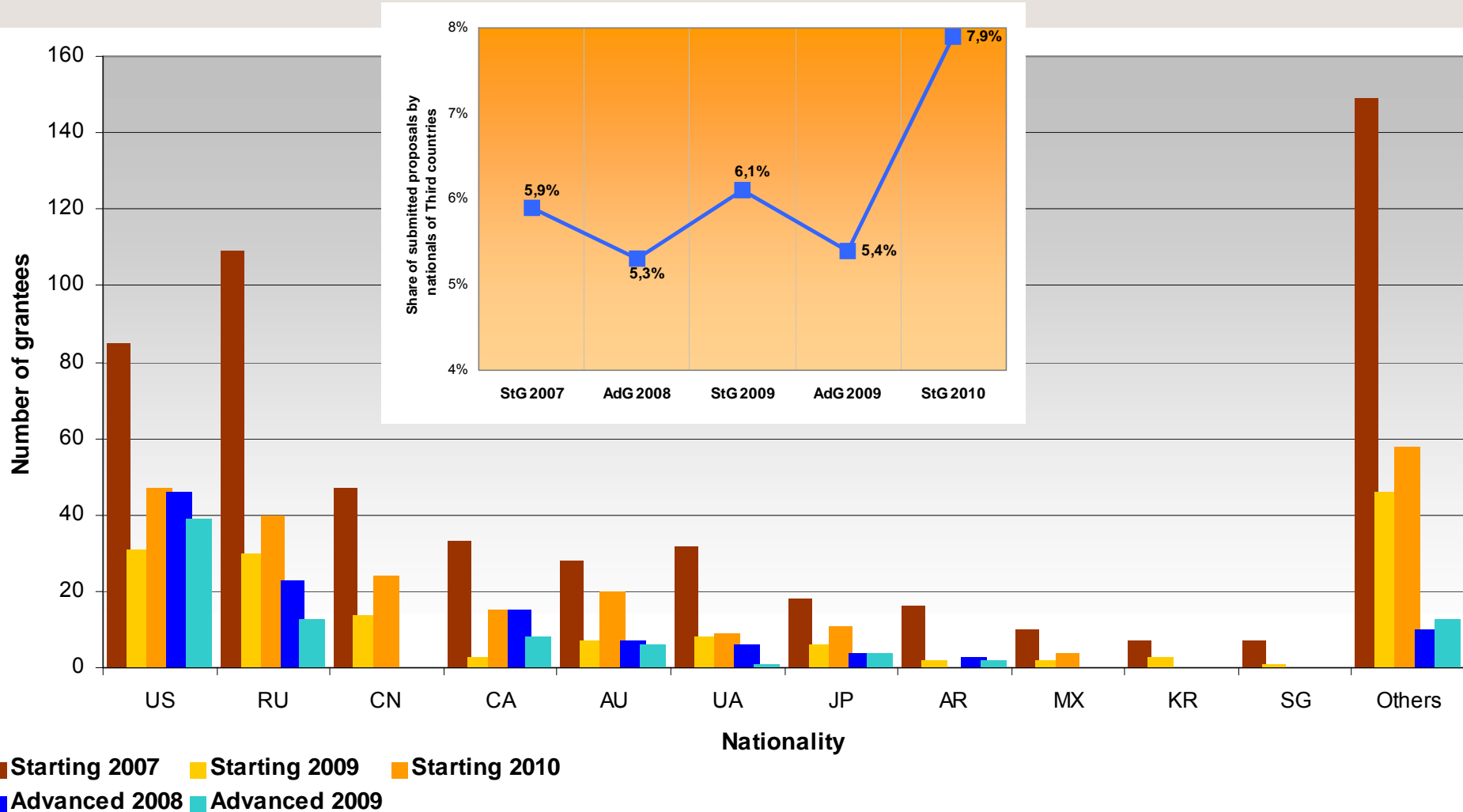


Submitted proposals by host country



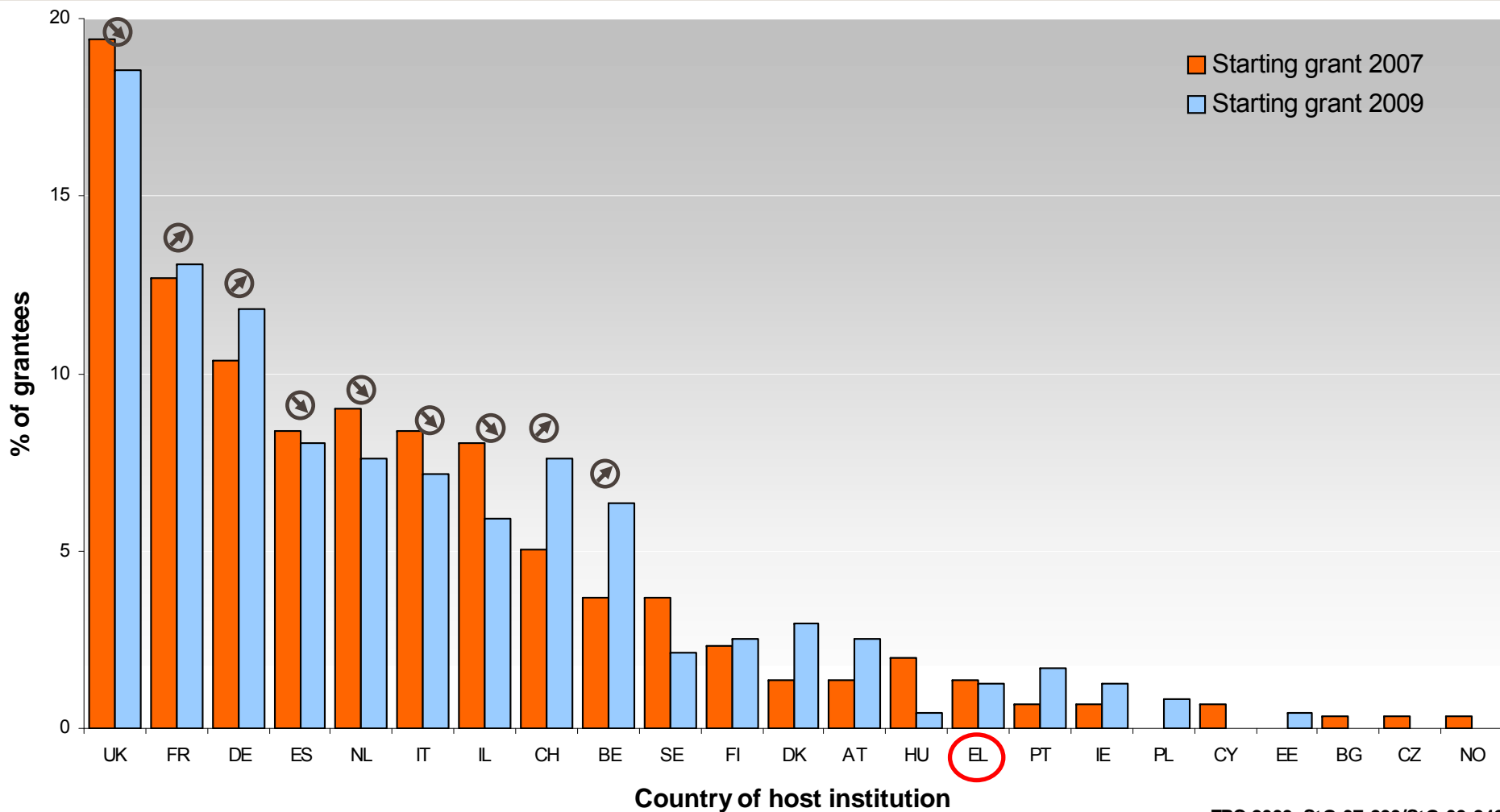


Submitted proposals from researchers with nationality from a Third country



