



**ERC**

## **Overview & Experience**

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Cagliari, 29 Novembre 2012

# IDEAS Programme Characteristics

- ❑ No thematic priorities (bottom up)
- ❑ Frontier research
- ❑ Opportunity for excellent researchers
  - ❑ At the beginning of their career (Starting)
  - ❑ Ramping up (Consolidator)
  - ❑ Well-established (Advanced)
- ❑ Excellence is highly weighted
- ❑ Lots of autonomy in grant management (including portability)



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from anywhere in the world

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**Optimised crowd and traffic management: QED!**



**Funding Opportunities**

**NEWS:**  
ERC calls 2013: What's new?

**OPEN CALLS:**  
**ERC Starting Grant: ERC-2013-StG**  
Call for Proposals - Deadline (17 Oct 2012)  
Guide for Applicants

- **ERC Advanced Grant: ERC-2013-AdG**  
Call for Proposals - Deadline (22 Nov 2012)  
Guide for Applicants
- **ERC Synergy Grant: ERC-2013-SyG**  
Call for Proposals - Deadline (10 Jan 2013)

**ERC Coordination and Support Actions: ERC-2013-Support-1**  
Call for Proposals - Deadline (16 Jan 2013)

• **ONGOING EVALUATIONS:**  
Timeframe ERC-2012-StG  
Timeframe ERC-2012-AdG  
Timeframe ERC-2012-PoC  
Timeframe ERC-2012-SyG

The official deadlines are only those indicated on the Participant Portal.

Documents

Keep updated on ERC

**Funding and Grants**  
Funding Schemes  
Apply for Funding  
National Contact Points  
FAQ

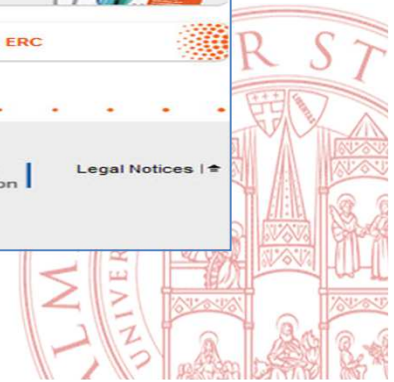
**Projects and Results**  
ERC Funded Projects  
Prizes and Awards  
Success Stories  
Statistics

**Media and Events**  
Press Releases  
ERC in the Press  
Newsletter  
Multimedia Library  
Publications  
Logos and Banners  
Events

**About ERC**  
Mission  
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History  
Reviews and Development  
Facts and Figures  
Job Opportunities  
Call for Tenders  
Useful links

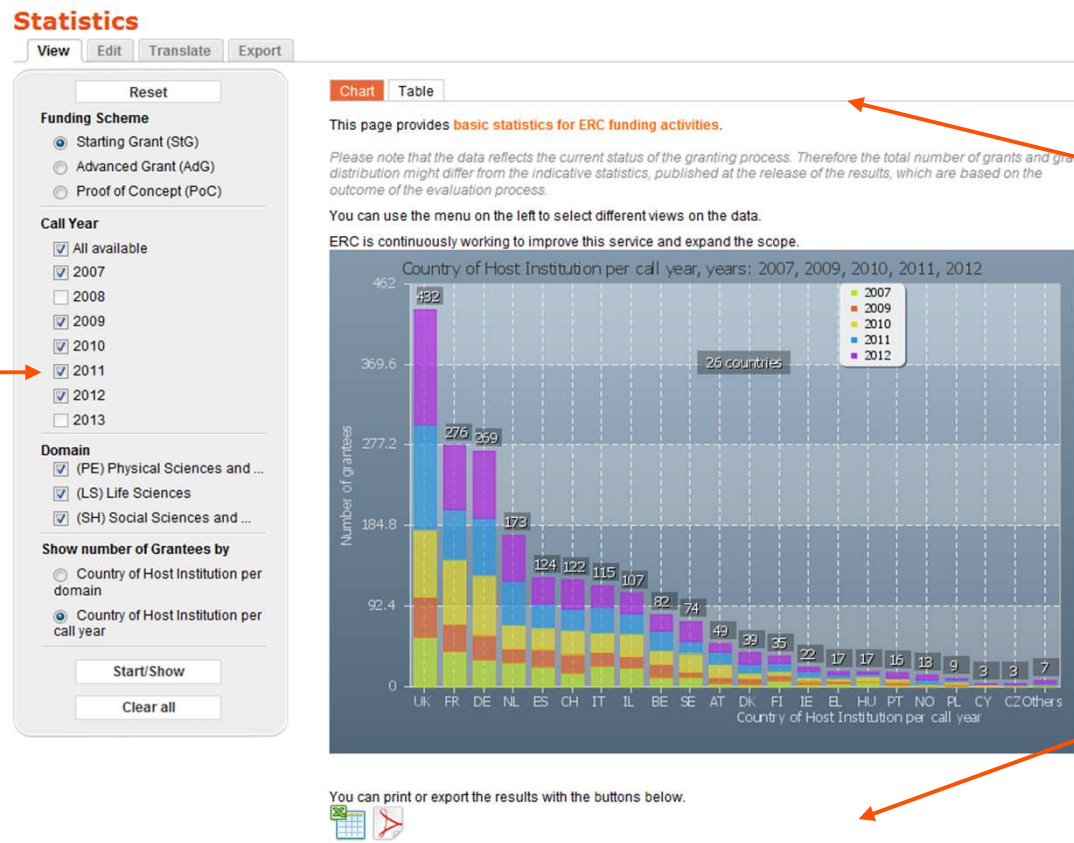
European Commission | Legal Notices |

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## New interactive statistics tool launched

