

# The European Research Council



European Research Council

Established by the European Commission

## ERC and Greece

## FP7 achievements and H2020 results

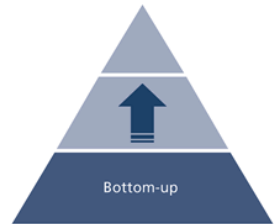
Theodore PAPAZOGLU  
ERCEA Head of Unit A.1

January 2016

# What is ERC?

The ERC supports excellence in frontier research through a bottom-up, individual-based, pan-European competition

**Budget:** € 13 billion (2014-2020) - 1.9 billion €/year  
 € 7.5 billion (2007-2013) - 1.1 billion €/year



## Legislation

- Scientific governance: independent Scientific Council with 22 members including the ERC President; full authority over funding strategy
- Support by the ERC Executive Agency (autonomous)
- Excellence as the only criterion

## Strategy

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





## The European Commission

- **Provides financing** through the EU framework programmes
- **Guarantees autonomy of the ERC**
- **Assures the integrity and accountability of the ERC**
- **Adopts annual work programmes** as established by the Scientific Council

## The ERC Scientific Council

- **22 prominent researchers** proposed by an independent identification committee
- **Appointed by the Commission** (4 years, renewable once)
- **Establishes overall scientific strategy;** annual work programmes (incl. calls for proposals, evaluation criteria); peer review methodology; selection and accreditation of experts
- **Controls quality of operations and management**
- **Ensures communication with the scientific community**



## The ERC Executive Agency

- **Executes annual work programme** as established by the Scientific Council
- **Implements calls for proposals** and provides information and support to applicants
- **Organises peer review evaluation**
- **Establishes and manages grant agreements**
- **Administers scientific and financial aspects** and follow-up of grant agreements
- **Carries out communications activities** and ensures information dissemination to ERC stakeholders

# ERC in the H2020 Structure

## ➤ The HORIZON 2020 main components:

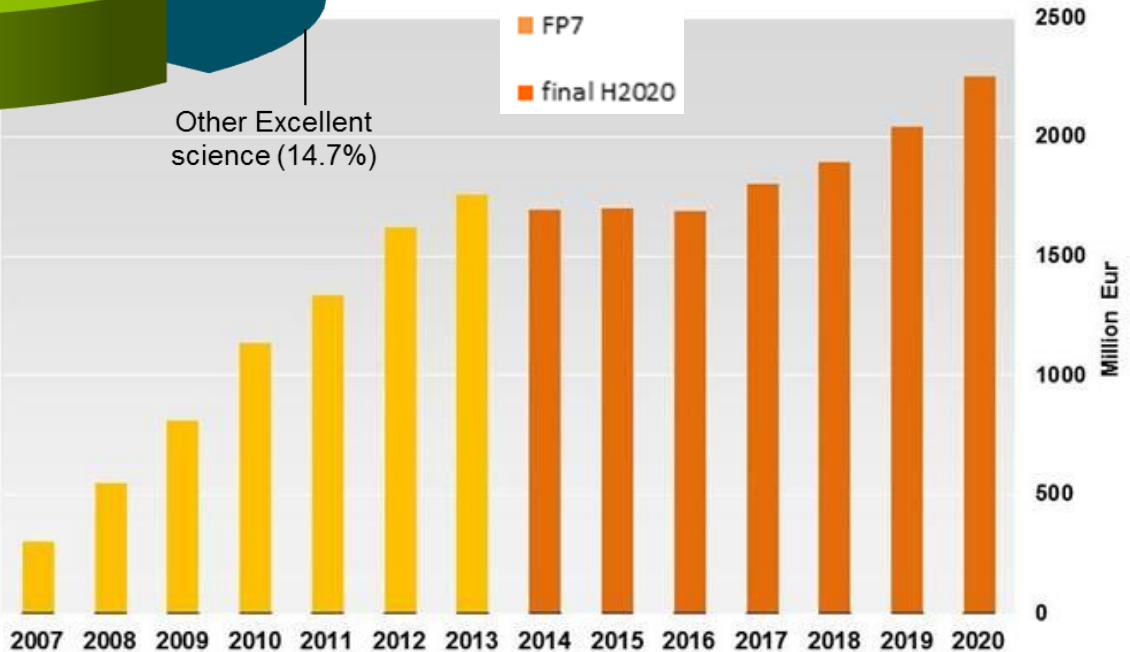
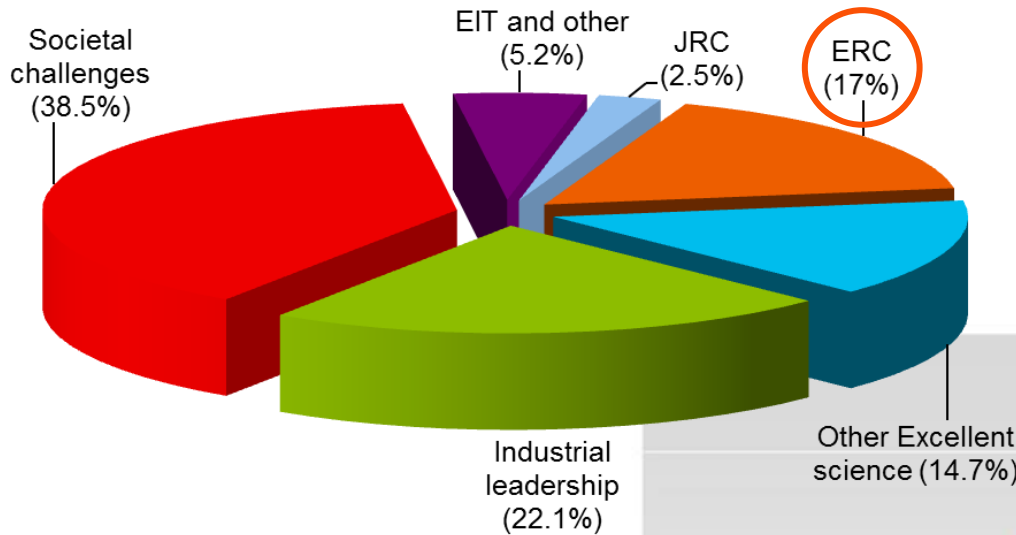
- Excellent Science
  - ➔ *World class science is foundation of technologies, jobs, well-being*
  - ➔ *Europe needs to develop, attract, retain research talent*
  - ➔ *Researchers need access to the best infrastructures*
- Industrial leadership
- Societal challenges