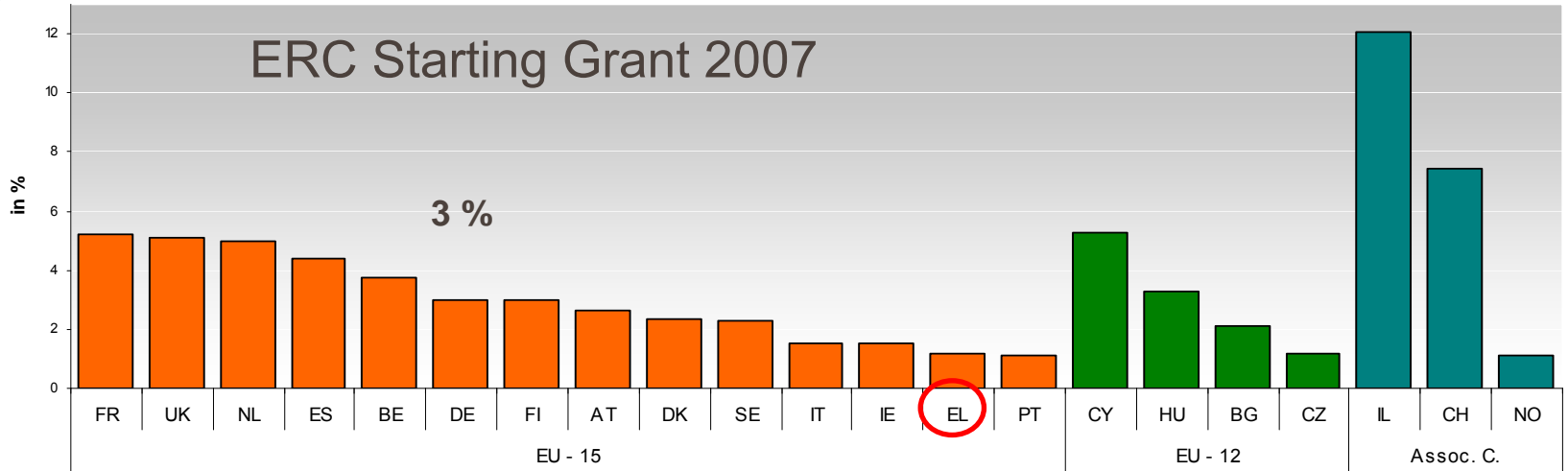


Share of selected proposals by country of host institution

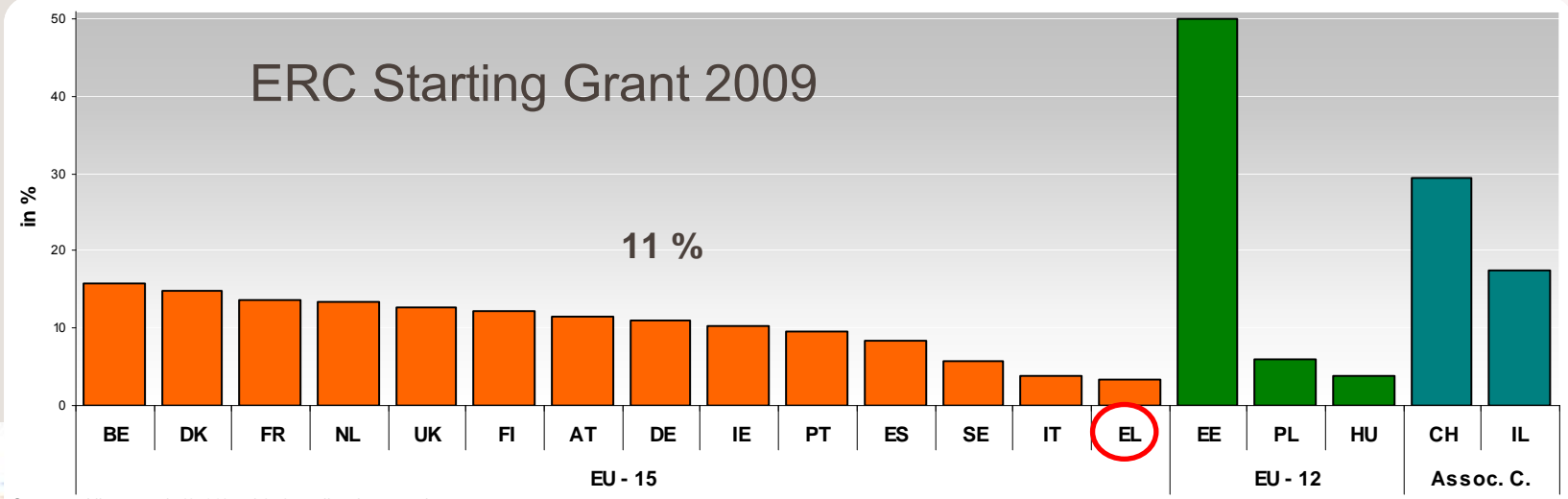




Success rate by country of host institution (i.e. ratio submitted – selected proposals)