Menu to select different views on the data by Funding Scheme, Call Year and Domain

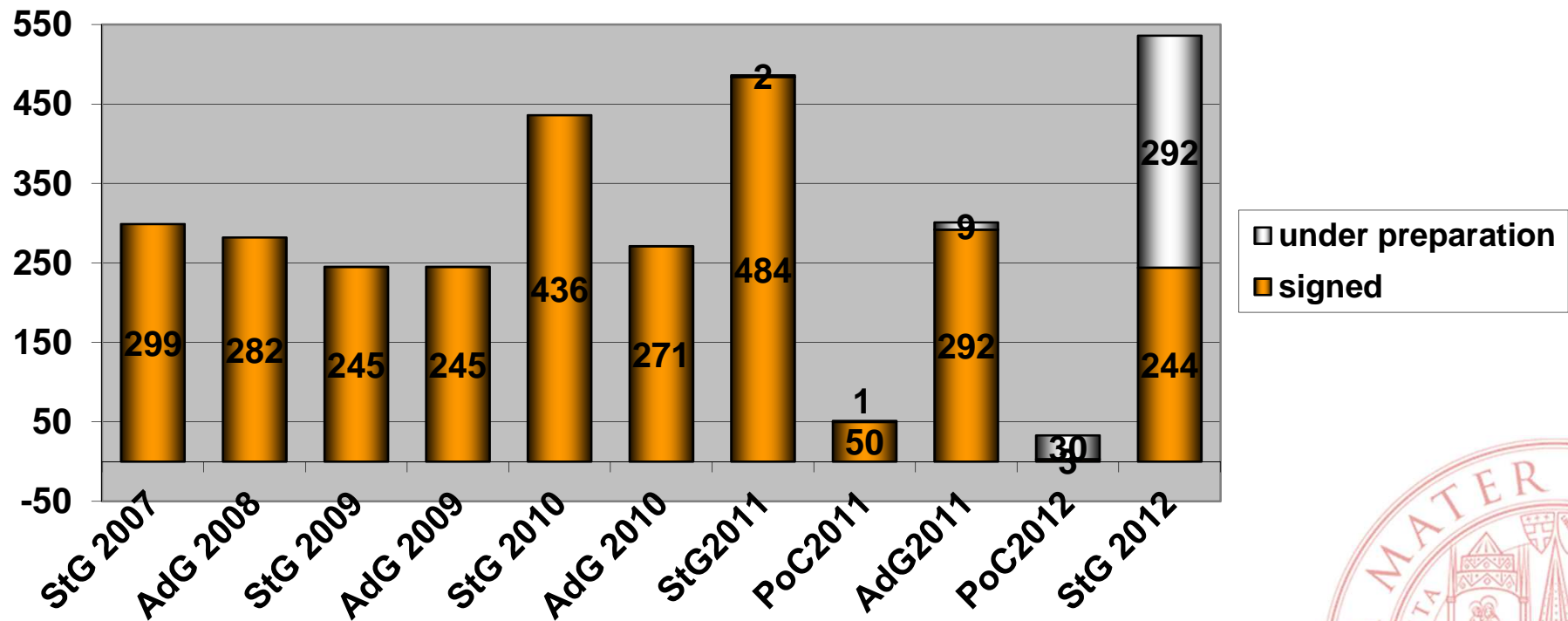


Statistics can be displayed in chart or table format with possibility to save as pdf or export the results