## ➤ Excellent Science:

- **European Research Council** (budget under H2020: € 13 billion)
- Future and Emerging Technologies
- Marie Skłodowska Curie Actions
- Research Infrastructures

# ERC H2020 Budget

**ERC Budget  
€ 13 billion**

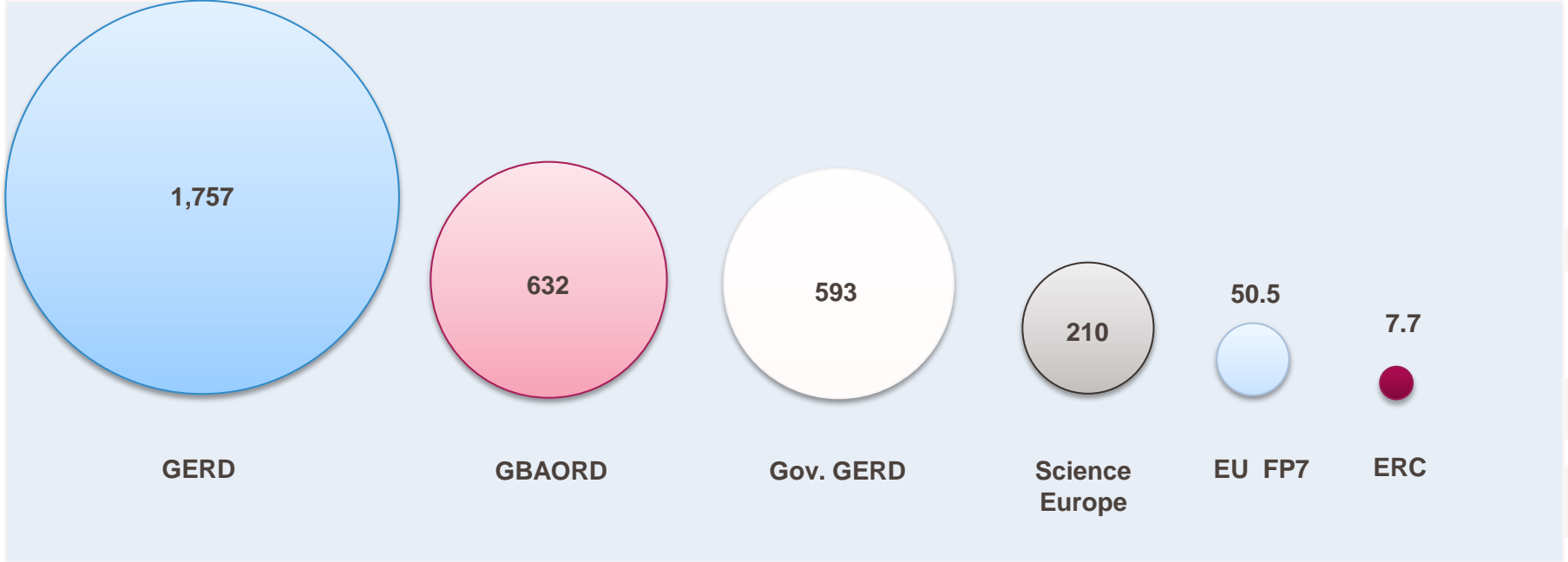