Source: All submitted proposals (9 167) and 299 selected projects

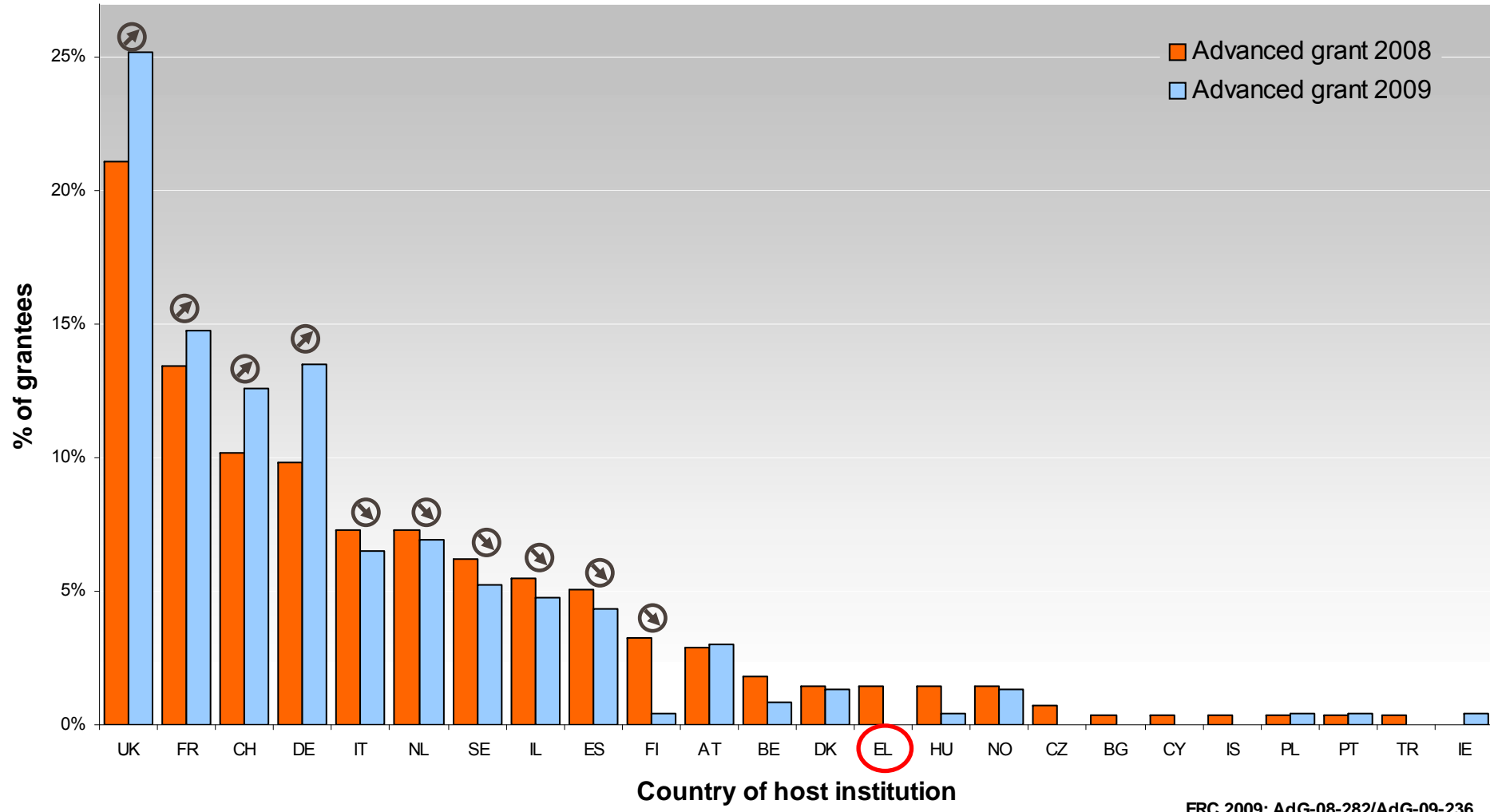


Source: All proposals (2503) and 242 top listed proposals



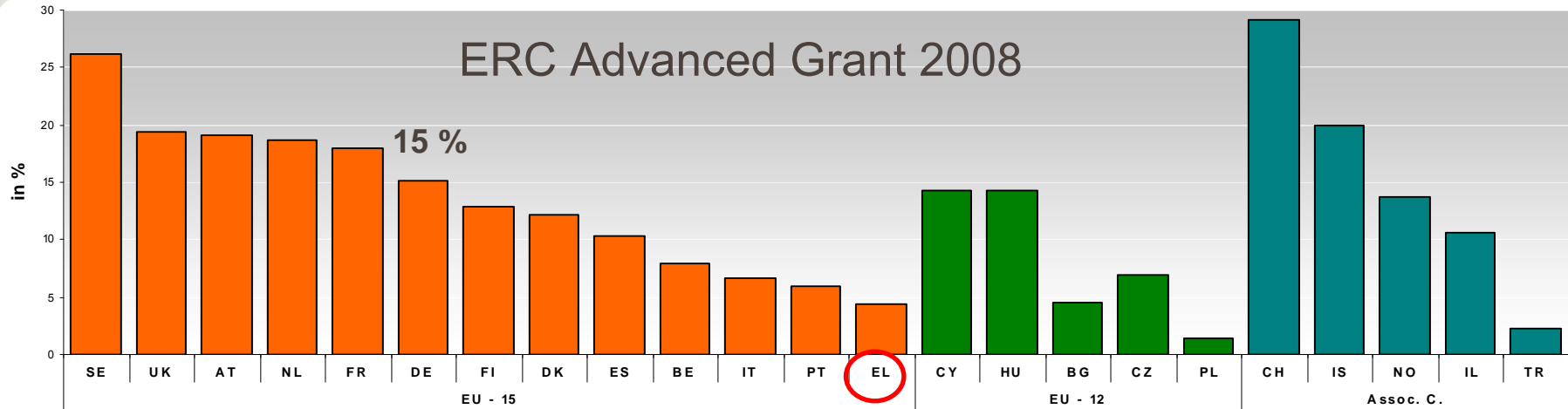


Share of selected proposals by country of host institution

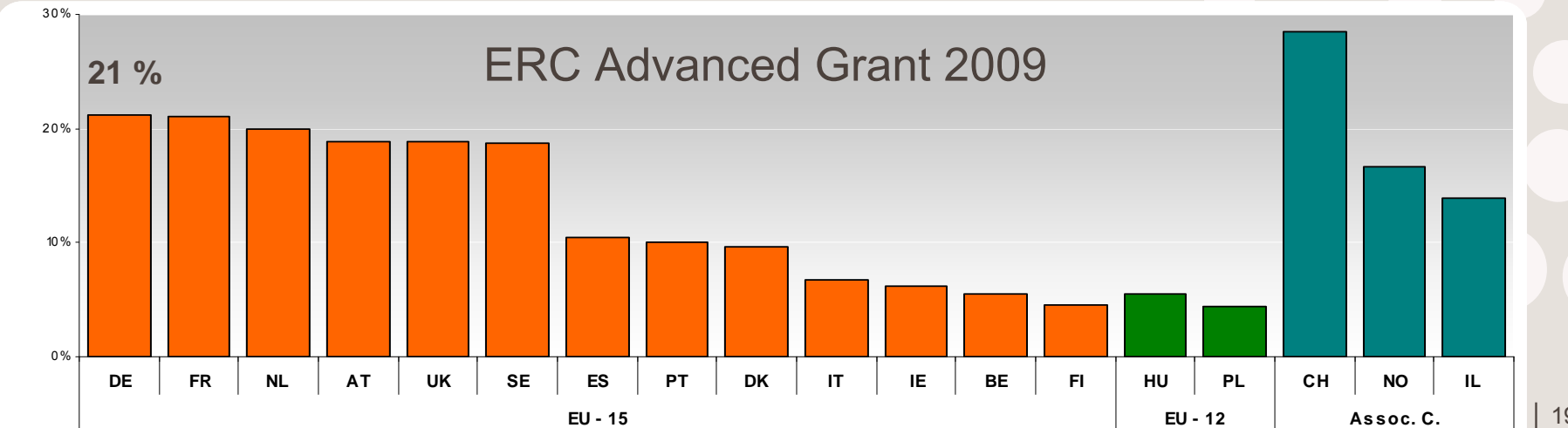




Success rate by country of host institution (i.e. ratio submitted – selected proposals)



Source: All submitted proposals (2167) and 282 selected projects



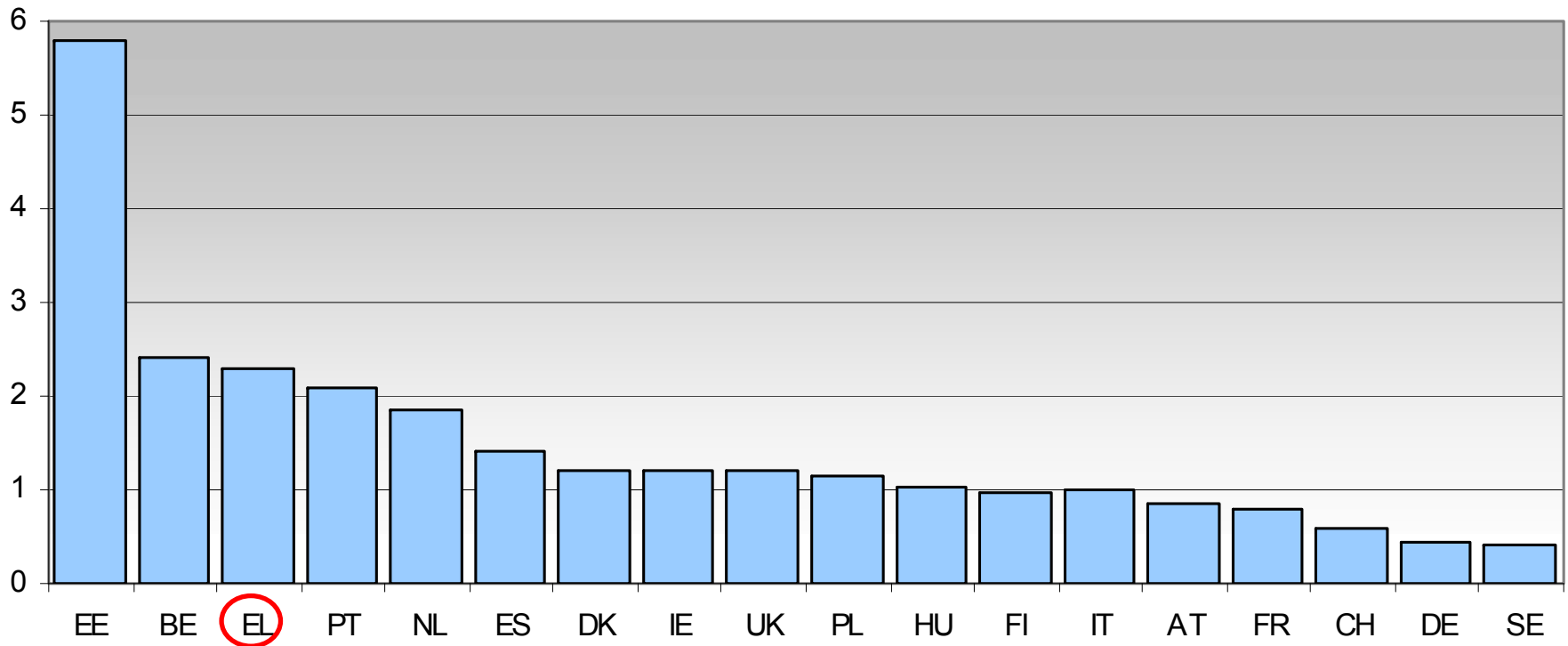
Source: All proposals (1584) and 236 top listed proposals



Number of projects vs. R&D intensity

242 StG 09 proposals

Proposals per billion GDP on R&D*



Source: Eurostat, Reference year 2007, or latest year available, Missing data: IL