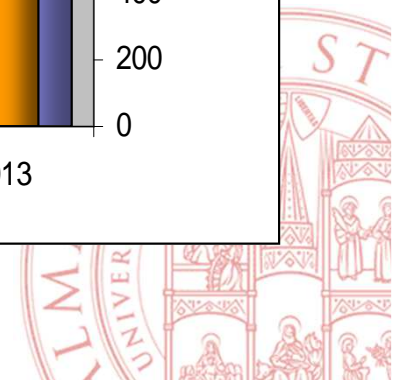
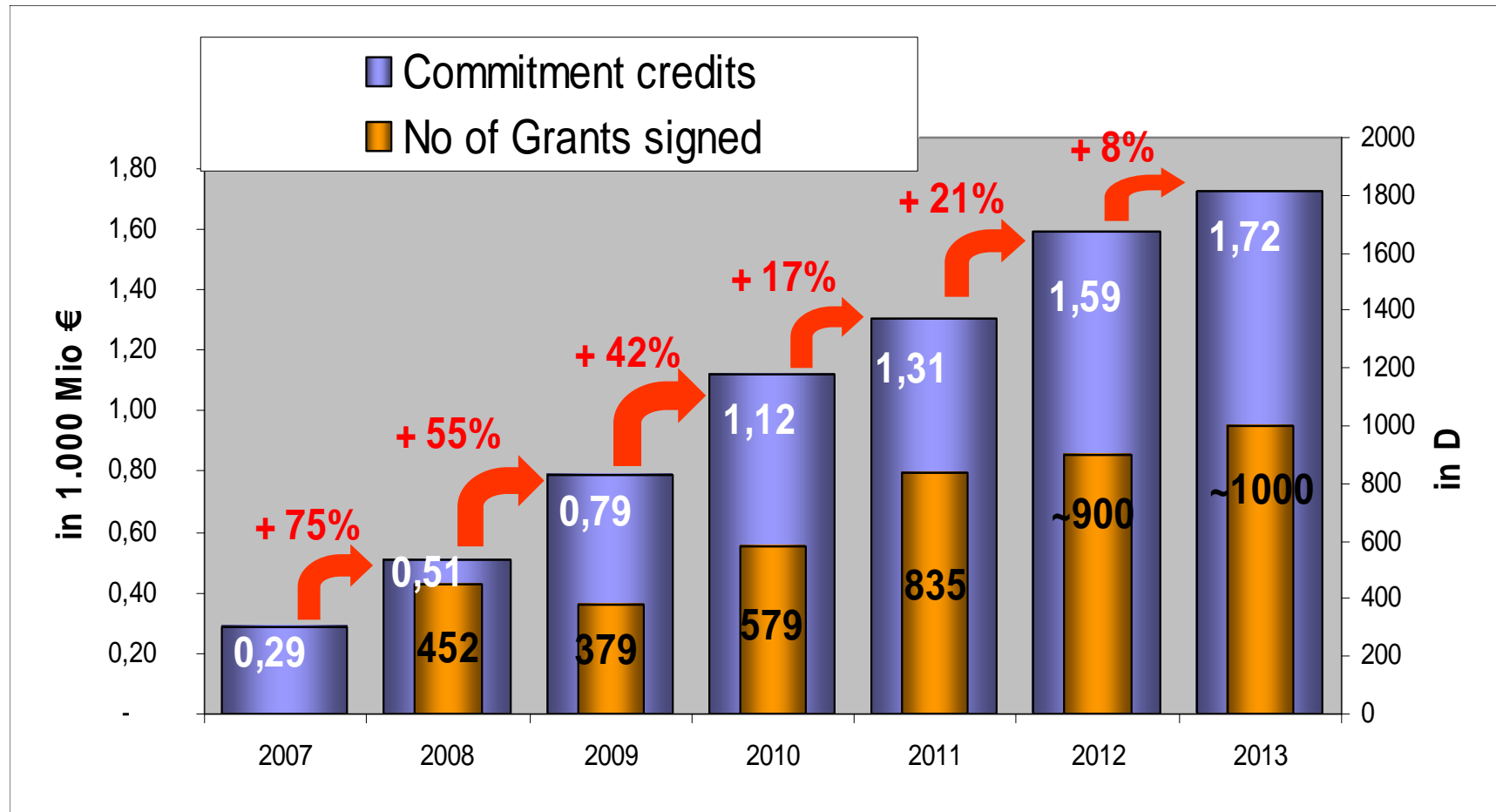


# GRANT PREPARATION

2.850 grants signed, for a total commitment of 4.58 bn€



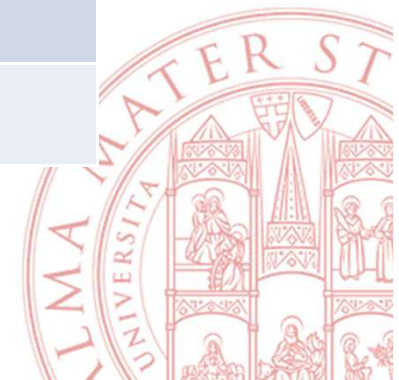
# GRANT PREPARATION yearly evolution



# GRANT PREPARATION

## Time to Grant (number of calendar days from invitation letter)

	StG2011	AdG201 1	PoC2011	StG2012
<b>minimum</b>	19	24	34	16
<b>first 10%</b>	55	51	51	44
<b>first 25%</b>	79	87	71	69
<b>median</b>	102	129	105	
<b>first 75%</b>	143	182	154	
<b>first 90%</b>	204	235	209	



