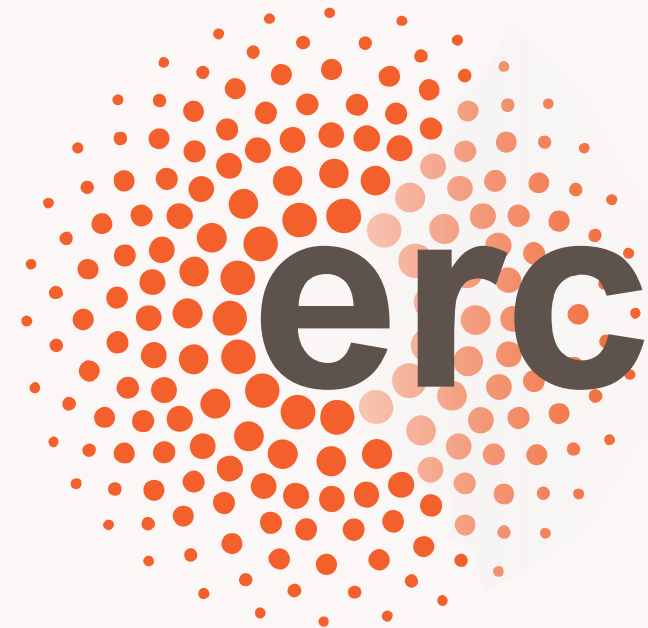


ERC – European Research Council

Overview: ERC Starting Grants

Alejandro MARTIN HOBDEY
ERC

Florence, 24 November 2010



Main Points

- Opportunities for funding
 - ➔ Emphasis on the Starting Grants
 - ➔ With practical considerations
- Overview of the Outcome of StG-2010 Call
- Policy considerations?



ERC Grant Schemes

Strategic principles

- **All fields of science and scholarship are eligible**
Investigator-driven, bottom-up
- **Excellence is the only valid criterion**
Individual team + research project
- **Investment in research talent**
Attractive, flexible grants, **up to five years**
Under control of the lead researcher (Principal Investigator)
- **Independent individual teams in Europe**
Nationality and Age of researchers is not relevant
Host organisation to be located in MS or AC
Portability of grants



ERC Grant Schemes

Funding Strategy

Aim: Retain – Repatriate – Recruit

⇒ Favour “**brain gain**” and “**reverse brain drain**”

- improve **career opportunities and independence** - especially for young researchers
- increase **competition, recognition and international visibility** - for excellent individual scientists and scholars in Europe
 - raise **aspiration and achievement** of basic research in Europe

Activities: Two complementary funding schemes

- **ERC Starting Grant (StG)**
- **ERC Advanced Grant (AdG)**



ERC Grant schemes

European Research Council



Two complementary funding schemes

ERC Starting Grant (StG):

- Researchers starting or consolidating their own independent research team (or research programme)
- Transition from working under a supervisor to an independent research leader
- Up to €2M over 5 years

ERC Advanced Grant (AdG):

- Established independent research leaders
- Track record over the last 10 years
- Up to €3.5M Million over 5 years



Call for proposals

Two calls

European Research Council

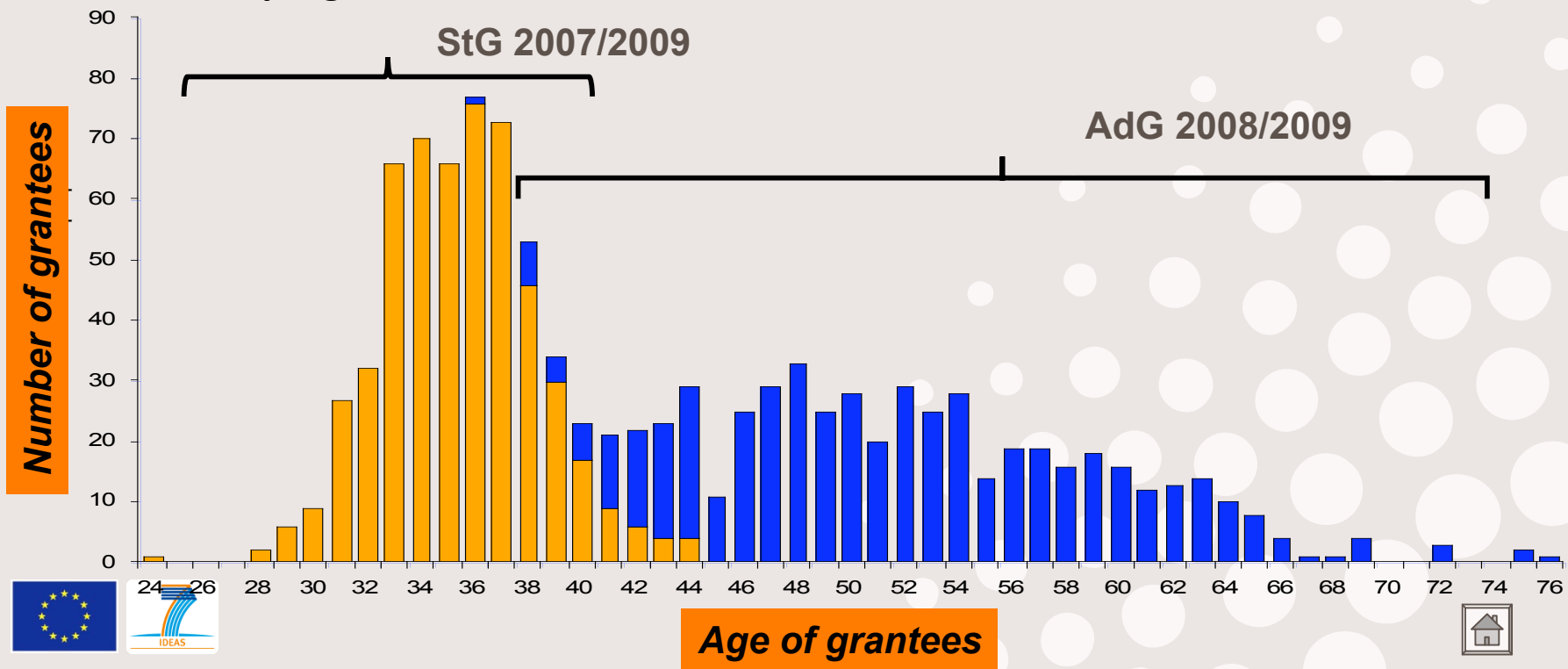


Starting Grants

- Attract/retain **next-generation leaders**
- Establish independent **research team & program**

Advanced Grants

- Attract/retain **current world-leaders**
- Stimulate investigator-driven, **breakthrough research**



StG & AdG Call 2011: deadlines

- Total budget for Call (2011): ~€660M (StG & AdG)

→ StG Deadlines:

- PE: 14 October
- LS: 9 November
- SH: 24 November

→ AdG deadlines:

- PE: 9 February 2011
- LS: 10 March 2011
- SH: 6 April 2011

Scientific domains

For operational reasons : **25 panels in 3 main domains**

PE: Physical Sciences, Engineering (10 panels)

LS: Life Sciences (9 panels)

SH: Social Sciences and Humanities (6 panels)

Allocation of **Call budget** per domain as follows:

PE domain: 40%

LS domain: 35%

SH domain: 15%

Interdisciplinary domain: 10%

Within domains, indicative budget is allocated to panels on a demand basis

► *probability of success independent of panel*

ERC Grants

Panel structure : 25 panels

European Research Council



Each panel :
Panel Chair and
10-15 Panel Members

Life Sciences

- LS1 Molecular & Structural Biology & Biochemistry
- LS2 Genetics, Genomics, Bioinformatics & Systems Biology
- LS3 Cellular and Developmental Biology
- LS4 Physiology, Pathophysiology & Endocrinology
- LS5 Neurosciences & neural disorders
- LS6 Immunity & infection
- LS7 Diagnostic tools, therapies & public health
- LS8 Evolutionary, population & environmental biology
- LS9 Applied life sciences & biotechnology

Social Sciences and Humanities

- SH1 Individuals, institutions & markets
- SH2 Institutions, values, beliefs and behaviour
- SH3 Environment & society
- SH4 The Human Mind and its complexity
- SH5 Cultures & cultural production
- SH6 The study of the human past

Physical Sciences & Engineering

- PE1 Mathematical foundations
- PE2 Fundamental constituents of matter
- PE3 Condensed matter physics
- PE4 Physical & Analytical Chemical sciences
- PE5 Materials & Synthesis
- PE6 Computer science & informatics
- PE7 Systems & communication engineering
- PE8 Products & process engineering
- PE9 Universe sciences
- PE10 Earth system science



Submission is to Panels

- Applicant submits to a *Targeted Panel* (of PI choice)
 - ➔ Can flag one “*Alternative Review Panel*”
- **Applicant chooses his/her panel**, that panel is “responsible” and takes ownership for the evaluation of that proposals
- Only switch proposals between panels in case of clear mistake on part of applicant
- Switching proposals between domains (deadlines) not possible
- But: In case cross-panel or cross-domain proposals, evaluation by members of other panels possible

Submission of proposals

- Single submission
 - ➔ “1 stage, 2 step” evaluation
- Electronic submission via EPSS only
- Deadlines strictly enforced
- Proposals have two parts:
 - ➔ Part A: Administrative forms
 - ➔ Part B: Scientific proposal itself

Proposal structure: Part A

- **Part A:** “Administrative forms” containing
 - ➔ A1 Information on PI
 - Request for change of stream (StG only)
 - ➔ A2 Information on Host Institution
 - ➔ A3 Budget breakdown by year and partner
 - Not detailed

Proposal Structure: Part B

- **Section 1 = “The PI”**
 - Scientific Leadership profile (1 page)
 - CV (including “funding ID”) (2 page)
 - 10-year track record (or “early achievements” for StG) (2 page)
 - Extended synopsis (5 page)
- **Section 2 = Full Scientific proposal** (15 page)
- Ethical Review information (where appropriate)
- Separate additional document:
 - ➔ Host Institution Support Letter (compulsory StG + AdG)
 - ➔ Copy of Ph.D. (compulsory StG)
 - ➔ Documents to prove extension to 10 year eligibility window (StG)



ERC Grant Schemes

Evaluation: Scientific Excellence is the sole criterion

Evaluation of *Excellence* at two levels:

- **Criterion 1: Quality of Principal Investigator**
- **Criterion 2: Quality of Research Project**

Referees and panels **evaluate and score** criteria numerically which will **result in the ranking** of the projects:

- 1- 4 per criterion
- Threshold : ≥ 2 for both criteria

Two step evaluation

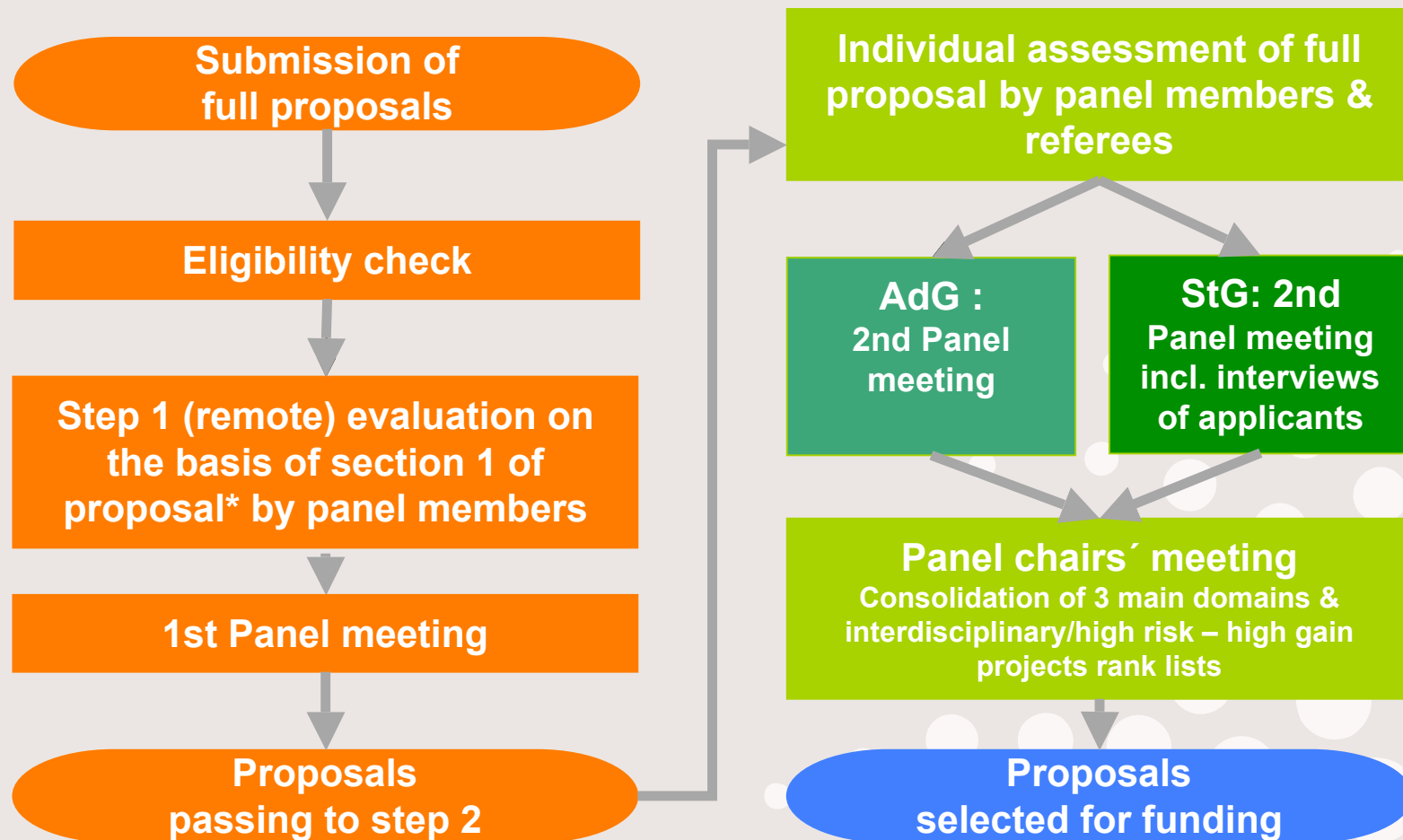
- Step 1:
 - ➔ Section 1 of Part B evaluated against Criterion 1 (PI) and 2 (Research Project)
 - ➔ Proposal needs to pass threshold for both criteria to pass to second step
 - ➔ Evaluated by Panel Members + possibly “alternate” panel members where necessary
- Step 2:
 - ➔ Sections B1 + B2 evaluated
 - ➔ Evaluated by Panel Members + Remote Referees
 - ➔ StG: Step 2 includes interviews in all cases



ERC Grants: how does it operate?

Submission, evaluation and selection

European Research Council



* Profile of PI, projects extended synopsis



Remote part of evaluation

- Remote part of evaluation takes part completely electronically
- **Step 1:** proposals assigned to ~4 PMs
- **Step 2:** proposals also sent to specialized remote experts (to be determined at Step 1 panel meeting)

What are panels looking for in an interview? (StG only)

European Research Council



- Maturity, leadership and vision
- Proposal is the applicant's (not his/her supervisor's)
- Answer lagging technical questions and uncertainties / feasibility
- Mastery of detail



Interdisciplinary Proposals

- Primary approach for Interdisciplinary proposals: **“mainstreaming”**
- Proposal submitted to a target panel primarily responsible for its evaluation
- Both Step 1 and Step 2:
 - ➔ Assigned for reviews from PMs outside primary panel, if necessary
- Step 2:
 - ➔ Remote reviewers: any reviewer in the world (hence any domain)
- If panel not comfortable in Step 2 meeting to take final decision, this is left to a final Panel Chair Meeting
- Interdisciplinary Research domain (cross-domain & cross-panel) → indicative budget of 10% total budget



Decision taken by combined panel of all Panel Chairs

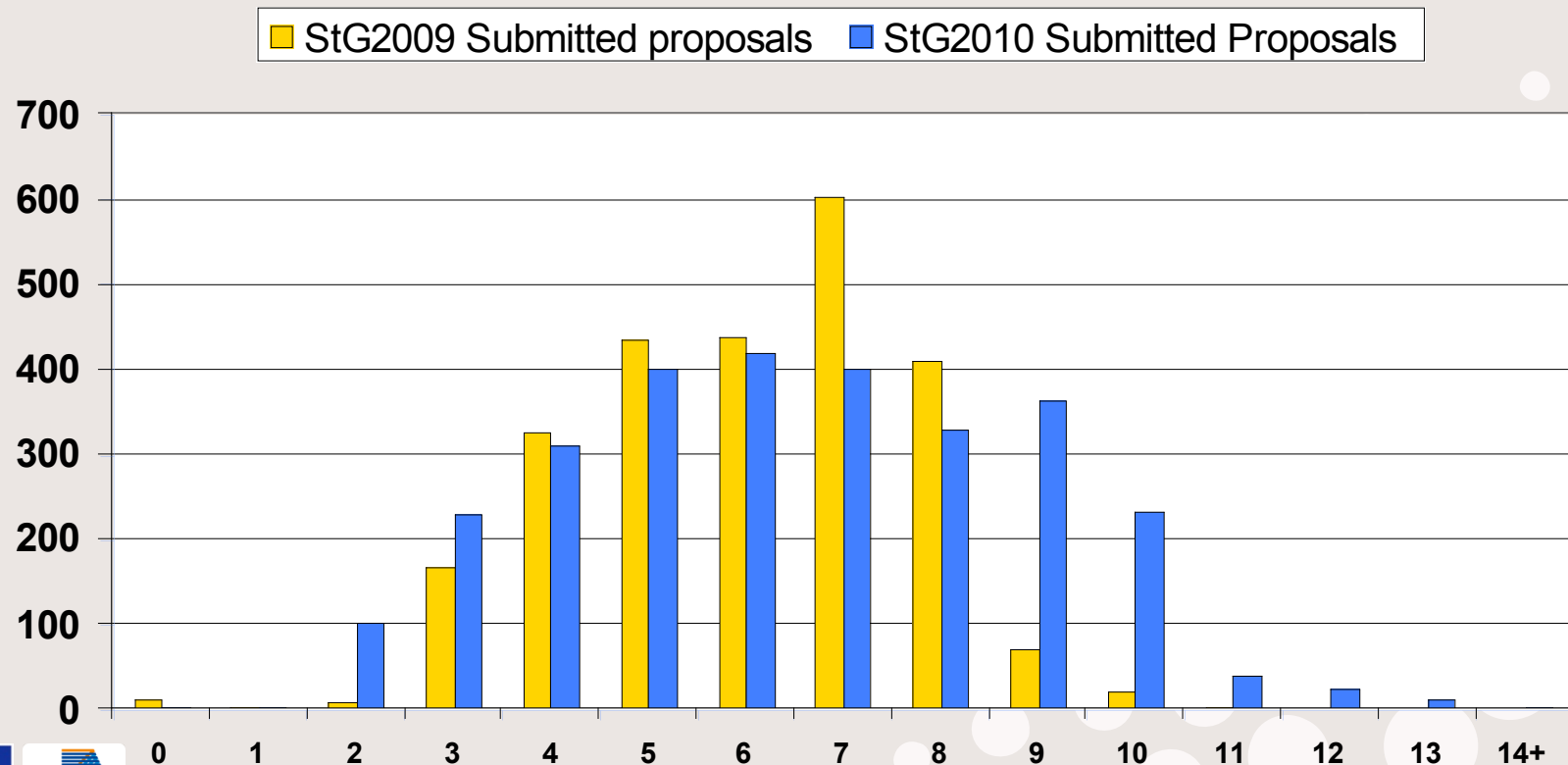


Approach taken for “streaming” (StG only)

- **“By default”:** people fall into the stream that corresponds by the number of years past Ph.D. (covers 90-95% of cases)
 - ➔ Starters 2 – 6 years past Ph.D
 - ➔ Consolidators: 7 – 12 years past Ph.D
- **Can request of change of stream:** take rather *strict / conservative approach*
- Applicants need to argue their case for different consideration.
- All **“objective”** (parental leave, military service, long term illness, etc) reasons that apply for extending the eligibility window apply by analogy to extending the “starter” window.
- **Subjective reasons:** **“Career break”** outside science/research (e.g. volunteer work, professional activity *completely unrelated to research career*, unemployment, etc)
- Applicant requested needs to attach a minimum amount of documentation to make claim credible