* Total intramural R&D expenditure (GERD) in billion Euro

ERC 2010: StG-09-242

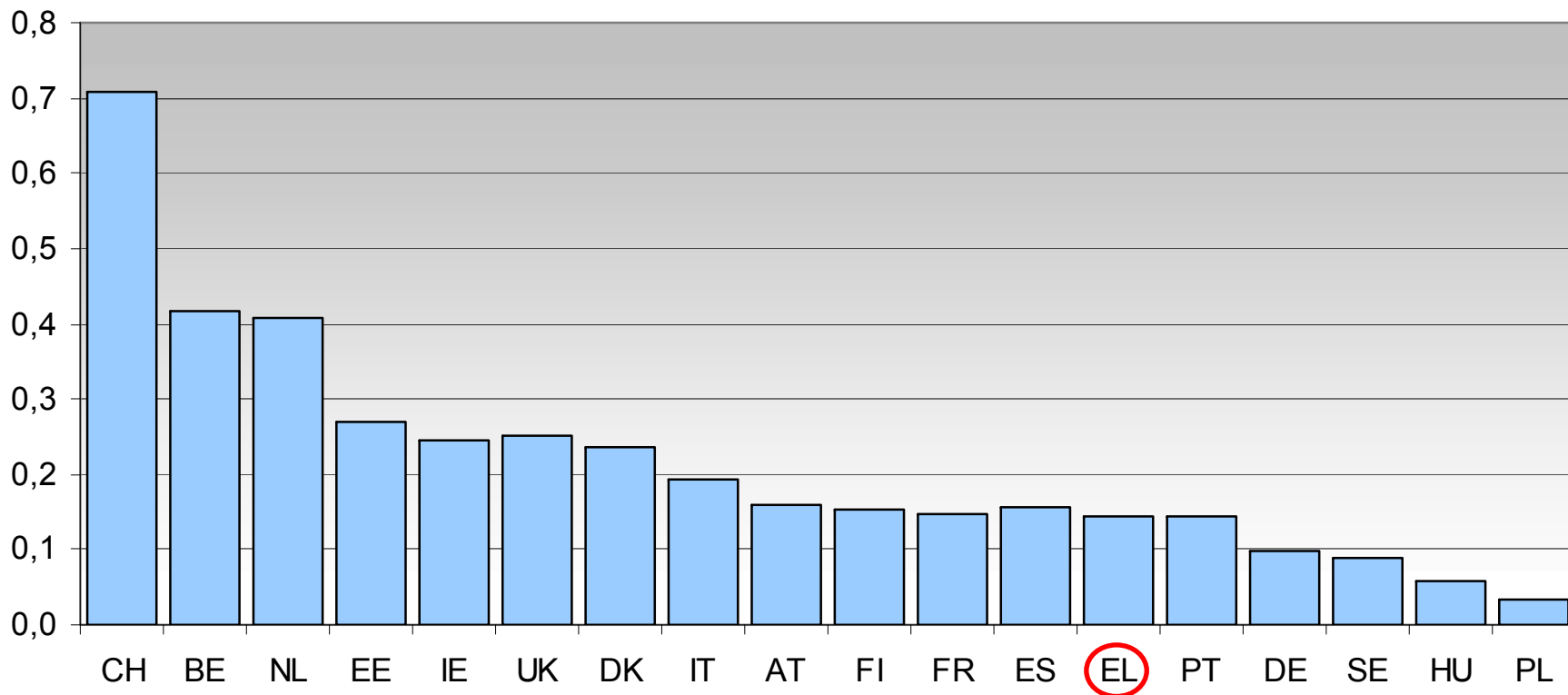




Number of projects vs. researchers population

242 StG 09 proposals

Grants per 1000 researchers (FTE)



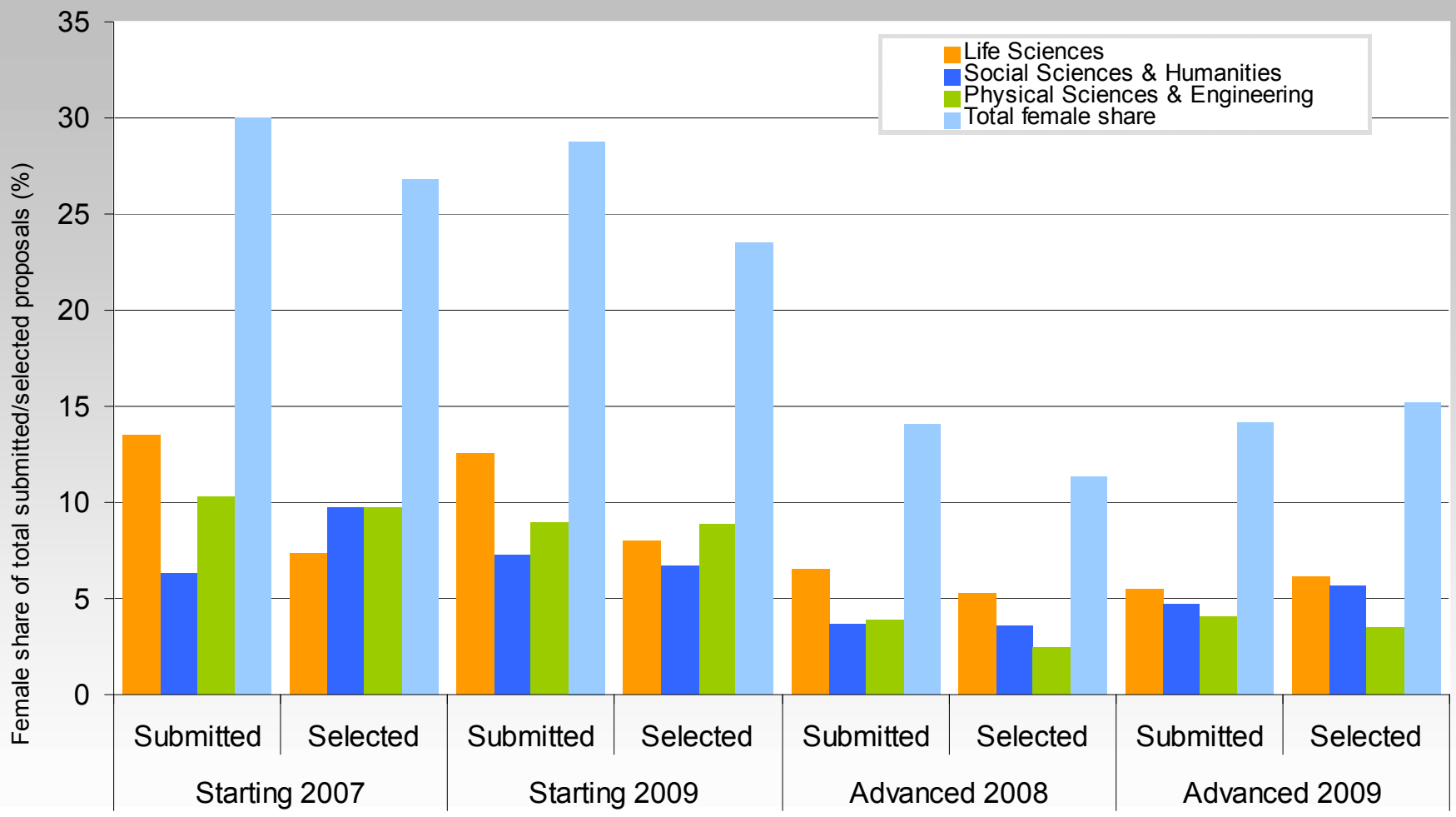
Source: Eurostat, Reference year 2006/2007, or latest year available, Missing data: IL ;
 FTE (Full-time equivalent) corresponds to one year's work by one person

ERC 2010: StG-09-242







Submitted and selected proposals by female applicants
 in % of grantees

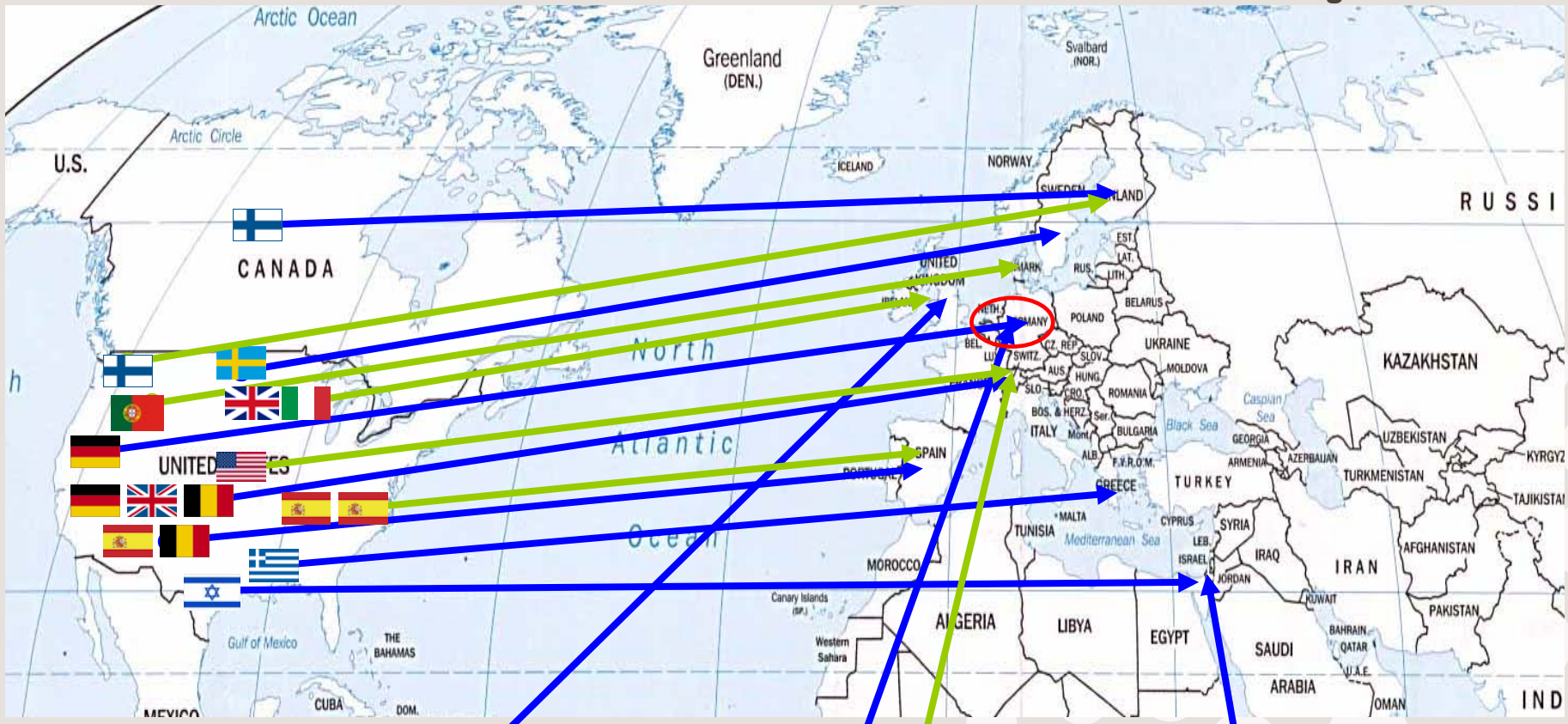


Number of submitted (selected) proposals: StG 2007 9167 (299), StG 2009 2503 (238), AdG 2008 2167 (282) AdG 2009 1583 (230 on main list)