# IDEAS Programme Characteristics

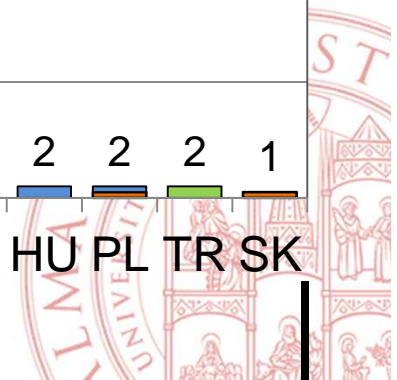
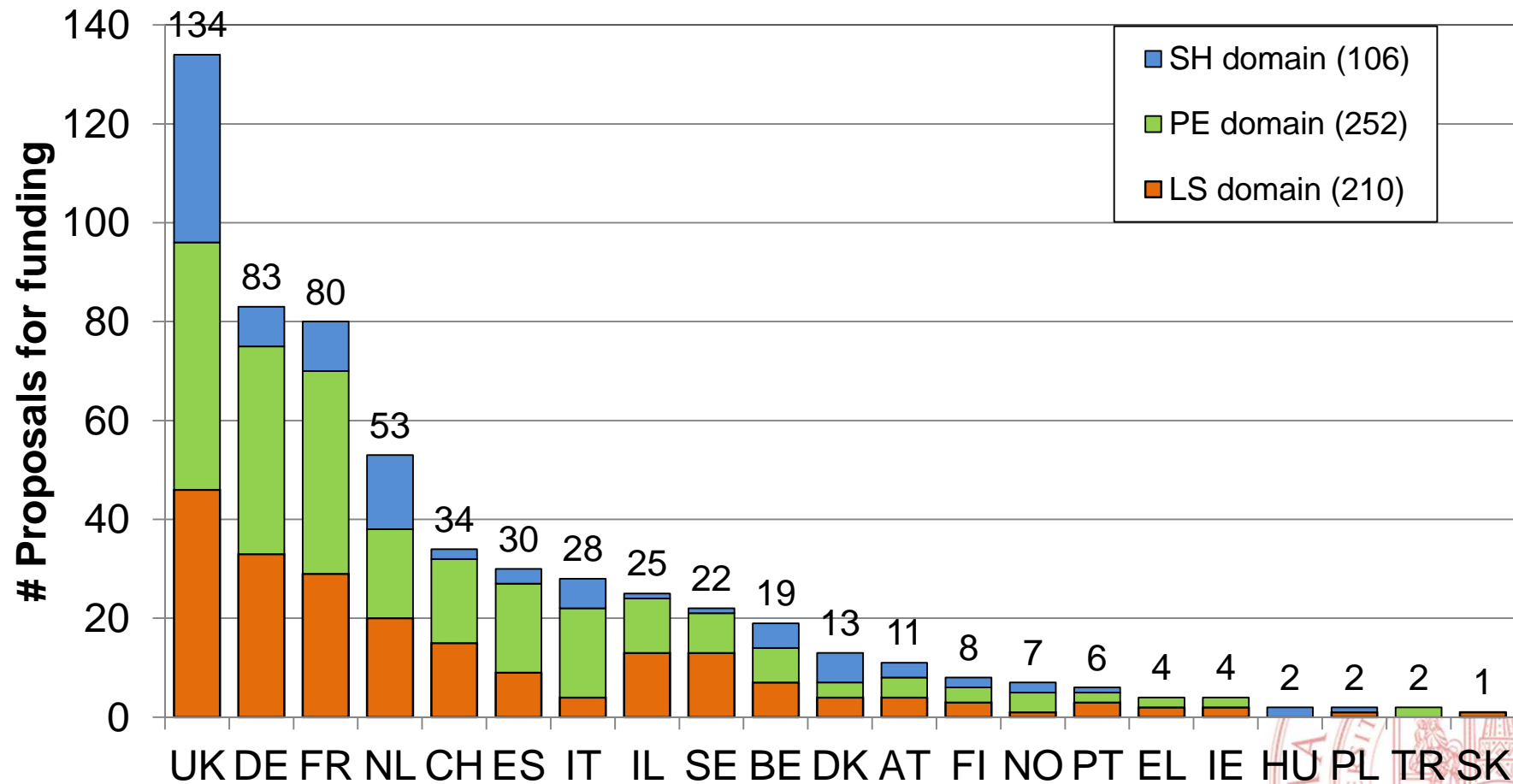
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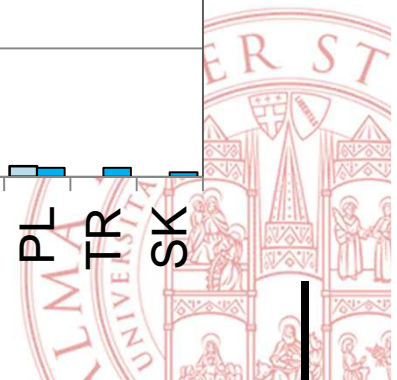
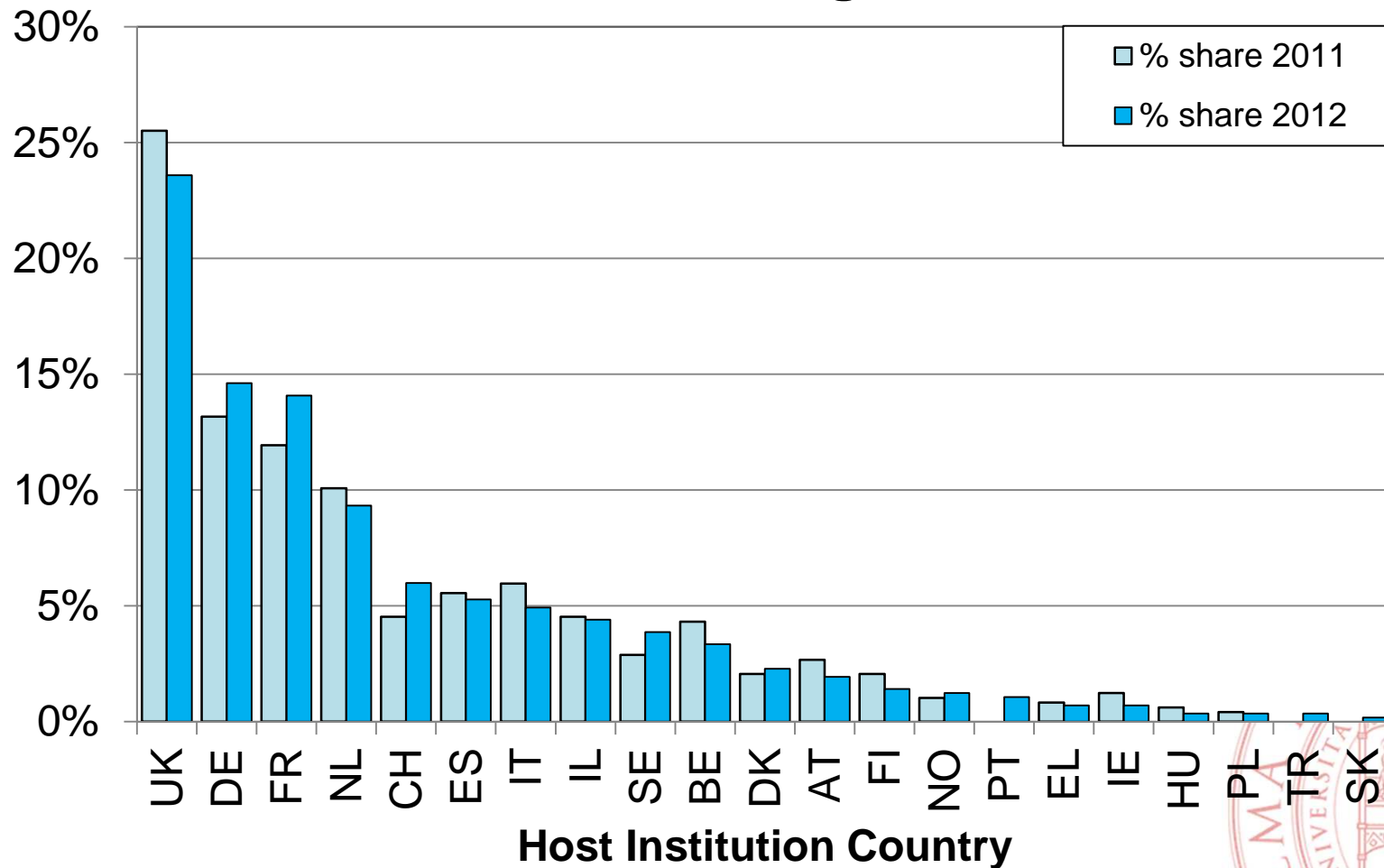
# STG 2012 : Proposals for funding Country of Host Institution and domain