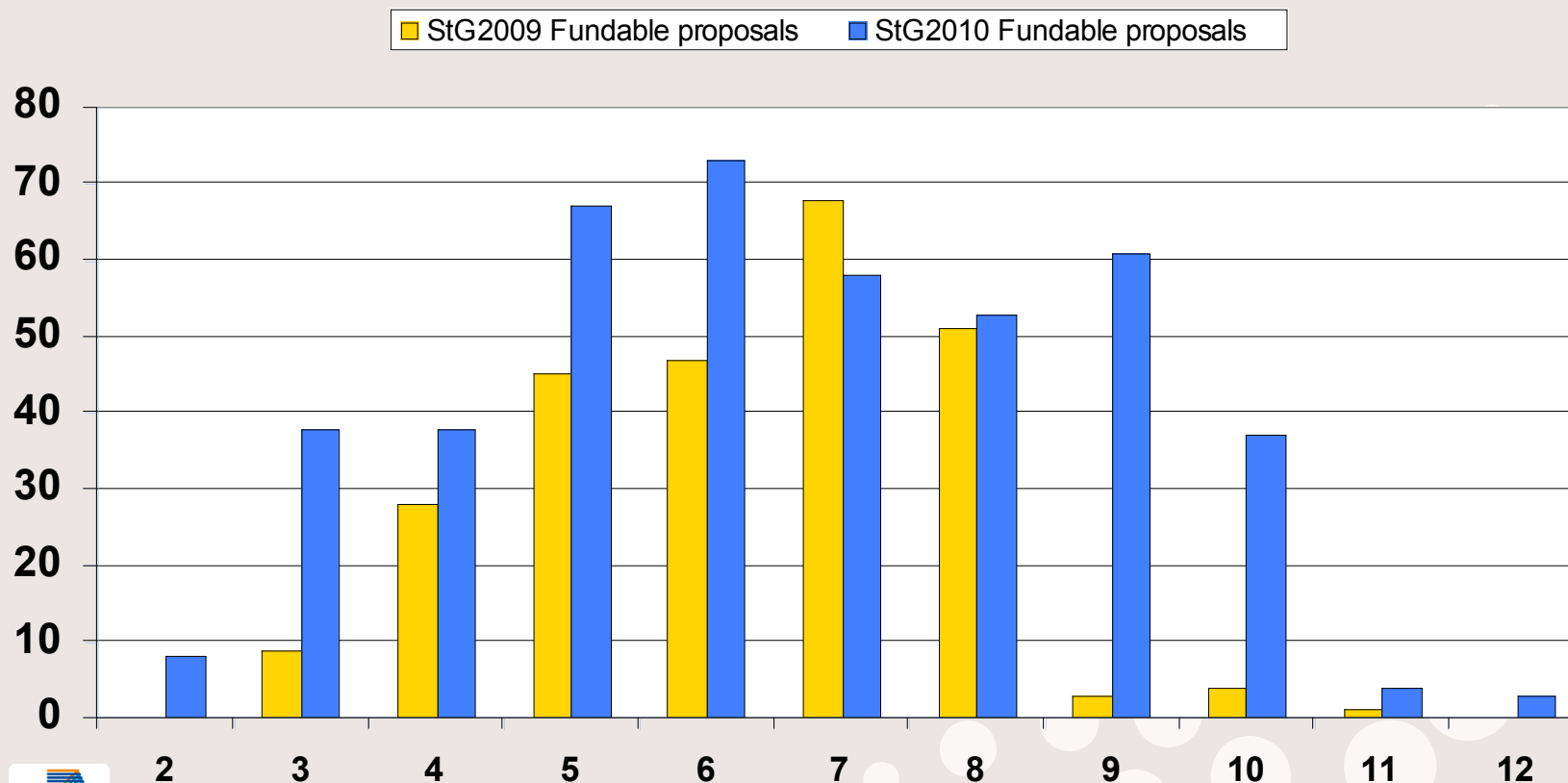
Distribution of proposal by year past PhD.

StG2010 vs StG2009 Submitted proposals distribution by PhD Year from Call date



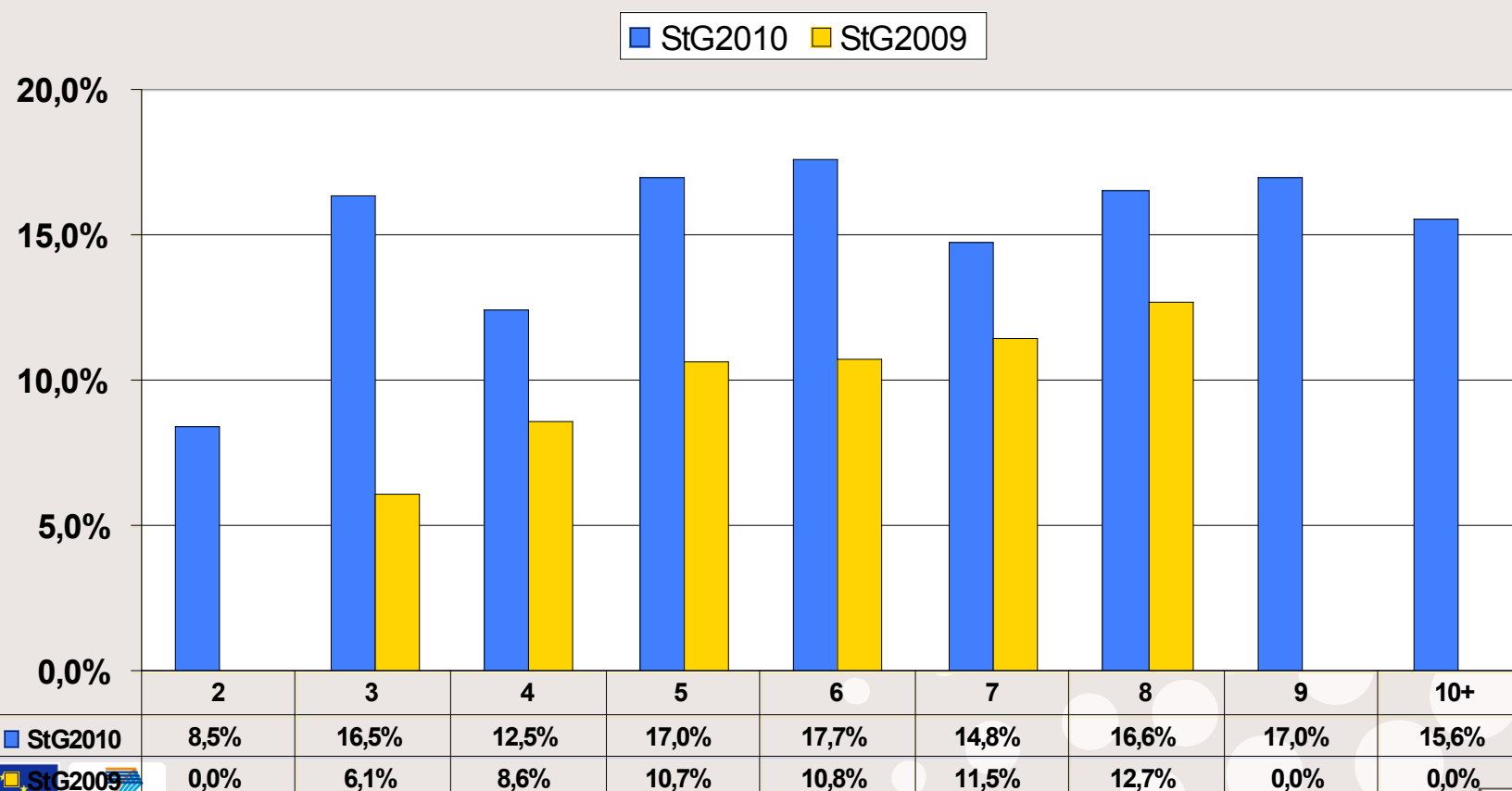
Funded proposals by years past Ph.D.

StG2010 vs StG2009 Fundable (Main+Reserve) proposals distribution by years past Ph.D.



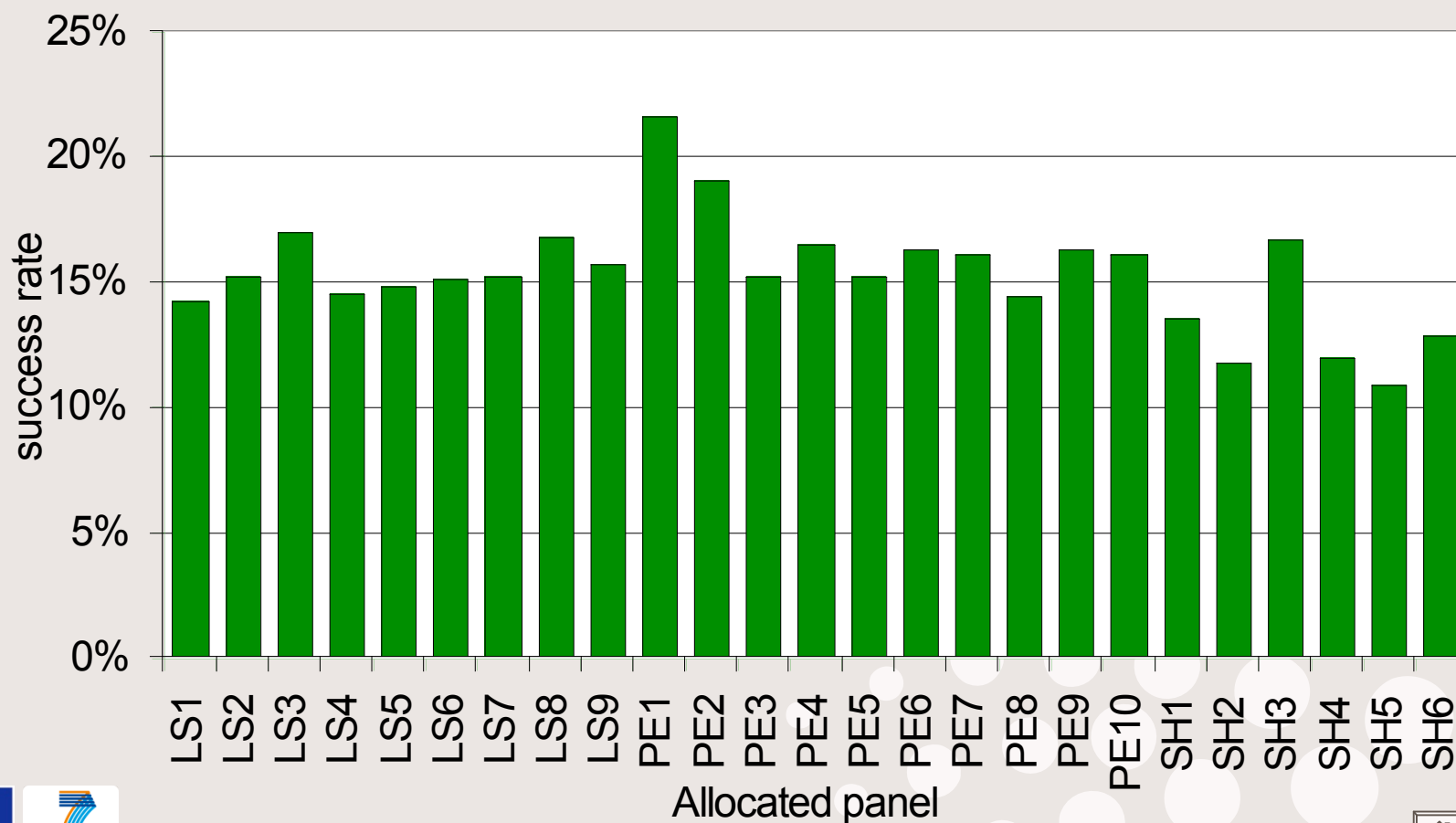
Success rate as years past Ph.D.