# Putting ERC Budget in some context - 1



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## ERC budget in FP7 vs. Public expenditure in MS (in € bil.)



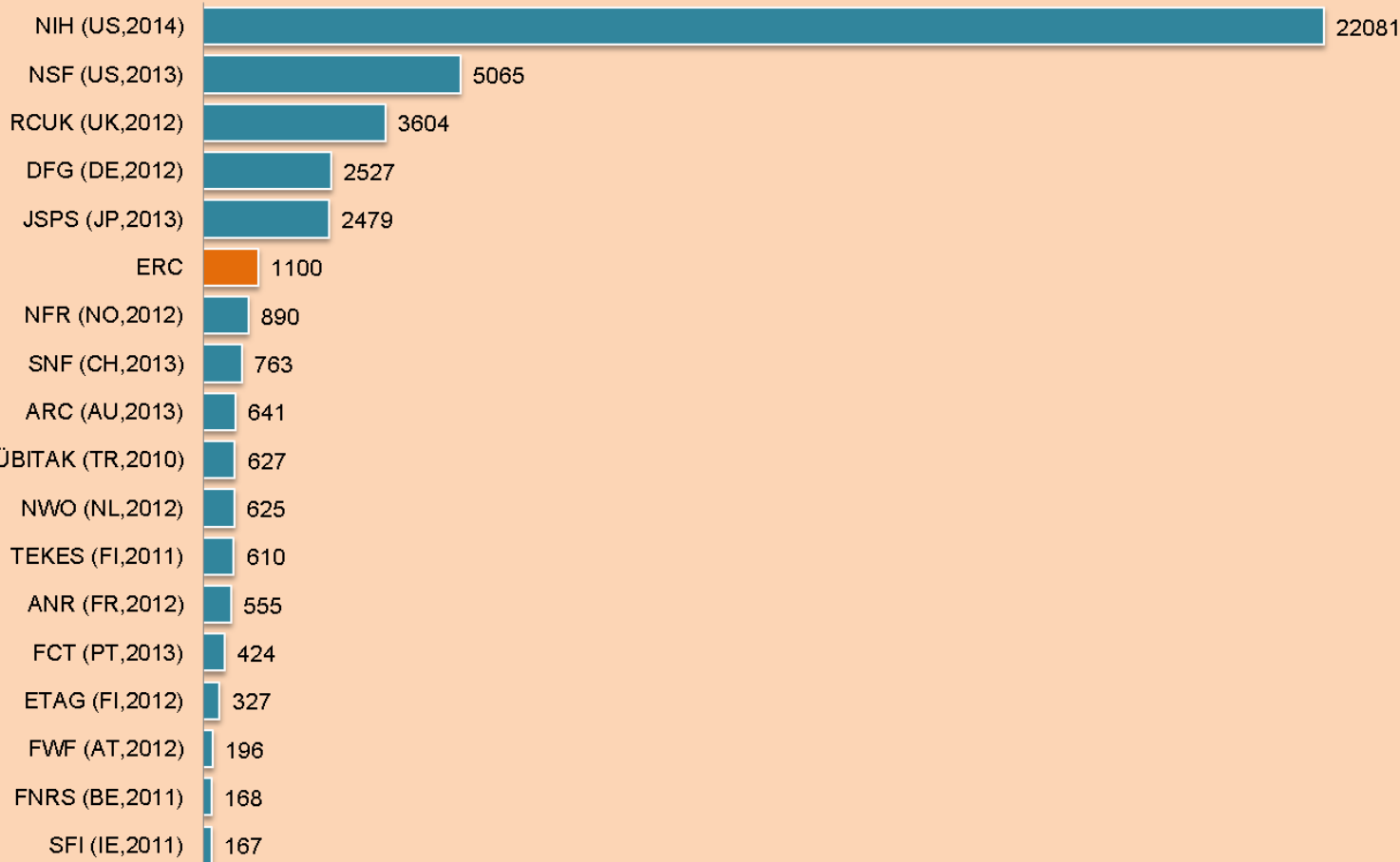
# Putting ERC Budget in some context - 2