## 21 Countries



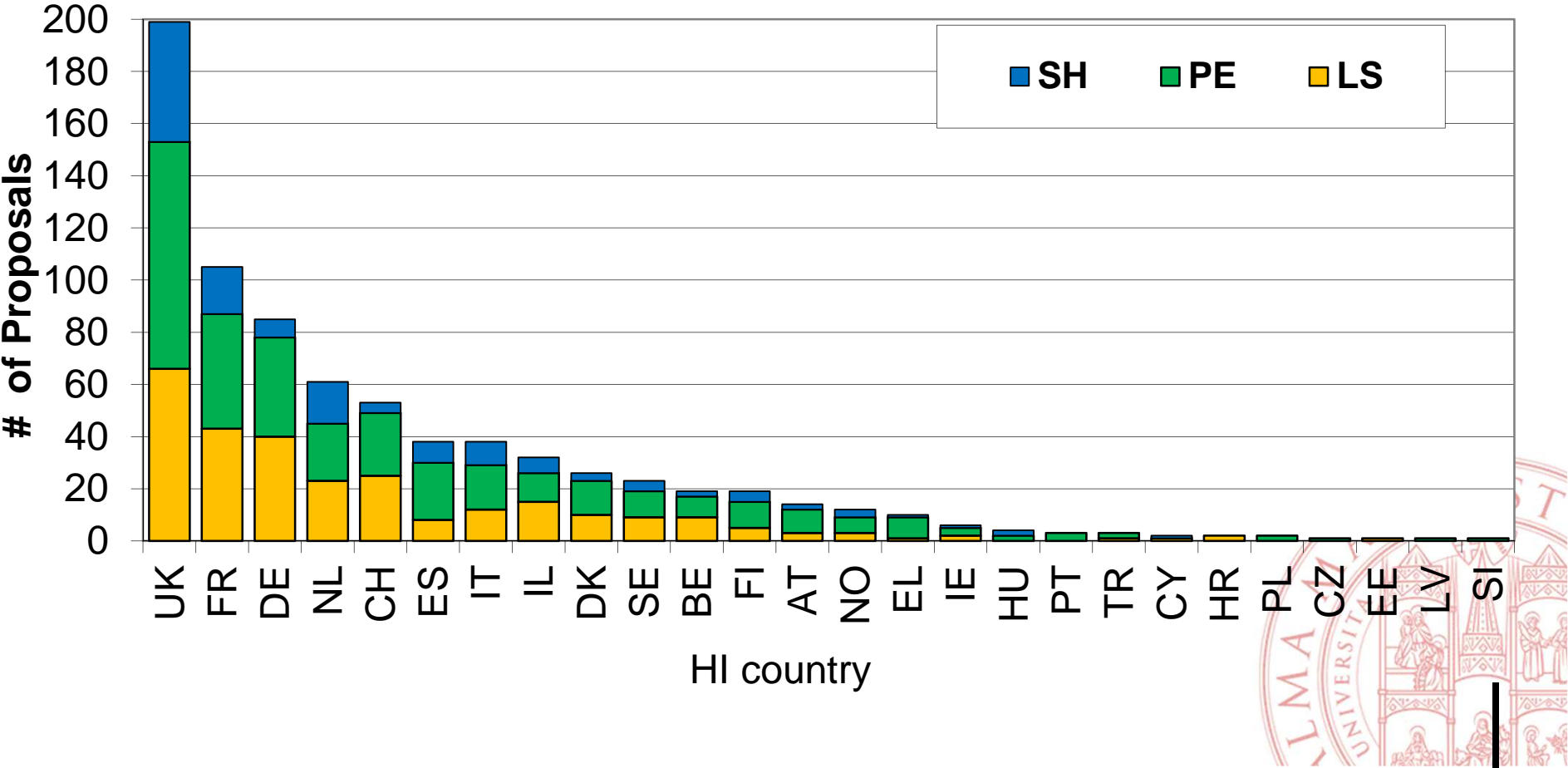
# STG 2011 - 2012 : Proposals for funding by Country of Host Institution