StG2010 vs StG2009 Success rate distribution by PhD Date
Main List + Associated States (tentative data)



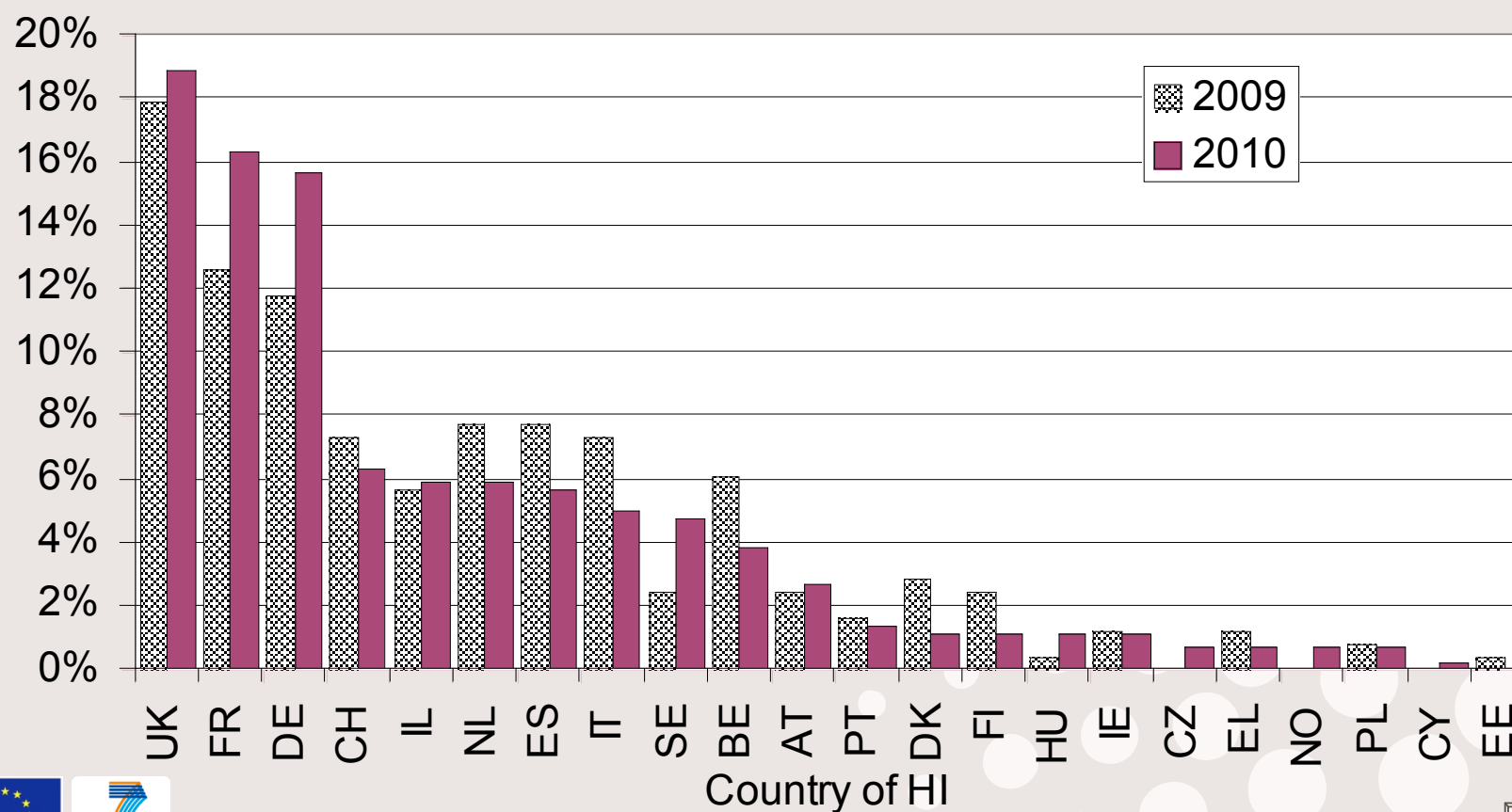
Overall success rate by panel (440 proposals)

StG 2010 % Success rate (average 15.32%)



StG 2010 Proportion of grants by country of HI

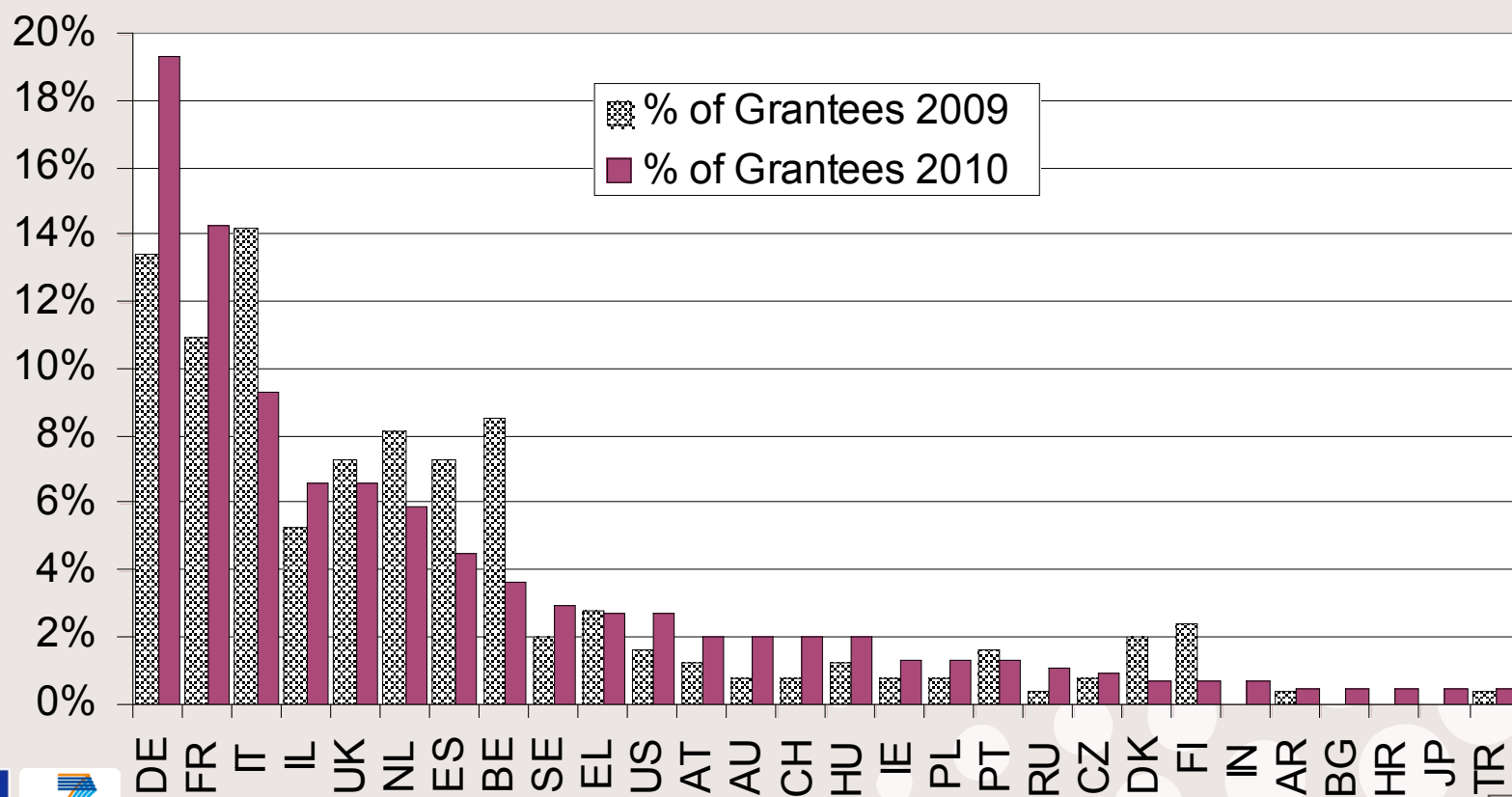
ERC STG 2009-10 % Funded Proposals by Country of HI
(preliminary analysis)