Selected projects: Repatriation and Recruitment

 Starting Grant 2007
 Starting Grant 2009



Argentina

Ideas Programme workshop
Athens, 20/10/2016

Japan

Australia



ERC Starting & Advanced grant calls 2007 - 2010



Comparison of the TOP European institutions

ERC StG 2007		ERC AdG 2008		ERC StG 2009	
no. grants		no. grants		no. grants	
17	CNRS	11	EPF Lausanne	7	CNRS
9	Max-Planck-Society	10	Centre National de Recherche Scientifique	7	EPF Lausanne
8	University of Cambridge	8	Weizmann Institute of Science	7	Max-Planck-Society
7	Technion Israel Institute of Technology	7	Univ of Oxford	6	Univ Leuven
6	Imperial College London	7	Imperial College London	6	Univ of Oxford
6	Hebrew Univ Jerusalem	6	ETH Zürich	5	Hebrew Univ Jerusalem
6	Consiglio Nazionale delle Ricerche	5	Univ of Edinburgh	5	Uni Gent
5	Weizmann Institute of Science	5	Univ of Cambridge	4	Univ of Cambridge
5	Univ Oxford	5	Univ Helsinki	4	University College London
5	University College London	4	Univ Genève	4	Uni Bristol
5	Free Univ Amsterdam	4	University College London	3	Commissariat à l'énergie atomique
4	Consejo Superior de Investigaciones Cientificas	3	Helsinki Univ of Technology	3	ETH Zürich
4	Univ Leuven	3	Univ of Tel Aviv	3	Imperial College London
4	Univ Heidelberg	3	Univ of Nijmegen	3	IN National de la Santé et de la Recherche Médicale
4	IN National de la Santé et de la Recherche Médicale	3	Max-Planck-Society	3	Uni Munich
3	Royal Netherlands Academy of Arts and Sciences	3	IN de Recherche en Informatique et en Automatique	3	Helsinki Univ of Technology
3	Univ Tel Aviv	3	Ecole des hautes études en sciences sociales	3	Univ of Utrecht
3	Univ Stockholm	3	Commissariat à l'énergie atomique	3	Weizmann Institute of Science
3	Univ Amsterdam	3	Hebrew Univ of Jerusalem		
3	Univ Aarhus	3	Univ of Utrecht		
3	Univ Leiden	3	Politecnico di Milano		
3	Medical Research Council	3	Univ of Lund		
3	Fundació Privada Centre de Regulació Genòmica	3	Karolinska Institutet		
3	Spanish National Cancer Centre				

1st call

2nd call

3rd call

ERC AdG 2009	
no. grants	
9	Centre National de Recherche Scientifique
9	ETH Zürich
9	Univ of Cambridge
7	University College London
7	Max-Planck-Society
6	University of Zürich
5	Univ of Oxford
5	Hebrew Univ of Jerusalem
5	Uni Bristol
4	EPF Lausanne
4	Weizmann Institute of Science
4	Imperial College London
4	IN National de la Santé et de la Recherche Médicale
4	Uni Munich
3	Univ of Edinburgh
3	Univ Genève
3	Univ Amsterdam
3	Univ Bergen
3	Univ Uppsala
3	Cancer Research UK