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## ERC in FP7 vs. other research funding agencies



# ERC Grant Schemes

## Starting Grants

starters  
(2-7 years after PhD)  
up to € 1.5 Mio  
for 5 years

## Consolidator Grants

consolidators  
(7-12 years after PhD)  
up to € 2.0 Mio  
for 5 years

## Advanced Grants

track-record of  
significant research  
achievements in the  
last 10 years  
up to € 2.5 Mio  
for 5 years

## Proof-of-Concept

bridging gap between research - earliest  
stage of marketable innovation  
up to €150,000 for ERC grant holders



# Creative Freedom to Individual Grantee



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## ERC offers independence, recognition & visibility

- to work on a research topic of **own choice**, with a team of **own choice**
- to gain true **financial autonomy** for 5 years
- to negotiate with the host institution the **best conditions** of work
- to attract **top team members** (EU and non-EU) **and collaborators**
- to move with the grant to any place in Europe if necessary (**portability of grants**)
- **to attract additional funding and gain recognition**; ERC is a quality label

# Evaluation Panel Structure (WP2016)



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## Life Sciences

- LS1 Molecular and Structural Biology and Biochemistry
- LS2 Genetics, Genomics, Bioinformatics and Systems Biology
- LS3 Cellular and Developmental Biology
- LS4 Physiology, Pathophysiology and Endocrinology
- LS5 Neurosciences and Neural Disorders
- LS6 Immunity and Infection
- LS7 Diagnostic Tools, Therapies and Public Health
- LS8 Evolutionary, Population and Environmental Biology
- LS9 Applied Life Sciences and Non-Medical Biotechnology

## Physical Sciences & Engineering

- PE1 Mathematics
- PE2 Fundamental Constituents of Matter
- PE3 Condensed Matter Physics
- PE4 Physical and Analytical Chemical Sciences
- PE5 Synthetic Chemistry and Materials
- PE6 Computer Science and Informatics
- PE7 Systems and Communication Engineering
- PE8 Products and Process Engineering
- PE9 Universe Sciences
- PE10 Earth System Science

## Social Sciences and Humanities

- SH1 Individuals, Markets and Organisations
- SH2 Institutions, Values, Environment and Space
- SH3 The Social World, Diversity, Population
- SH4 The Human Mind and Its Complexity
- SH5 Cultures and Cultural Production
- SH6 The Study of the Human Past

# Proposal Structure

## Administrative forms (Part A)

- 1 – General information
- 2 – Administrative data of participating organisations
- 3 – Budget
- 4 – Ethics
- 5 – Call specific questions

Administrative forms

## Annexes

Commitment of the host institution

## Part B1 (submitted as pdf) *Evaluated in Step 1 & Step 2*

Text box - Cross-panel explanation

- a – Extended synopsis      5 pages
  - b – Curriculum vitae      2 pages
  - c - Track-record      2 pages
- Appendix – Funding ID