StG 2010 – Proportion of grants by nationality

ERC STG 2009- 10 %Funded proposals by PI Nationality

preliminary analysis

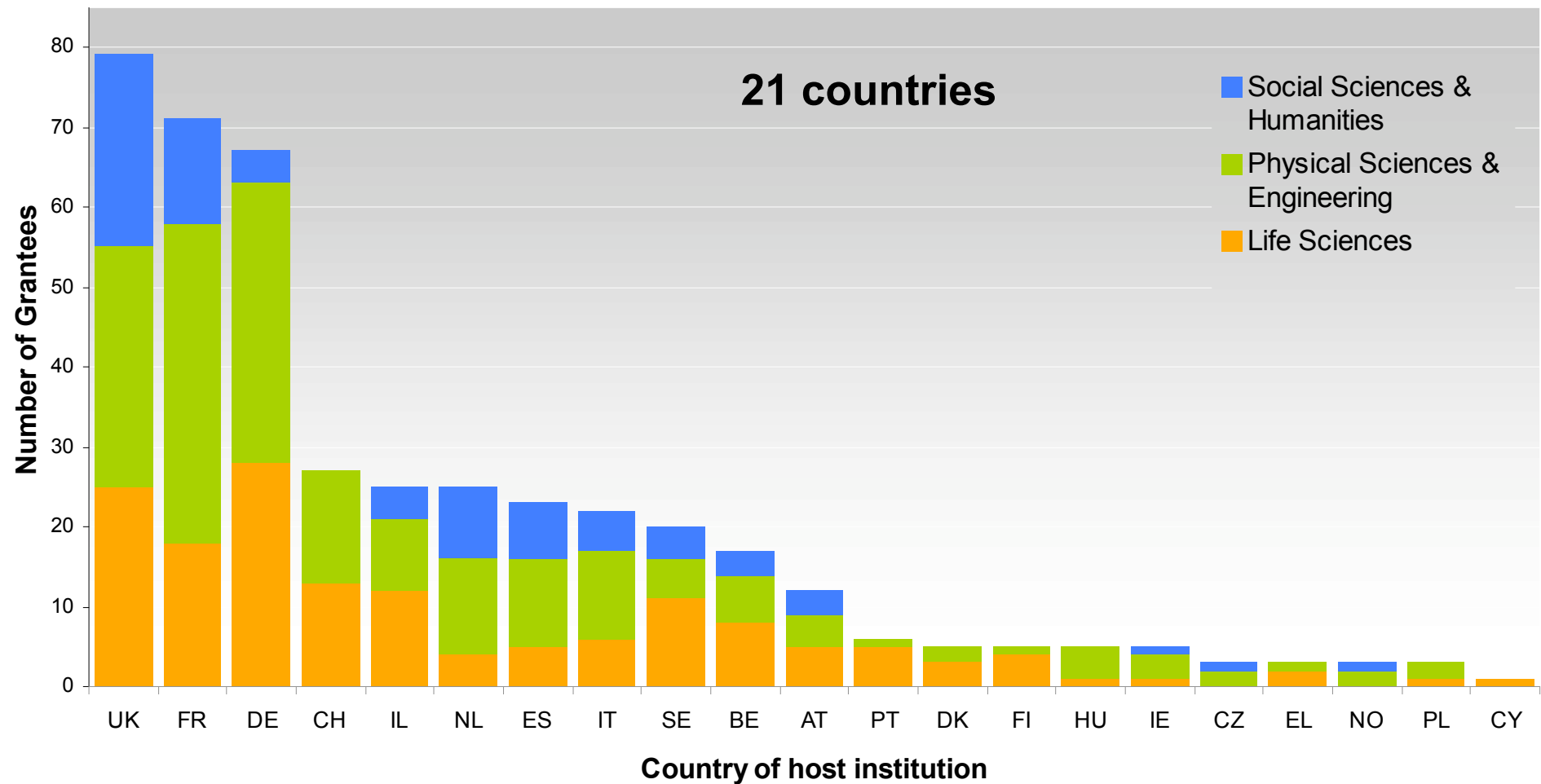


ERC Starting Grant: 2010 call

Grantees by country of host institution & domain

Source: 427 proposals

European Research Council



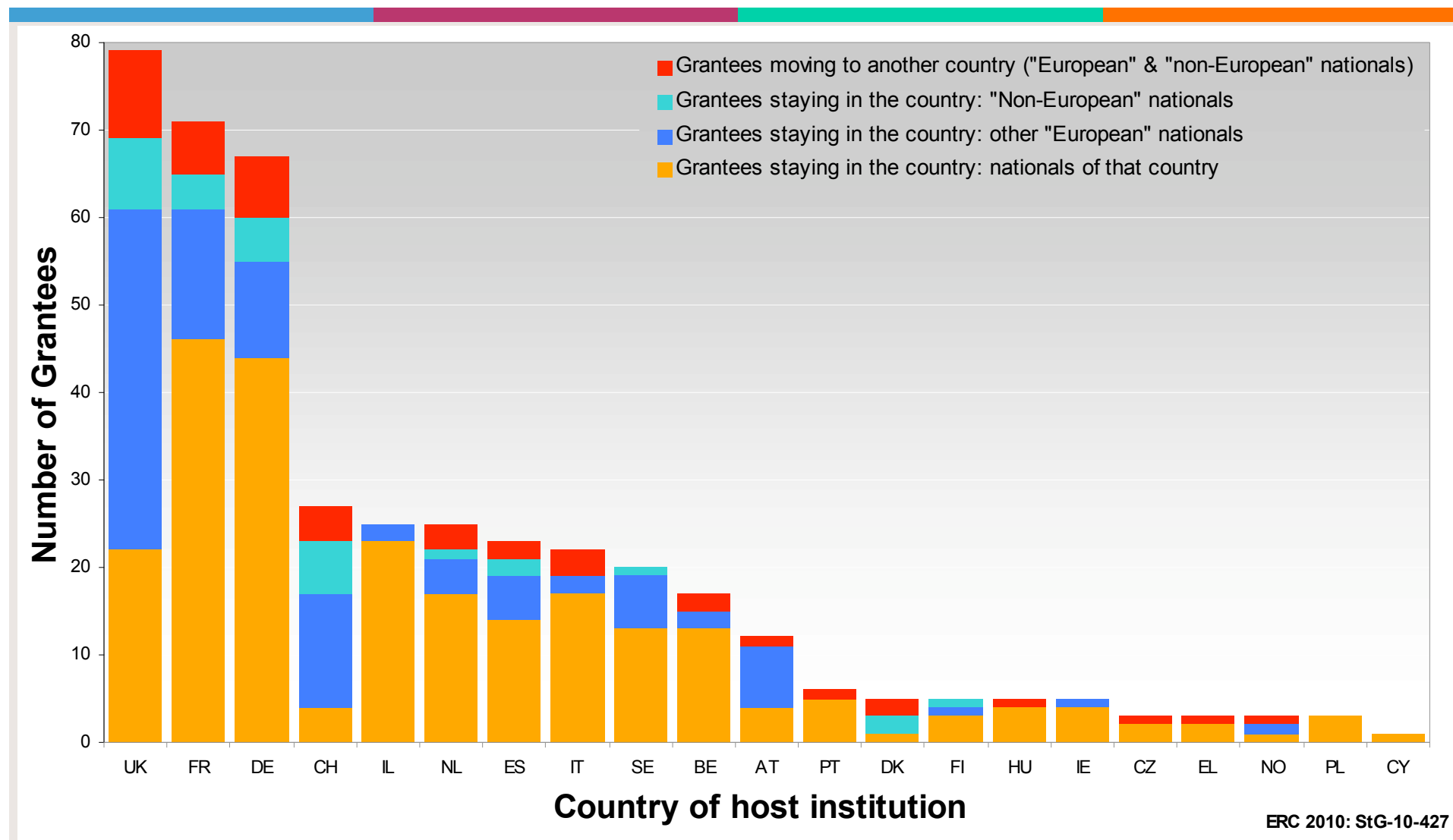
ERC 2010: StG-10-427

ERC Starting Grant: 2010 call

Mobility: Incoming & staying candidates

Source: 427 proposals

European Research Council

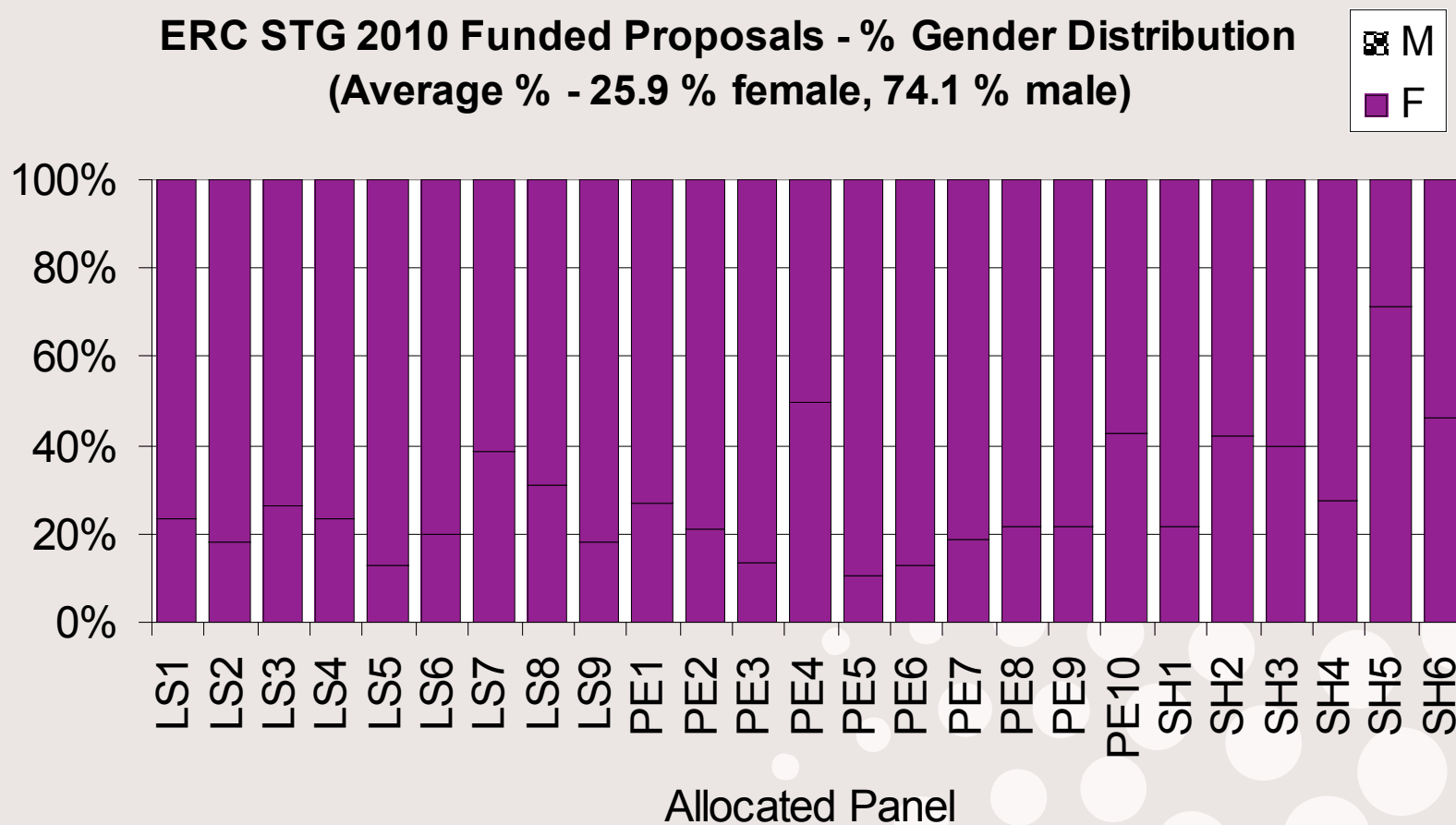