## All countries on funding list in 2012



# ADG 2012- Proposals passing to Step 2 by HI country and domain

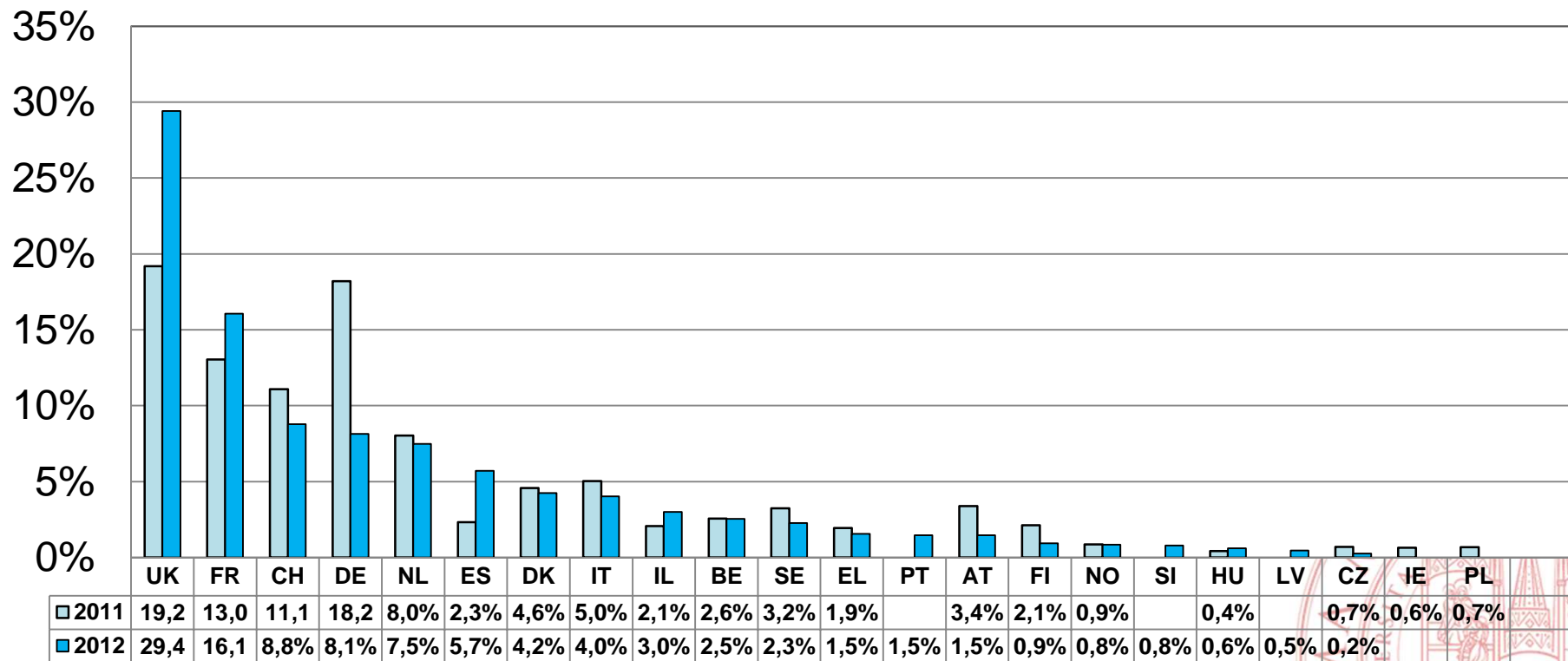
## ERC ADG 2012 # of proposals by HI country and domain passed to Step 2