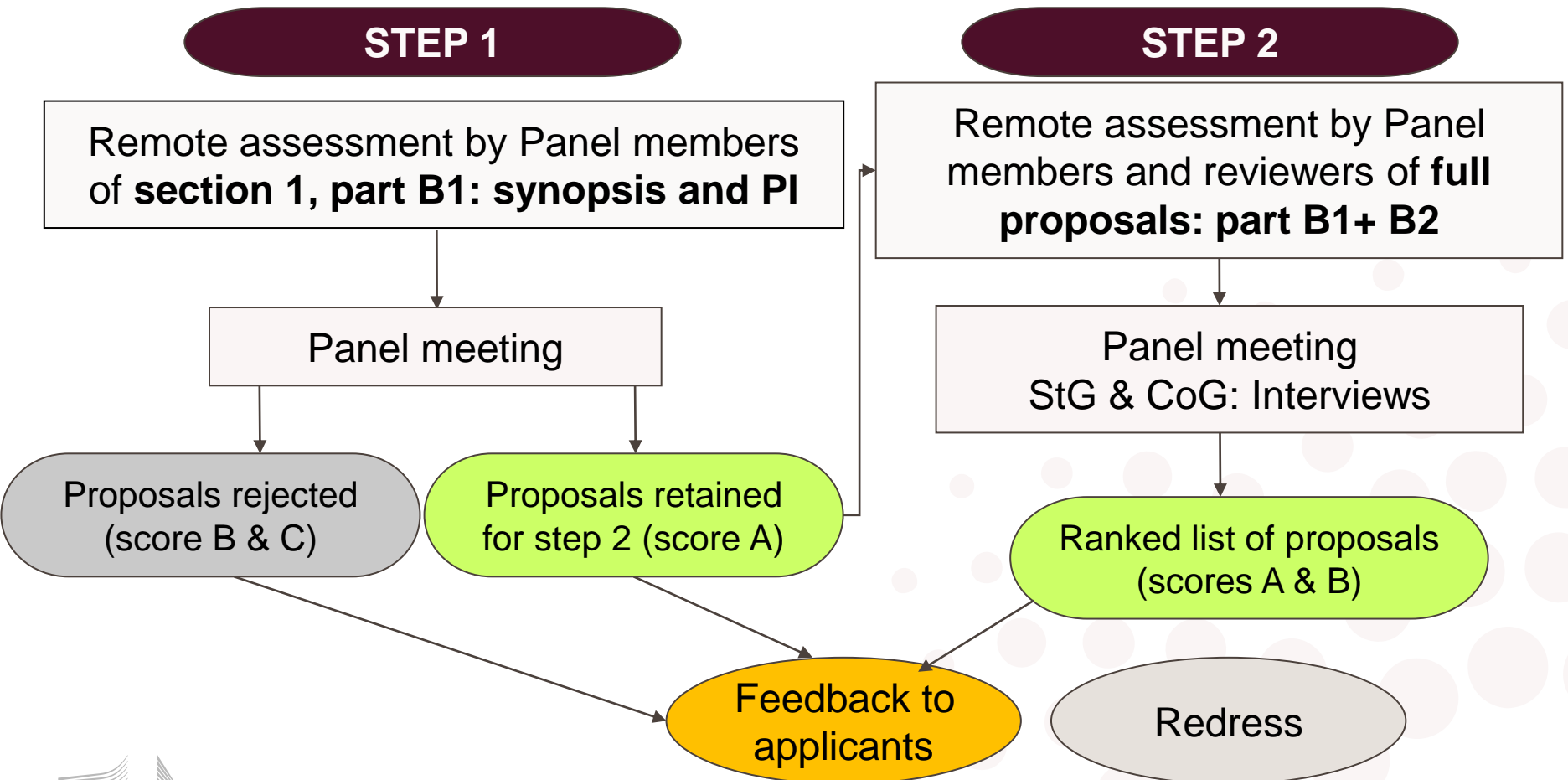
## Part B2 (submitted as pdf) *Not evaluated in Step 1 (Step 2 only)*

- Scientific proposal      15 pages
- a – State-of-the-art and objectives
- b – Methodology
- c – Resources