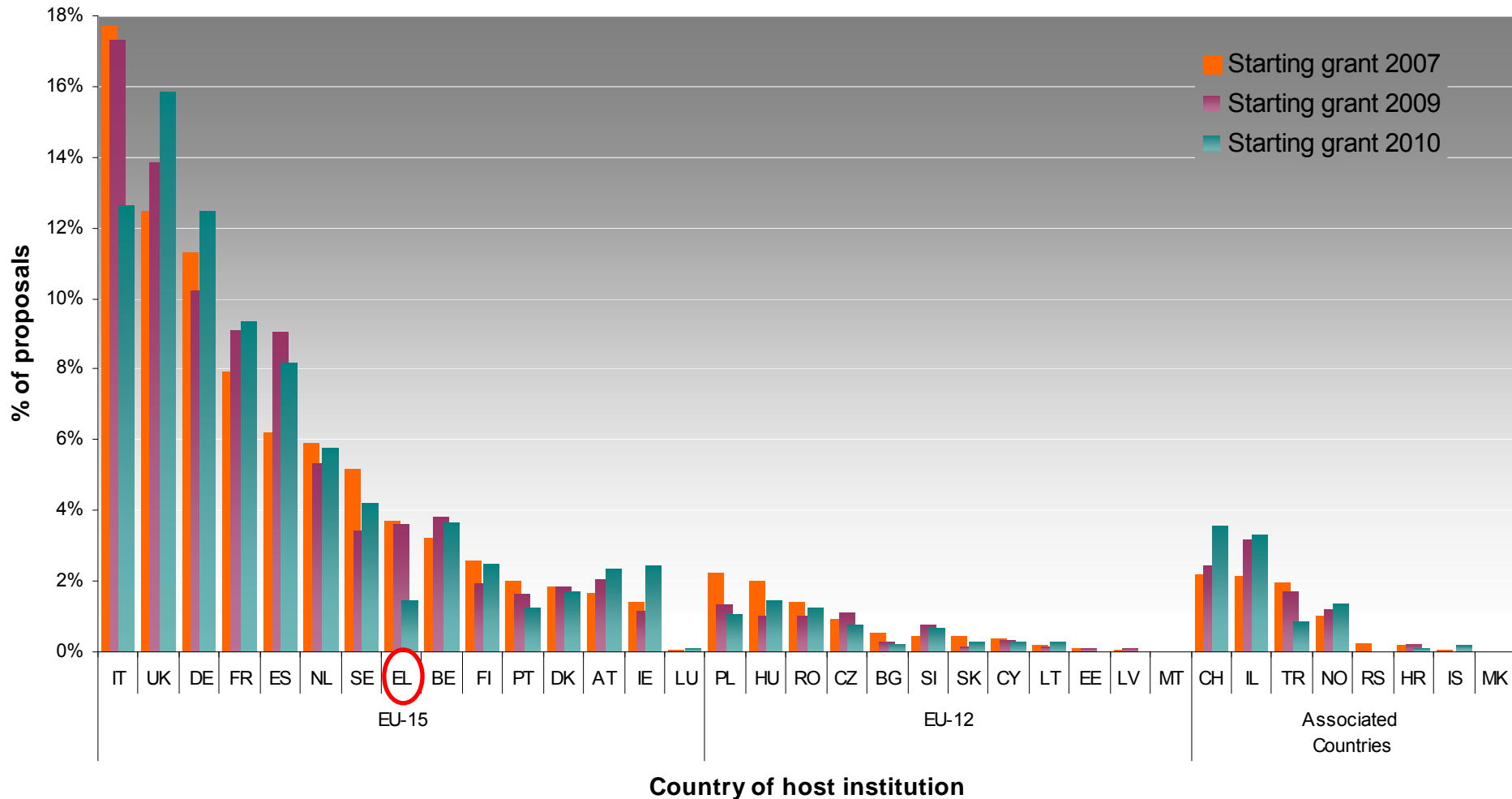
4th call



ERC Starting Grant calls 2007, 2009 + 2010

Applicants by country of host institution

Source: 9167, 2503, 2873 submitted proposals



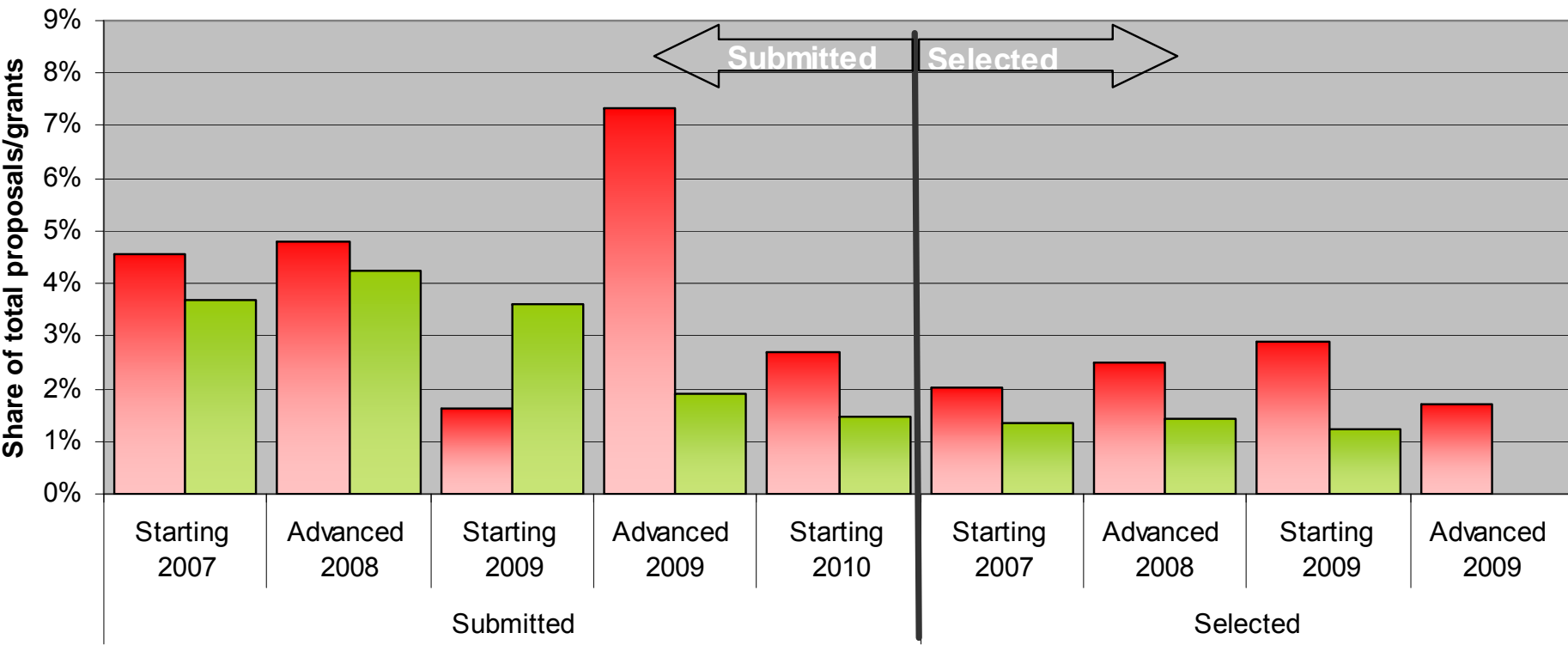


Share of submitted and selected proposals by Greek nationals and Greek host institutions



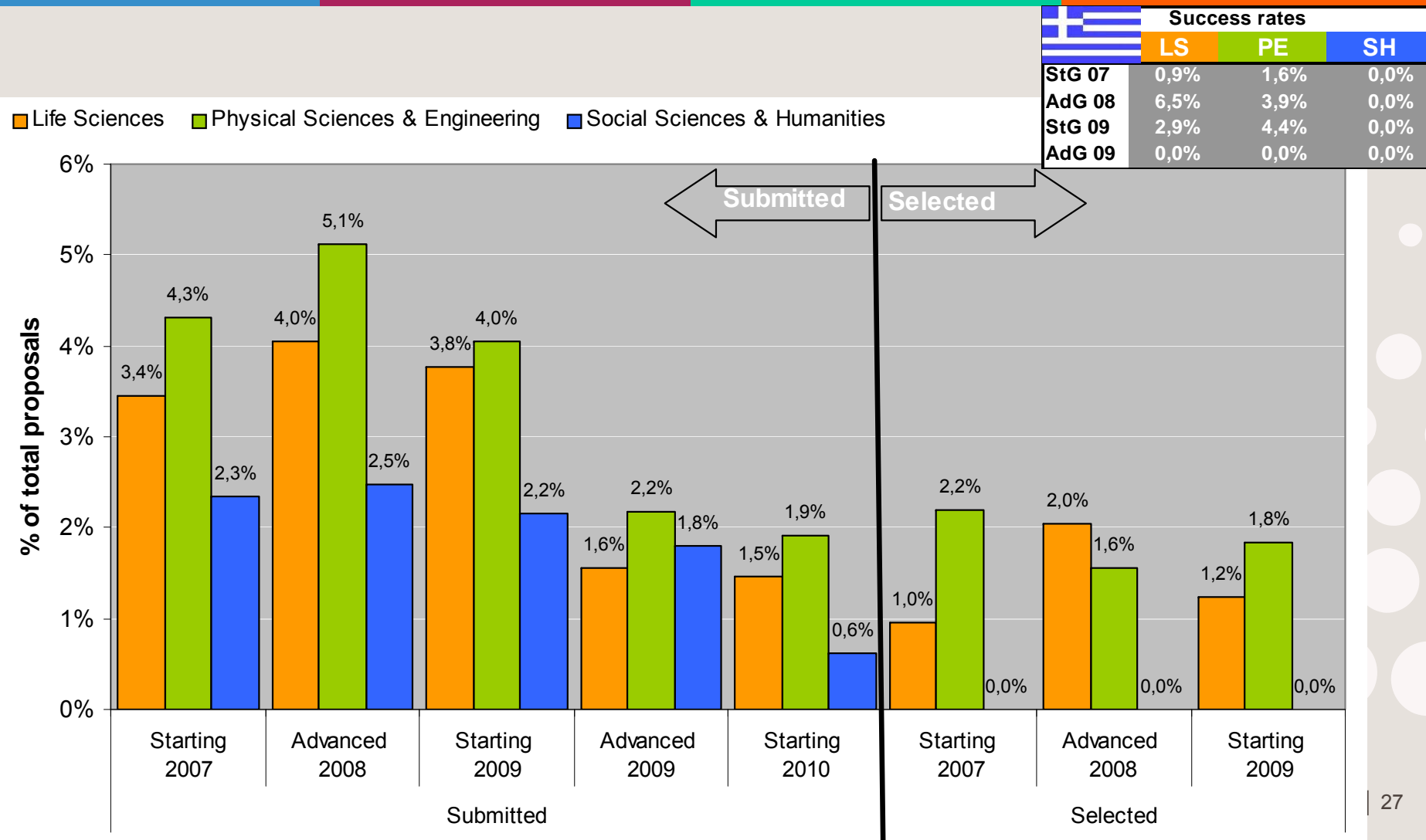
	Success rates			
	StG 07	AdG 08	StG 09	AdG 09
EL nationals	1,4%	6,7%	17,1%	3,4%
EL hosts	1,2%	4,3%	3,3%	0,0%
Calls: Average success	3,3%	9,7%	13,0%	15,0%