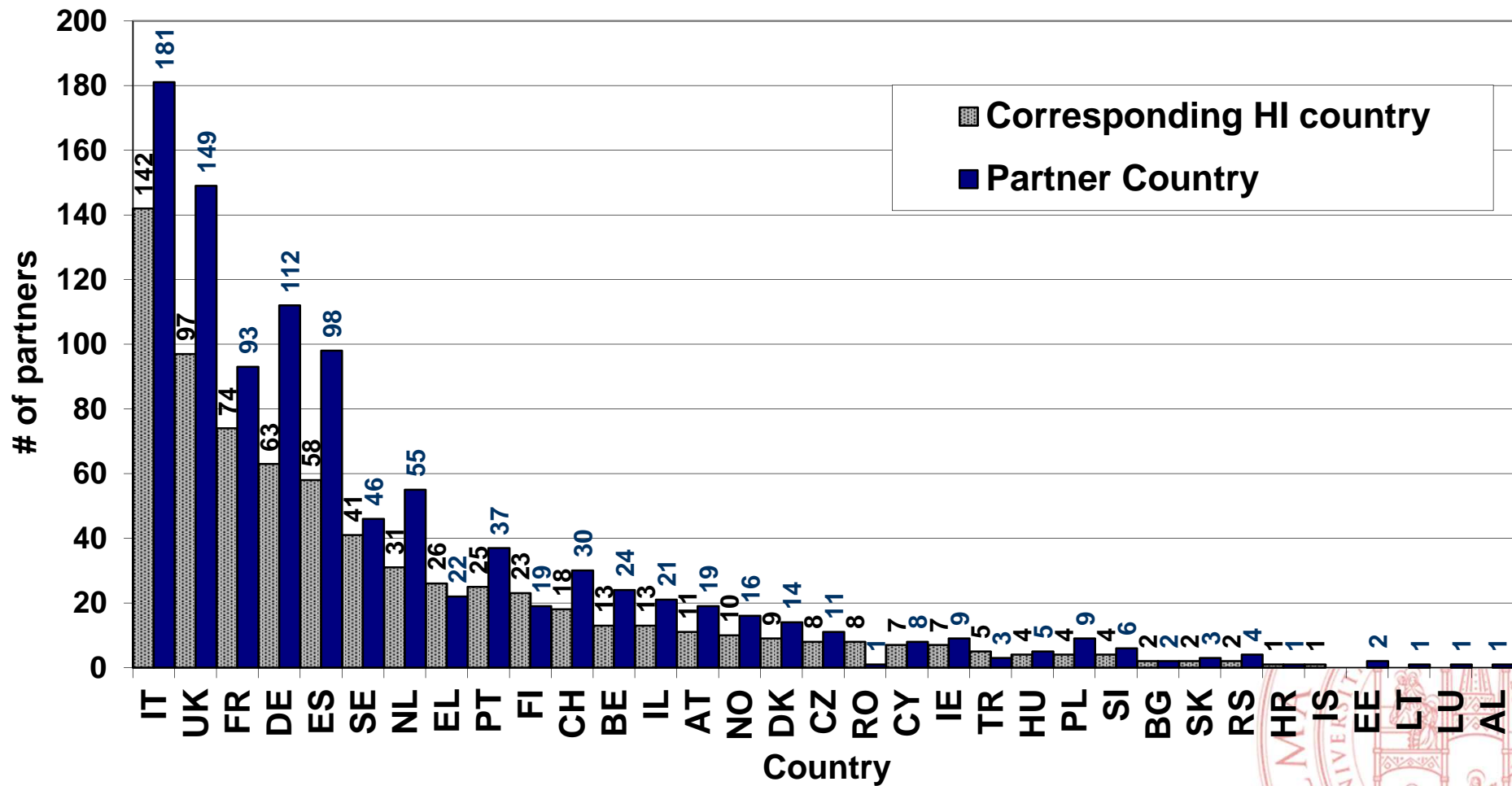
# ADG 2011-2012 Step 2 PE domain – Distribution of funds