Gender distribution by panel for funded proposals

European Research Council

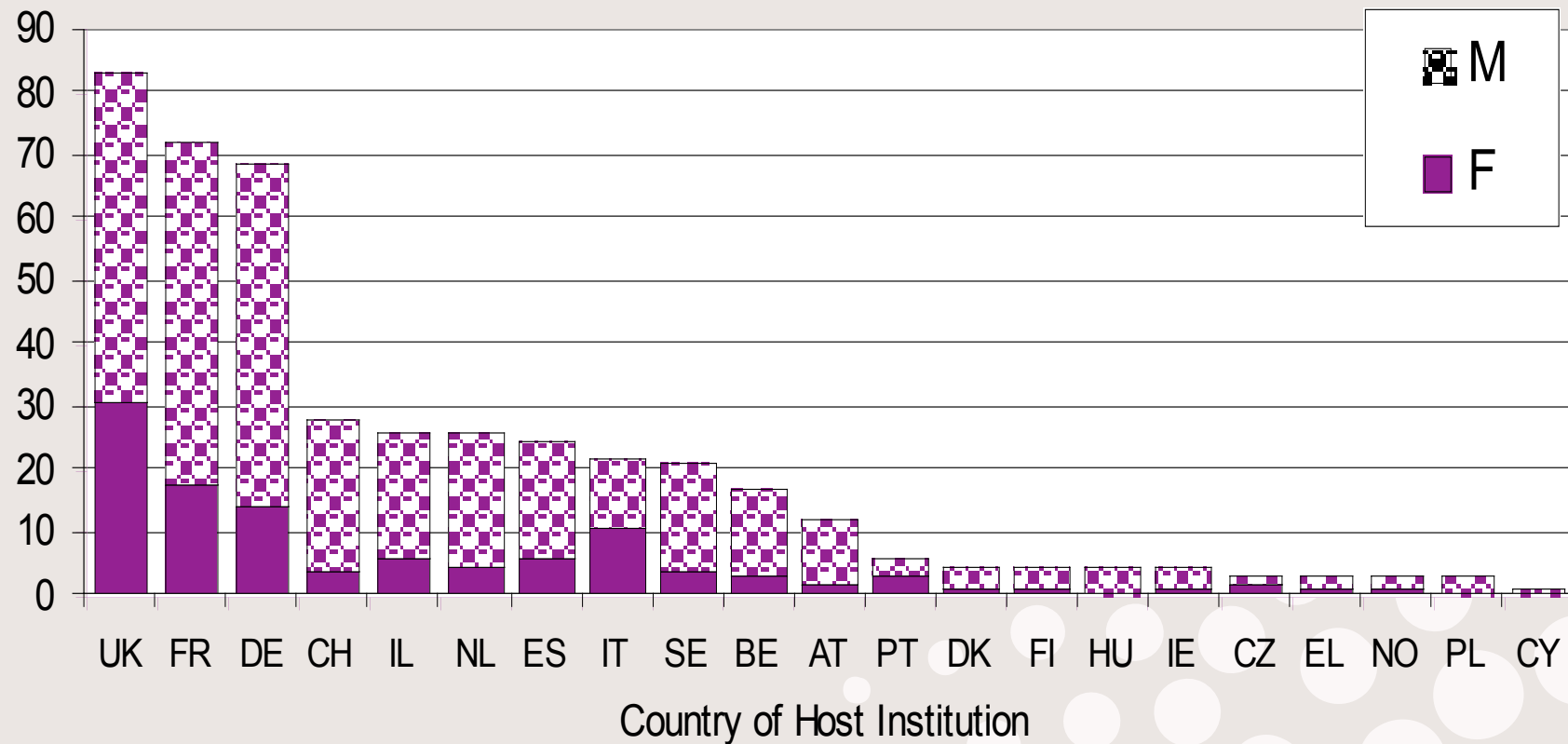


ERC STG 2010 Funded Proposals - % Gender Distribution
(Average % - 25.9 % female, 74.1 % male)



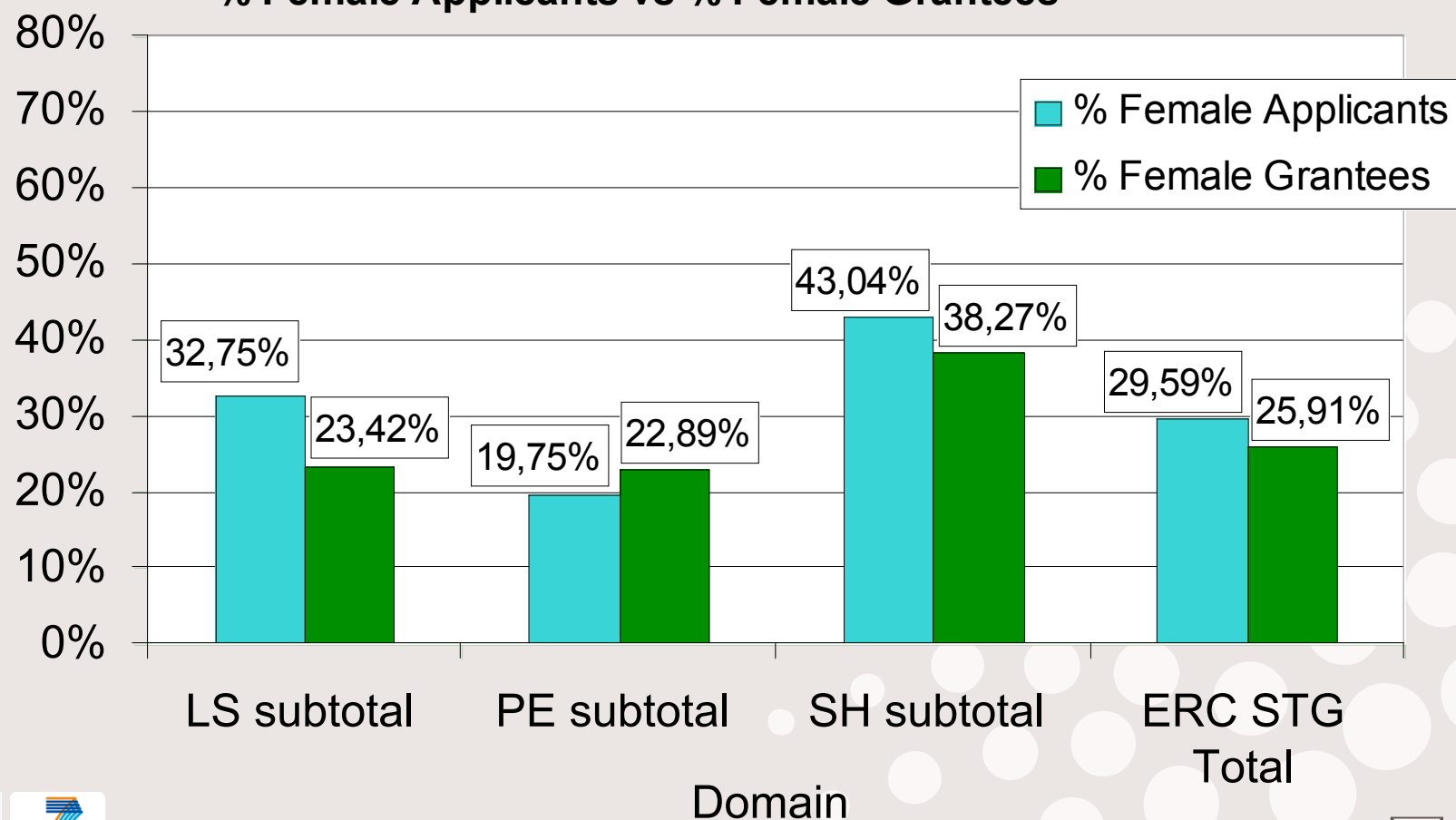
Grantees by Country of HI and Gender

StG 2010 Funded Proposals
by Country of Host Institution and Gender



StG 2010 - Success of female grantees

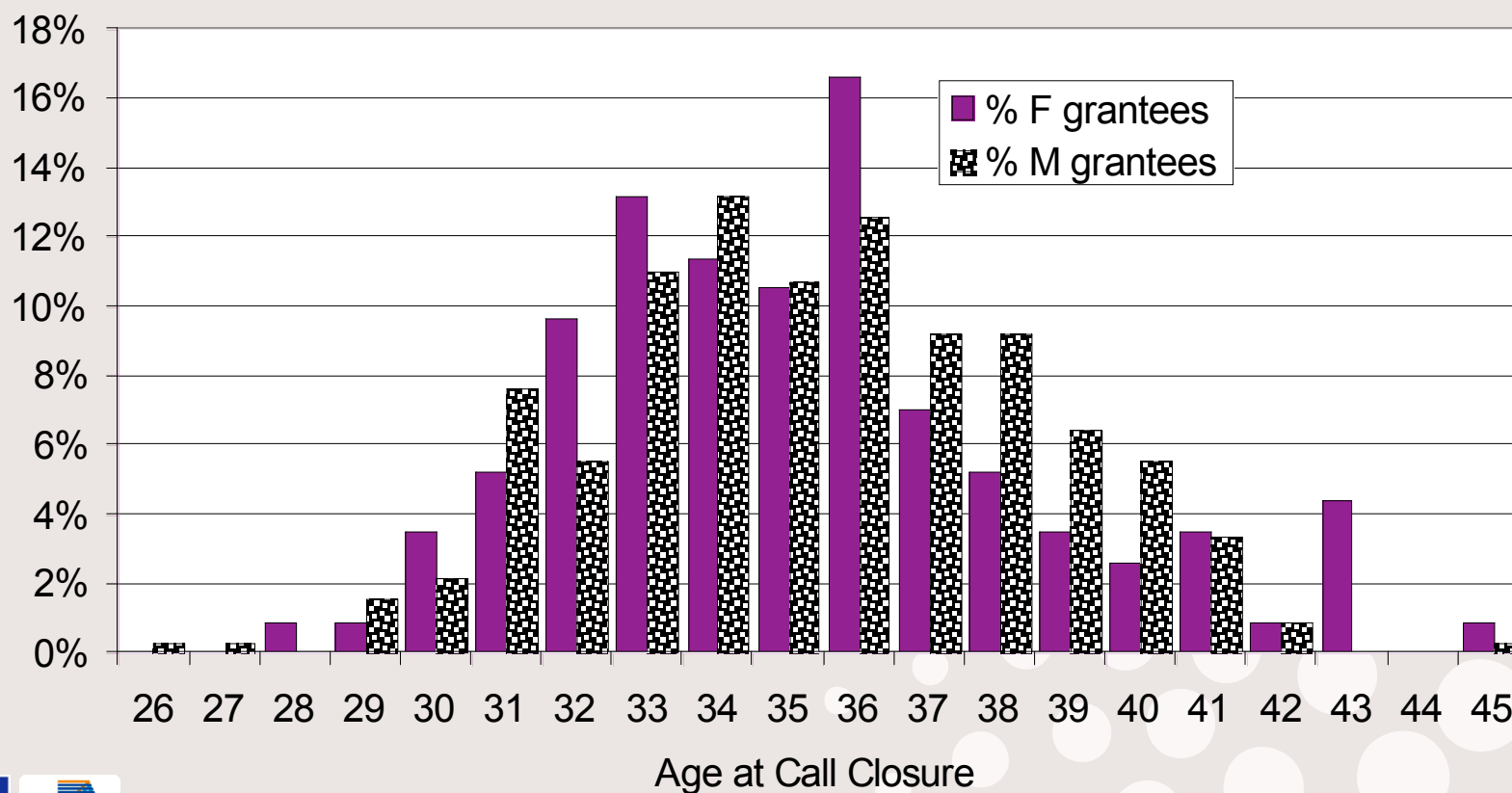
StG 2010 Domain
% Female Applicants vs % Female Grantees