█ Greek Nationals █ Greek host institutions



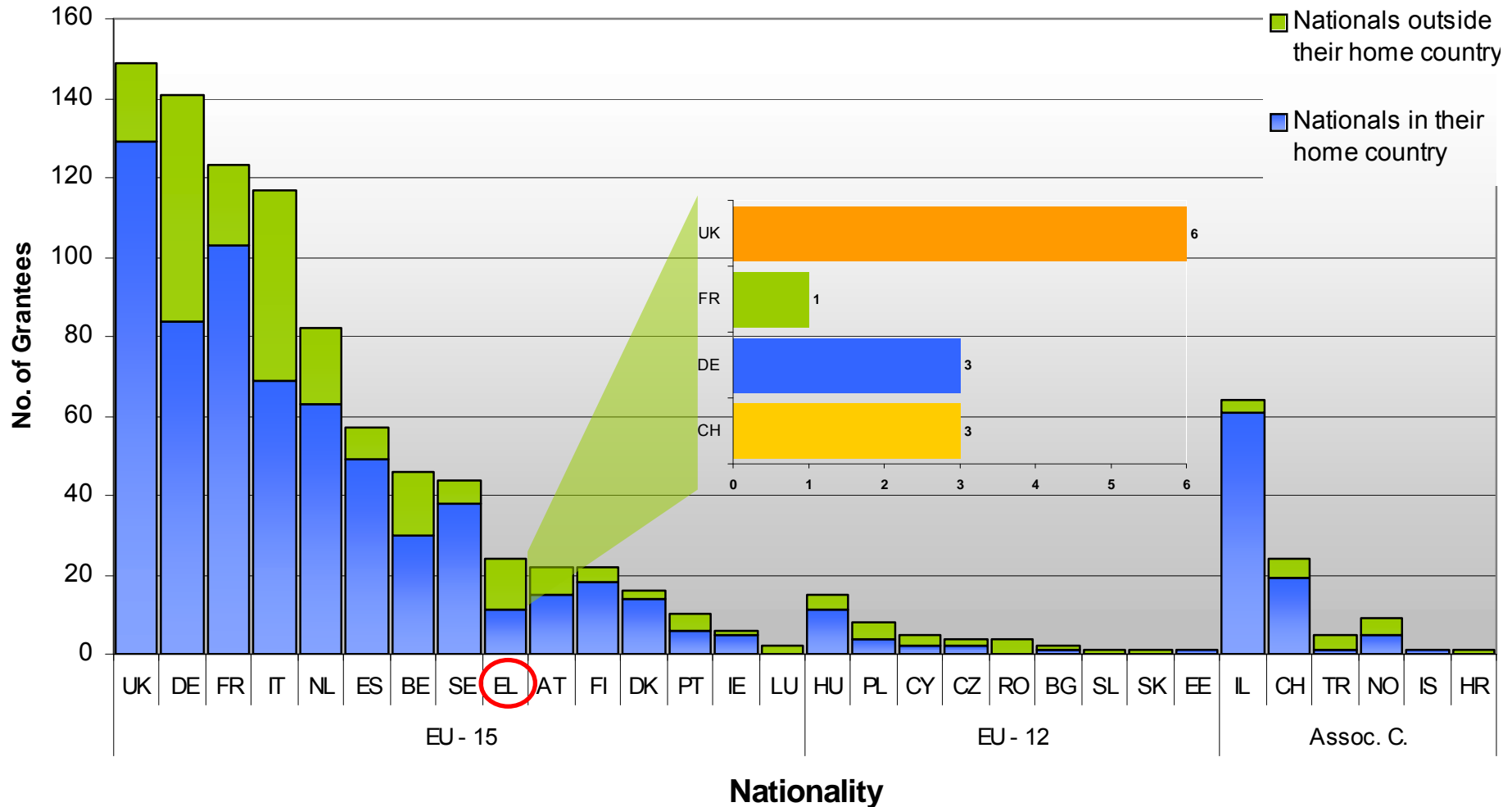


Share of submitted and selected proposals by Greek host institutions



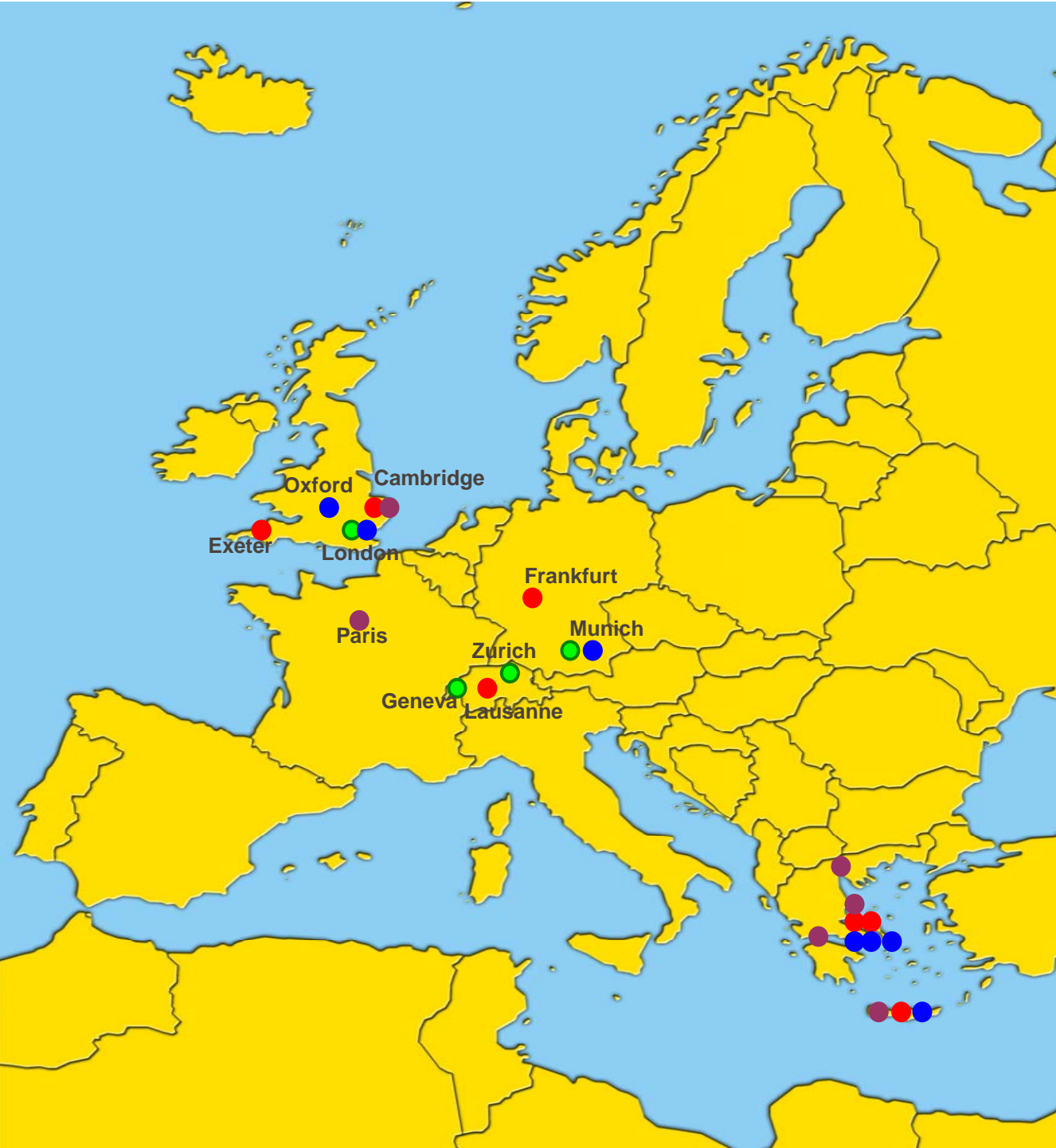


Nationality and host country



ERC StG 2007, StG 2009
AdG 2008, AdG 2009


Host institutions in Greece and Greek nationals in other European countries



- Starting grant call 2007
- Advanced grant call 2008
- Starting grant 2009
- Advanced grant call 2009

Attracting applicants

NL | EN



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- ⇒ Companies

An ERC position at Ghent University?

Are you an outstanding researcher with an innovative research idea?
Why not choose Ghent University as hosting institution for the establishment of your research team?

Ghent University wants to actively promote its participation in the [IDE45-programme](#) of the Seventh Framework Programme (FP7 – 2007-2013).

This programme, managed by the [European Research Council \(ERC\)](#) provides a distinctive funding mechanism devoted to scientific excellence for all scientific fields.

Funding is provided for the implementation of groundbreaking research for a period of 5 years. Two types of Grants are available:

- [ERC Starting Grants](#) for young postdocs (3-8 years research experience)
- [ERC Advanced Grants](#) for established senior researchers

What can Ghent University offer you?


For applicants:

- Support in the proposal writing stage: screening and review of proposal in cooperation with external consultants

For successful ERC-candidates:

- A long-term research professorship
- For a period of four years, an additional PhD-student with supporting bench fee
- Full administrative support by the European Office of Ghent University

Helpdesk: EU-col@UGent.be



Read more...

WP 2010, structure

- a) Stable and complementary grant schemes: StG, AdG.**
- Investigator driven (“bottom-up”) actions.
 - Highest quality research at the frontiers of knowledge with particular encouragement of interdisciplinarity.
 - Evaluation of proposals on the basis of the sole criterion of excellence.
 - Targeting investigators at two different career stages.
 - Multiple, sliding stage opportunities over 7 years of FP7.
 - Continuously increasing budget.
- b) Funding.**
- Calls’ cumulative budget surpassing for the first time the €1 bn mark!
 - Complementing Member States’ activities towards full spectrum coverage (SP Ideas-consistent).
- c) Accompanying measures/actions (CSA) for the timely monitoring/assessment of the ERC activities.**

WP 2010, general adjustments

1. Significant budgetary strengthening of StG (StG/AdG ca.1/1). **Strategic adjustment.**
2. Measures to increase attractiveness of EU and associated countries to researchers from third countries. **We are not there yet!**
3. Further addressing of justified research career gaps and/or unconventional research career paths (especially for women researchers). **We are not there yet!**
4. Slight simplification of proposal structure (no *self-evaluation*). **Feedback from applicants/panels.**
5. Clearer indications of expected commitment to the ERC-funded activity by the PI of a StG and AdG project (previously only specified in the Guide for Applicants). **A lot of questions from potential applicants/"granting experience", make expectations clear.**

WP 2010, AdG specific adjustments

- No change in content (high quality applications by excellent established PIs).
- Re-application rule (from ERC-2010-AdG and on): every other call unless proposal evaluated over quality threshold at step-2 but not funded. **AdG have more chances.**
- Re-application rule that links applicants of either ERC-2008-AdG or ERC-2009-AdG calls with the ERC-2010-AdG still holds. **Legal obligation.**

WP 2010, other elements

- a) **Complementary actions/activities/studies via CSAs (call for tenders in 2010, expert groups).**