## ERC ADG 2011-2012 PE domain- Distribution of funds by Host Institution Country

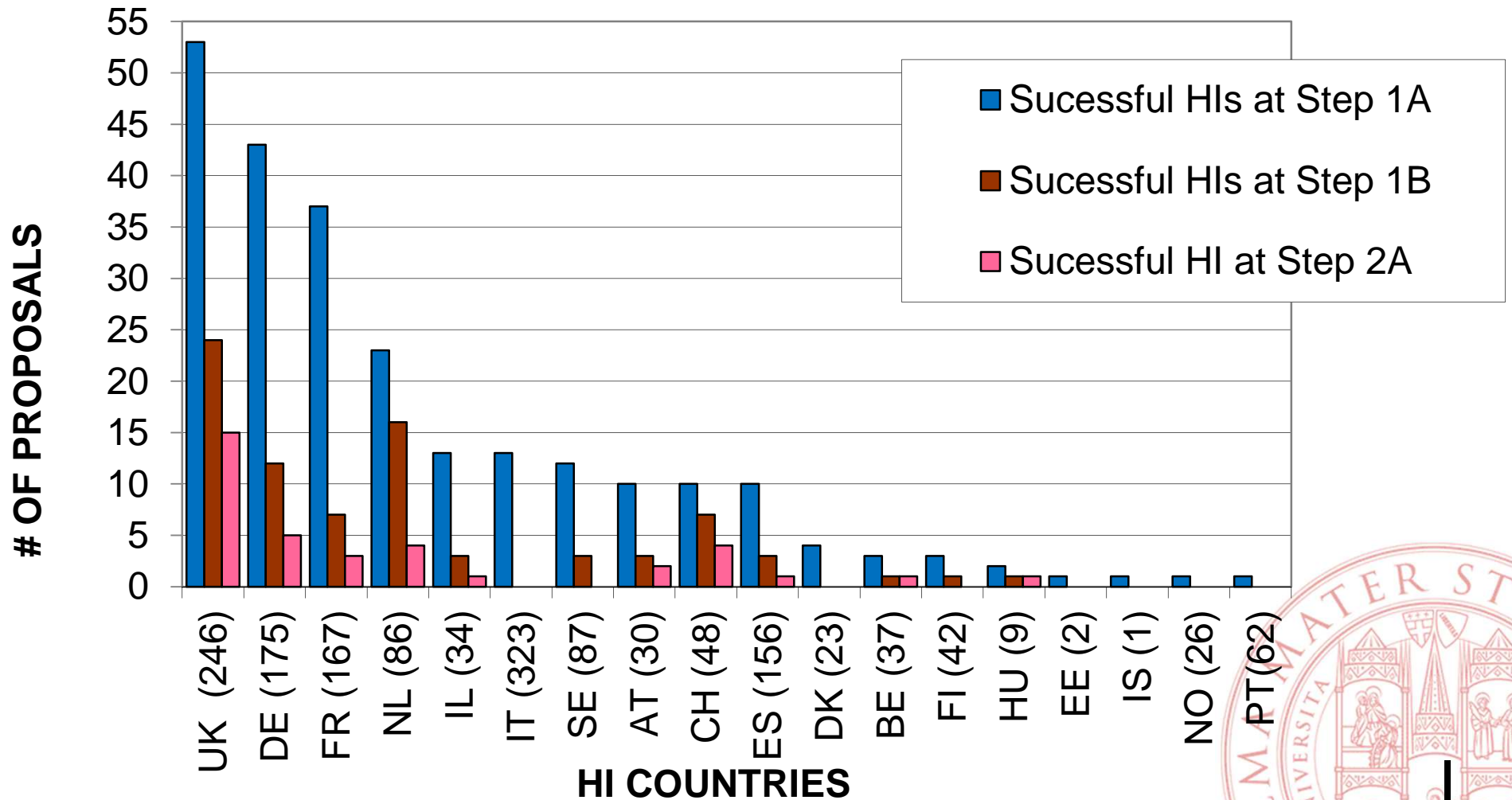
All countries on funding list in 2012



# Synergy 2012 corresponding HIs and partners distribution at submission



# SYNERGY 2012- Successful HI countries – at each step



# Project preparation

## General notes

### Deciding to try

- Need to have time (make sure you get an empty slot in your calendar)
- Prepare for it : read a lot to widen you views → depth you have, but do you have breadth?
- Are you mature? You are convinced you know the target area very deeply? Have you supervised 5-10 PhDs in the area?
- Are you visible? If people in the panel know you or if they can find out about you in a few minutes (one call, one google search), that's ok
- Have an idea YOU are really excited about? (not the money 😊)

### Effort needed to prepare a competitive proposal

- Focus, focus, focus: take two weeks 100% for writeup only – no distractions
- Your junior collaborators can help (bibliography, figures), but you must write the whole thing
- No cut and paste – it's 15 pages, it must really flow nicely

...



# The *Principal Investigator*

- ❑ **Space is very limited: chose carefully!**
- ❑ **Prefer quality to volume: papers with high ref. count, possibly highly technical**
- ❑ **Highlight only major accomplishments – academic, industrial, prizes**
- ❑ **Be quantitative – h-index, citation count (publish-or-perish/google scholar, microsoft academic search, ...)**
- ❑ **Be comparative – quote rankings, if possible**
- ❑ **Focus: quote your best research related to the topic of the project**
- ❑ **Cover all aspects: scientific excellence, impact (academic, industrial, social) of research, capability to attract funding, excellence in education, team leadership**
- ❑ **Make sure that 10-years derivative is positive**
- ❑ **Highlight cooperation and international research network (academic, industrial)**





# Poposal content

## *some advice*

- ❑ **Highly technical but understandable. Proposal is reviewed by 7 people.... Cannot assume that they are all specialists in your field.**
- ❑ **Spend a lot of time in making sure that impact is really understandable (and exciting)**
- ❑ **Short is beautiful – do not write too much**
- ❑ **Be ambitious, but credible (do not promise too much)**
- ❑ **Link key deliverables to your track record to convince reviewers that you can deliver**
- ❑ **Give room to science (more than in e.g. FP7 cooperation projects)**
- ❑ **5 years is a long time – don't over-specify**



## ERC AdG-MULTITHERMAN at a Glance

- ❑ Funding 2.48M€ (single partner), started Apr. 1<sup>st</sup>, 2012 – Duration: 60 months
- ❑ Multidisciplinary contributions from Artificial Intelligence & Optimization and Control Theory
- ❑ Objective: **Multi-scale Thermal Management of Computing Systems**

Integrate thermal-aware platform design, thermal control with workload management and shaping in a distributed, multi-scale strategy, to achieve the highest performance compatible with temperature constraints

The development of a synergistic performance, power and thermal management strategy requires major breakthrough in several areas, namely architectures, run-time systems, resource management middleware, code optimization tools and programming models.

Bring together techniques from computer architecture and circuits, control theory, combinatorial and continuous optimization, statistical model-building and artificial intelligence Results will be demonstrated on of physical and virtual prototypes, proving practical applicability and relevance for industrial applications.

# IDEAS Advanced Grant

## *la gestione di un progetto ERC*

### ❑ **Pluses**

- ❑ Very little paperwork compared with other FP7 schemes
- ❑ Lots of freedom
- ❑ Interaction with PO is quite immediate and easy

### ❑ **complessità/ difficoltà/**

- ❑ EU side: so far so good!
- ❑ UNIBO side: hard to scale up – make sure you make your department/school immediately aware!
- ❑ Things take time in Italy – perhaps too much...

...



***Grazie dell'attenzione!***