Age distribution Grantees

ERC STG 2010 Age of Grantees

Average: Men: 35.34 yrs; Women: 35.28 yrs

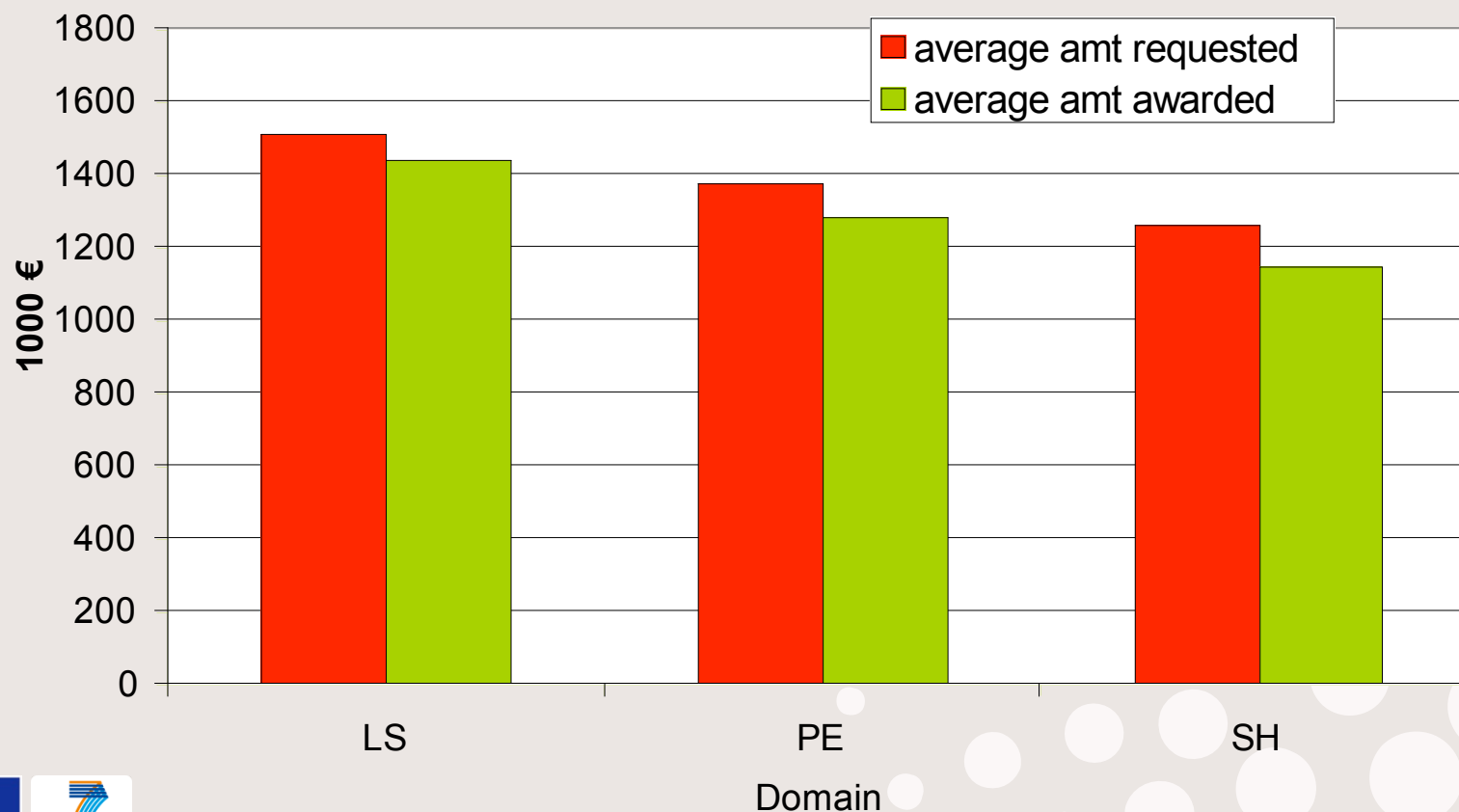


StG 2011 – Average size of requested and awarded amount of funded proposals by domain

European Research Council



ERC STG 2010 Average Grant

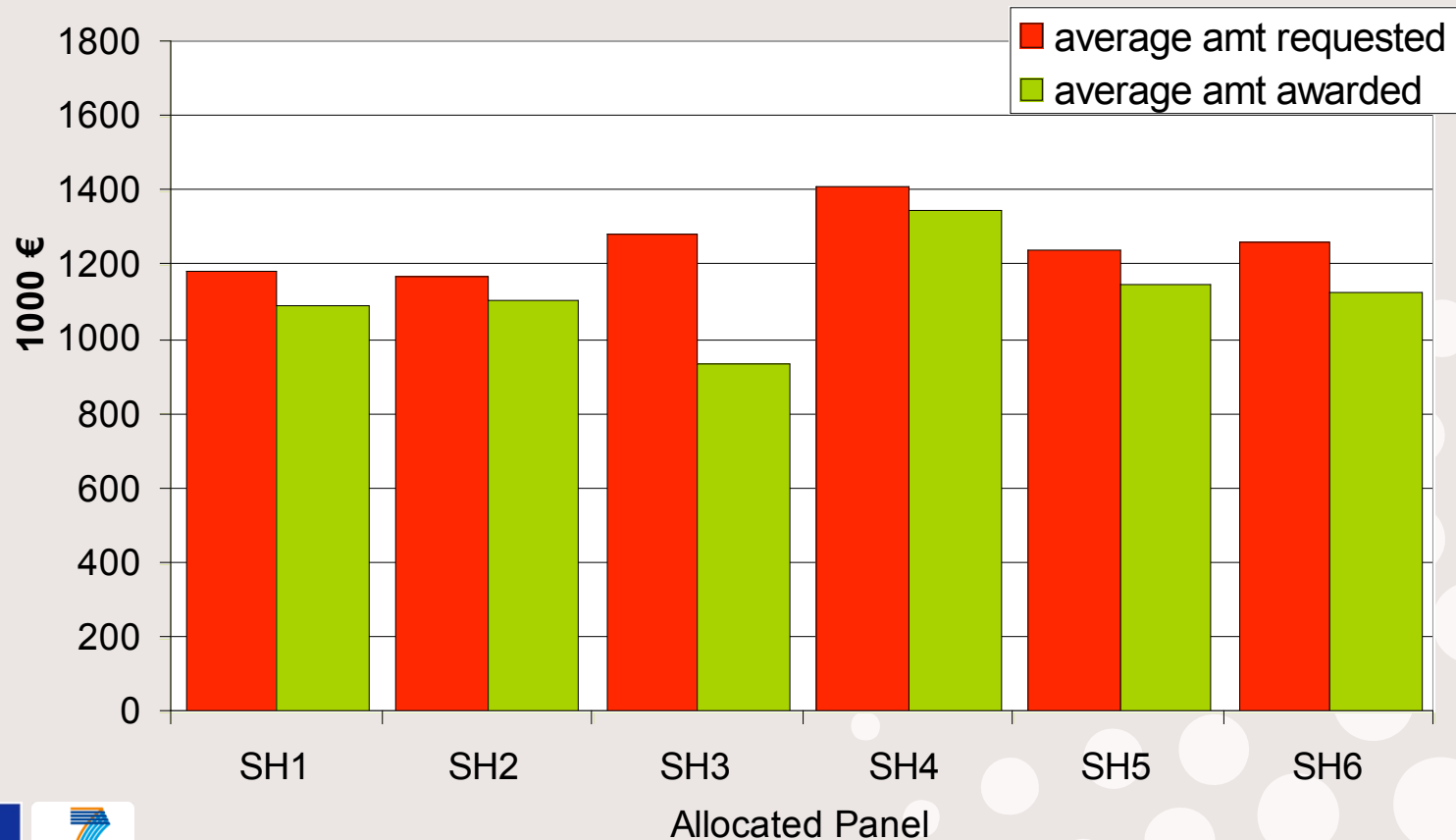


StG 2011 – Average size of requested and awarded amount of funded proposals – SH Domain