- b) **Support to chair and vice chairs of Scientific Council via CSA.**

Timetable 2009-10

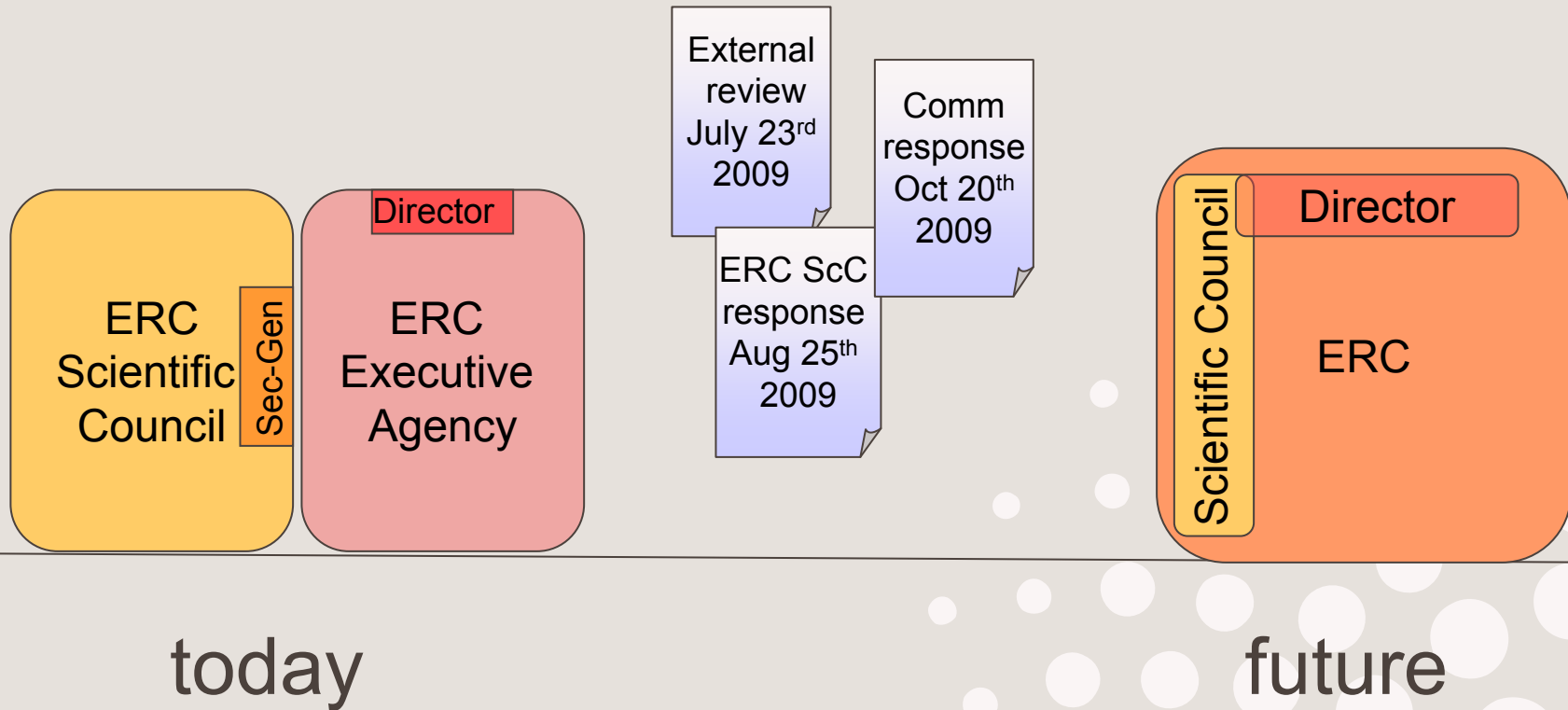
<p>WP publication (adoption by the Commission):</p>	<p>29 July 2009</p>
<p>Publication of the second StG call, ERC-2010-StG: 30/07/09</p>	<p>Deadlines PE: 28/10/09 LS: 18/11/09 SH: 09/12/09</p>
<p>Publication of the second AdG call, ERC-2010-AdG: 30/10/09</p>	<p>Deadlines PE: 24/02/10 LS: 17/03/10 SH: 07/04/10</p>

Outlook on the Future: Food for thought!

- **What about funding also the mid-term research careers?**
- **Twinning grants for European and non-European co-investigators and their teams**
- **Advanced Studies Institutes/ Graduate Schools – the breeding zones of new ideas?**



The ERC is a learning organisation!

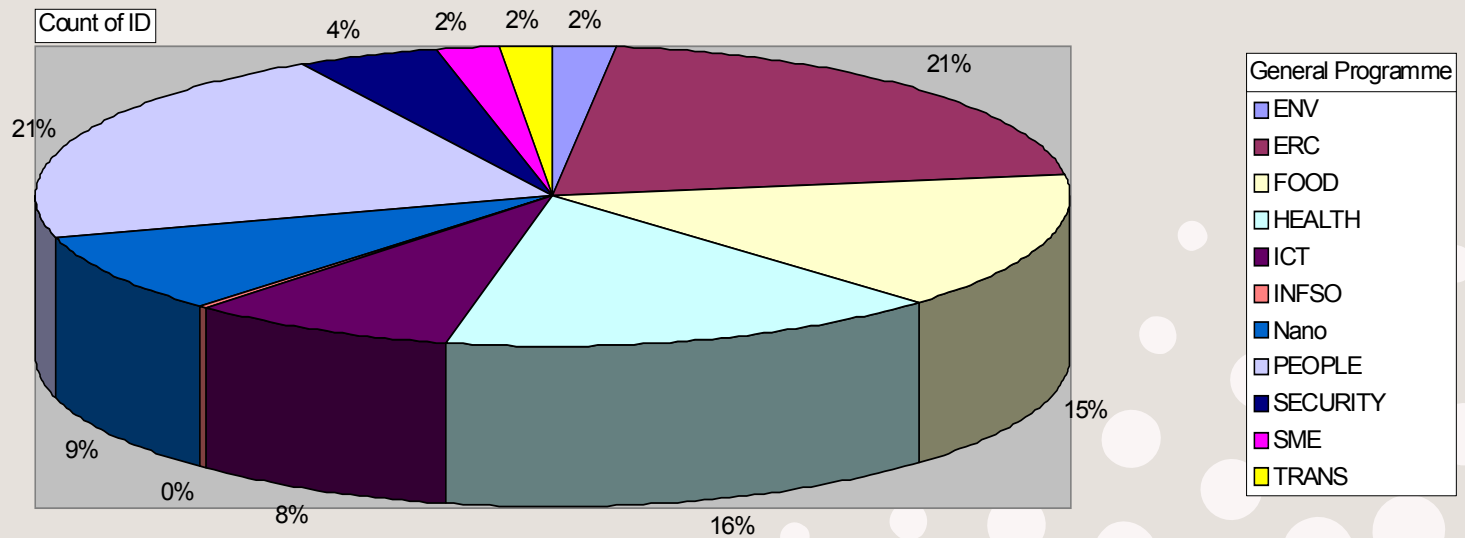


Ongoing moves!

- Two standing Committees of the ScC
 - Conflict of Interest + Ethical Issues
 - Panels
- Appointment of Expert Evaluators
- Minutes of Scientific Council meetings
- Further development of instruments
- Simplification of administrative procedures

Year 2009

ERC proposals= 48 on 245 proposals



Framework Programme

Ethics Review and the FP7 Ethics Framework

ETHICS HELP DESK FOR ALL FP7 projects:
http://cordis.europa.eu/fp7/get-support_en.html

Contact:

Isidoros Karatzas.

Head of the Ethics Review Sector

Unit for Governance and Ethics

Directorate L: Science, Economy and Society

European Commission, Research Directorate-General

Isidoros.karatzas@ec.europa.eu

The position of the director !

- Director Designate of the ERCEA
- Merge of scientific and managerial tasks
- Publication of a vacancy for a Principal Adviser function (Grade AD14)
- Official Journal C 295 A of 04/12/2009
- Closing date: **5 March 2010**.



ERC-funded Research & PIs

Case studies

- ERC website '**Funded projects**' section:
 - List with names of StG PIs and host institutions, grant size, duration, project abstracts of 299 funded projects (1st call 2007)
 - List with names of AdG PIs and host institutions of 275 retained proposals
 - ERC Starting Grant brochure with Case Studies
- **Various brochures on Starting Grant case studies** produced by national actors (e.g. in DE, AT, BE, FR)
- **List of 299 Grantees** (1st StG competition 2007)
http://erc.europa.eu/pdf/ERC_Starting_Grantees_2007.xls
- **ERC event, 7 October 2008, Paris**
Video of presentations & 2 discussion roundtables with 10 Starting Grantees
<http://www.canalc2.tv/video.asp?idEvenement=423>
- **FP7 project database (FP IDEAS projects)**
http://cordis.europa.eu/fp7/projects_en.html

Danke!

Merci!

Thank you!

Gracie!

Gracias!

Ευχαριστώ!