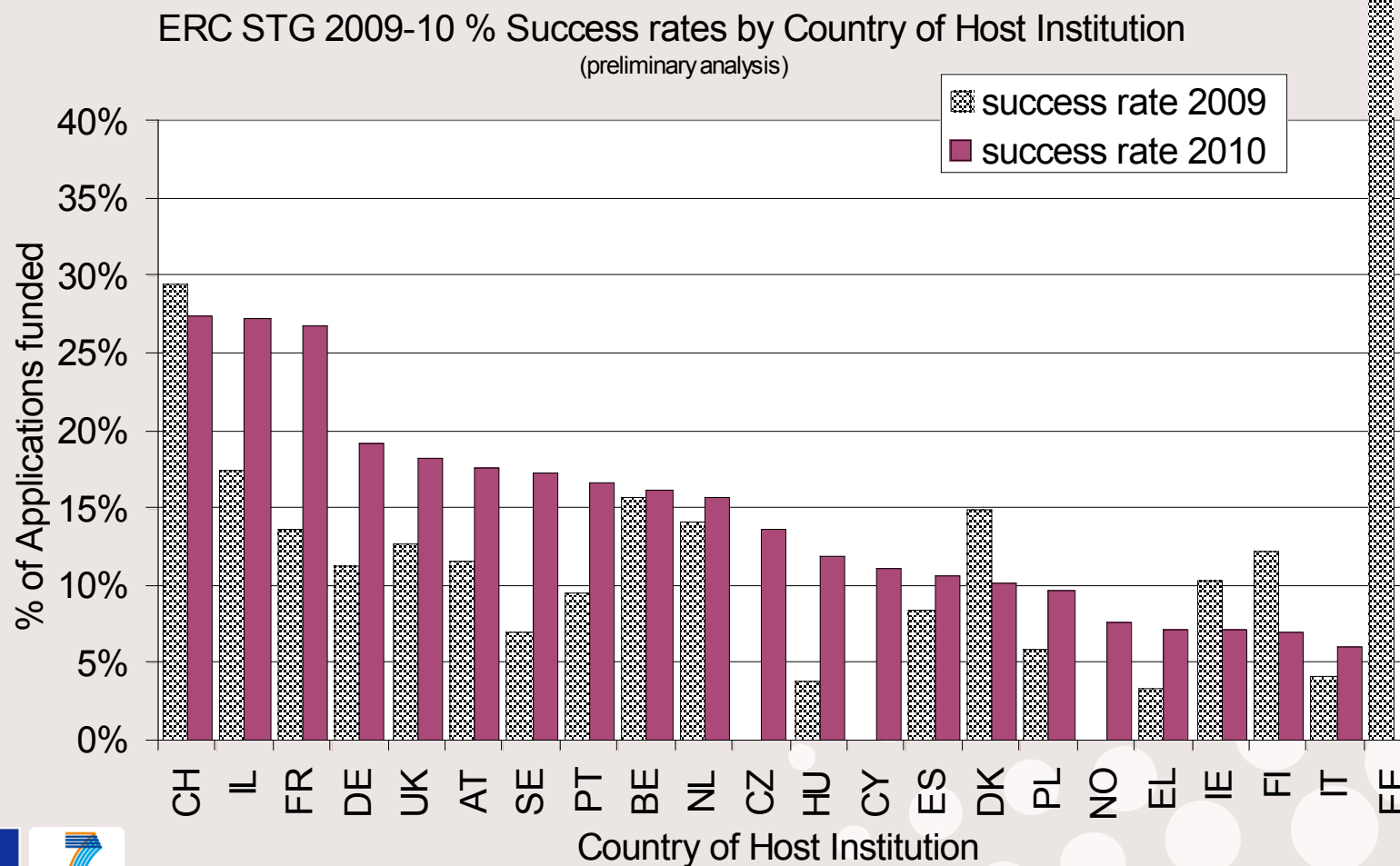
European Research Council



ERC STG 2010 Average Amount Requested and Awarded
SH Domain



StG 2009 - 2010 – Success rate by country of HI



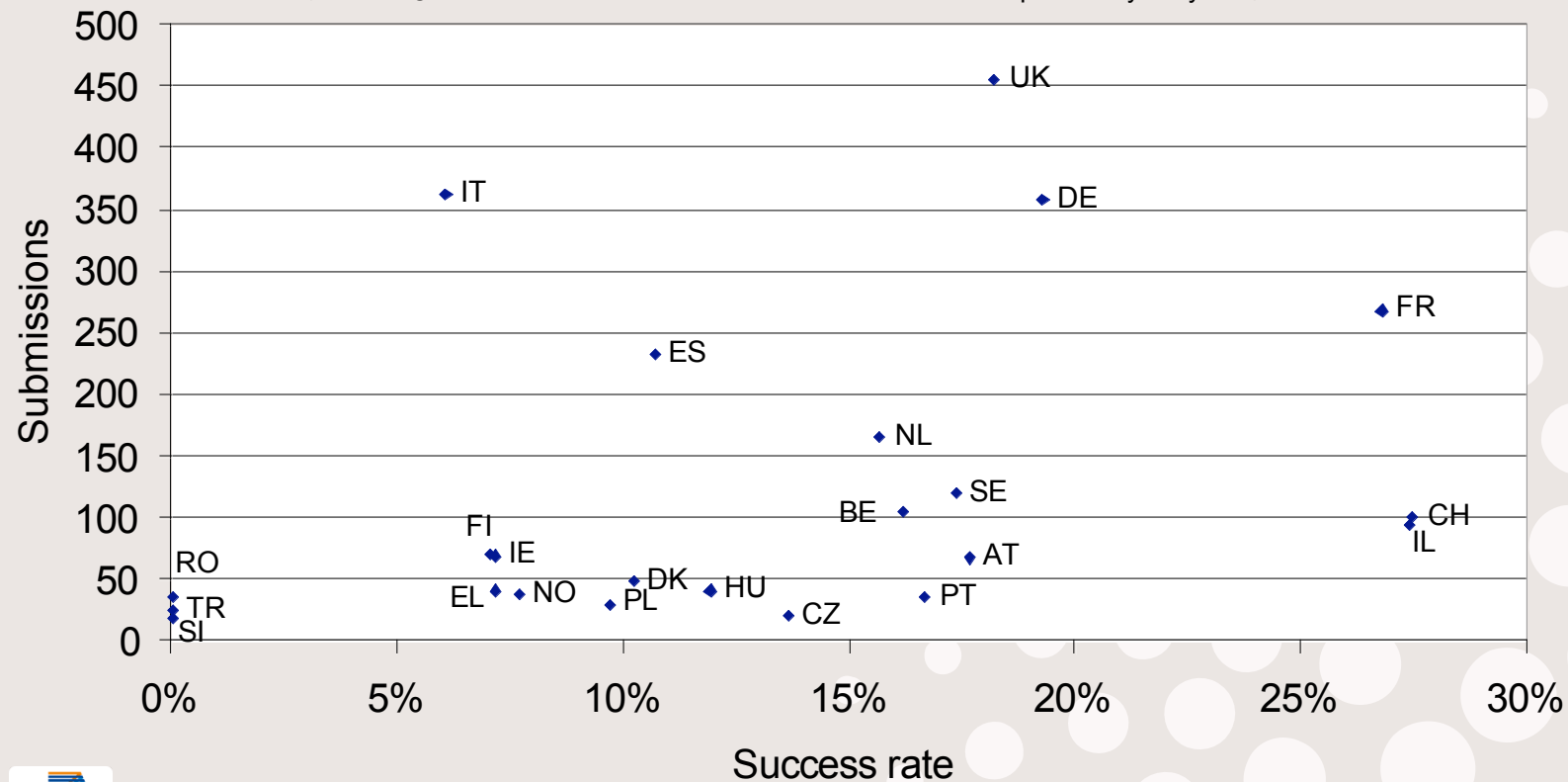
StG 2010 – Number of applications vs. Success rate by Country of HI

European Research Council



ERC STG 2010 Submissions by Country of Host Institution Vs Success Rate

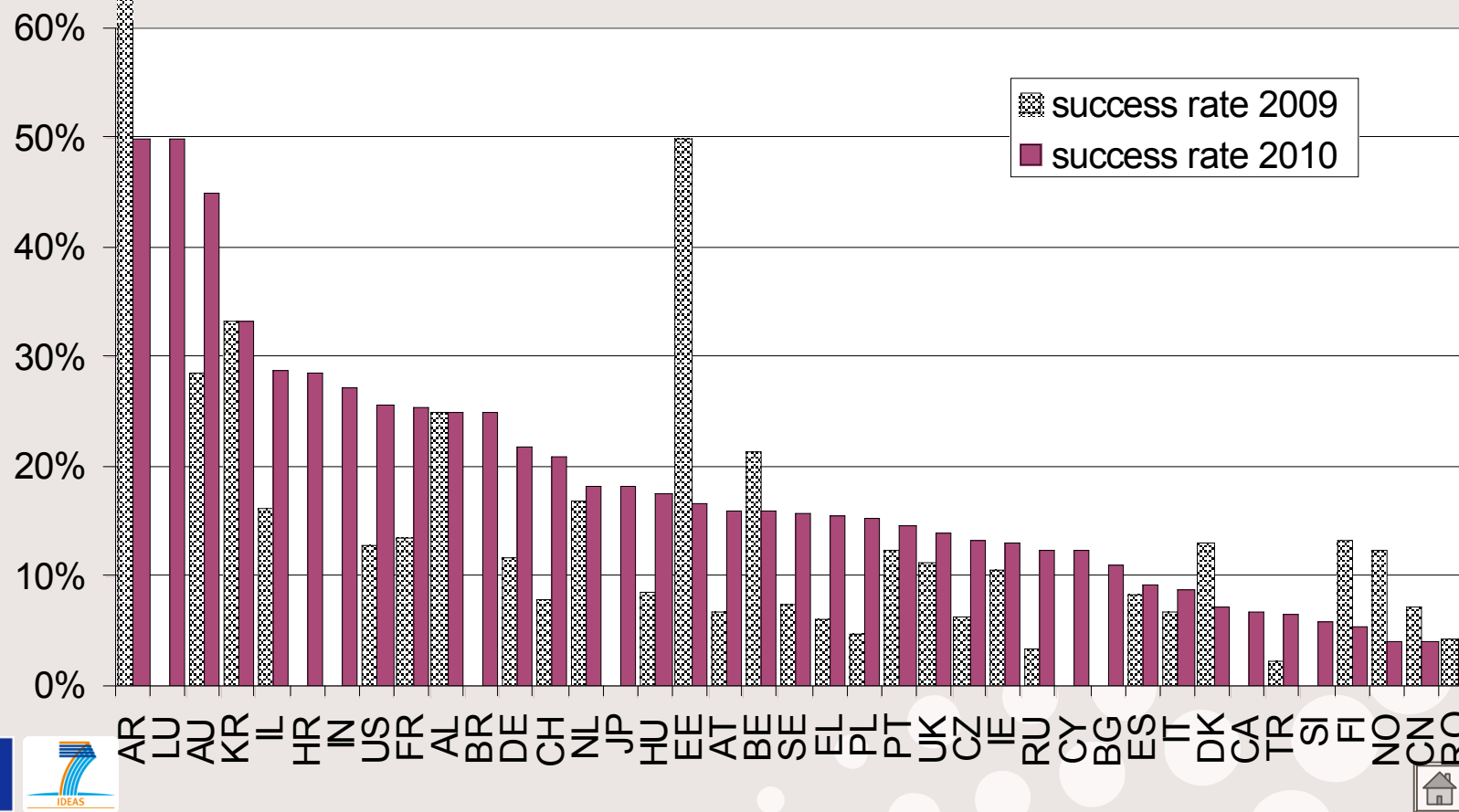
(excluding countries with less than 10 submissions; preliminary analysis)



StG2010 – Success rate by nationality

ERC STG 2009-10 % Success Rate by Nationality

(preliminary analysis)



StG 2010 – Number of applications vs. Success rate by nationality of PI

European Research Council