## **Guidelines and Recommendations in the Information for Applicants**

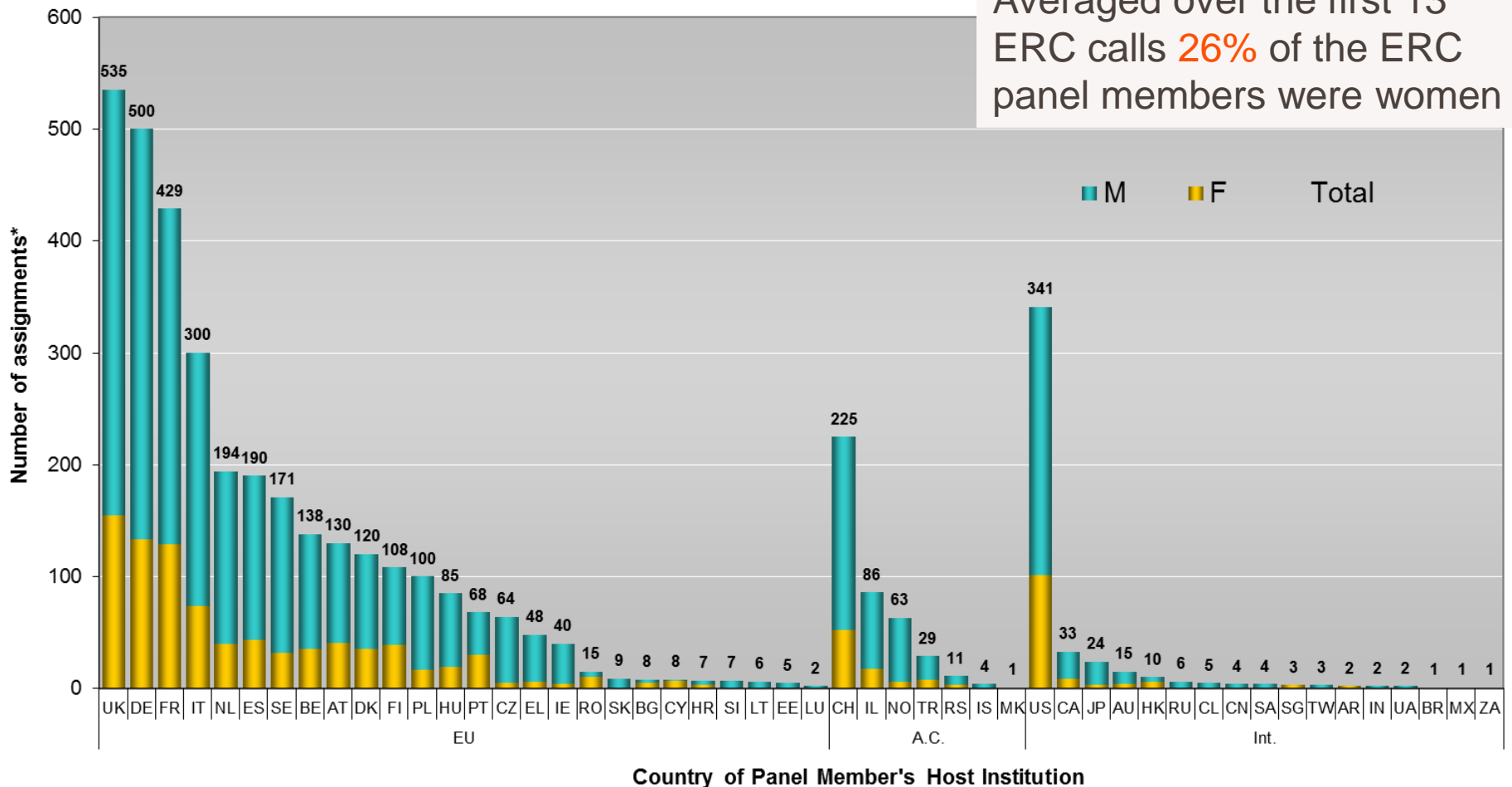
# How Are the Proposals Evaluated?

## Single Submission, but a Two-step Evaluation



# FP7 ERC Panel Members by Country of HI and Gender

Averaged over the first 13 ERC calls **26%** of the ERC panel members were women



Based on the ten ERC StG and AdG calls 2007 - 2013



# FP7 ERC & H2020 Panel Members from Greece

**40 Individual Panel Members (27 from Athens area research organizations/universities)**

**91 instances\* (from 1 to 5 calls per panel member)**

**4 Panel Chairpersons (from 1 to 3 calls)**

**206 Evaluations of individual proposals as remote referees (typically 1, up to 6 over multiple calls)**

# After 8 Years, a Success Story



Over **5,000**  
top researchers funded since  
the ERC's creation in 2007



Over **30,000**  
articles featuring ERC projects published  
in prestigious scientific journals



Over **40,000**  
researchers and other professionals  
employed in ERC research teams



**626** research institutions  
hosting ERC grantees – universities,  
public or private research centres in  
the EU or associated countries

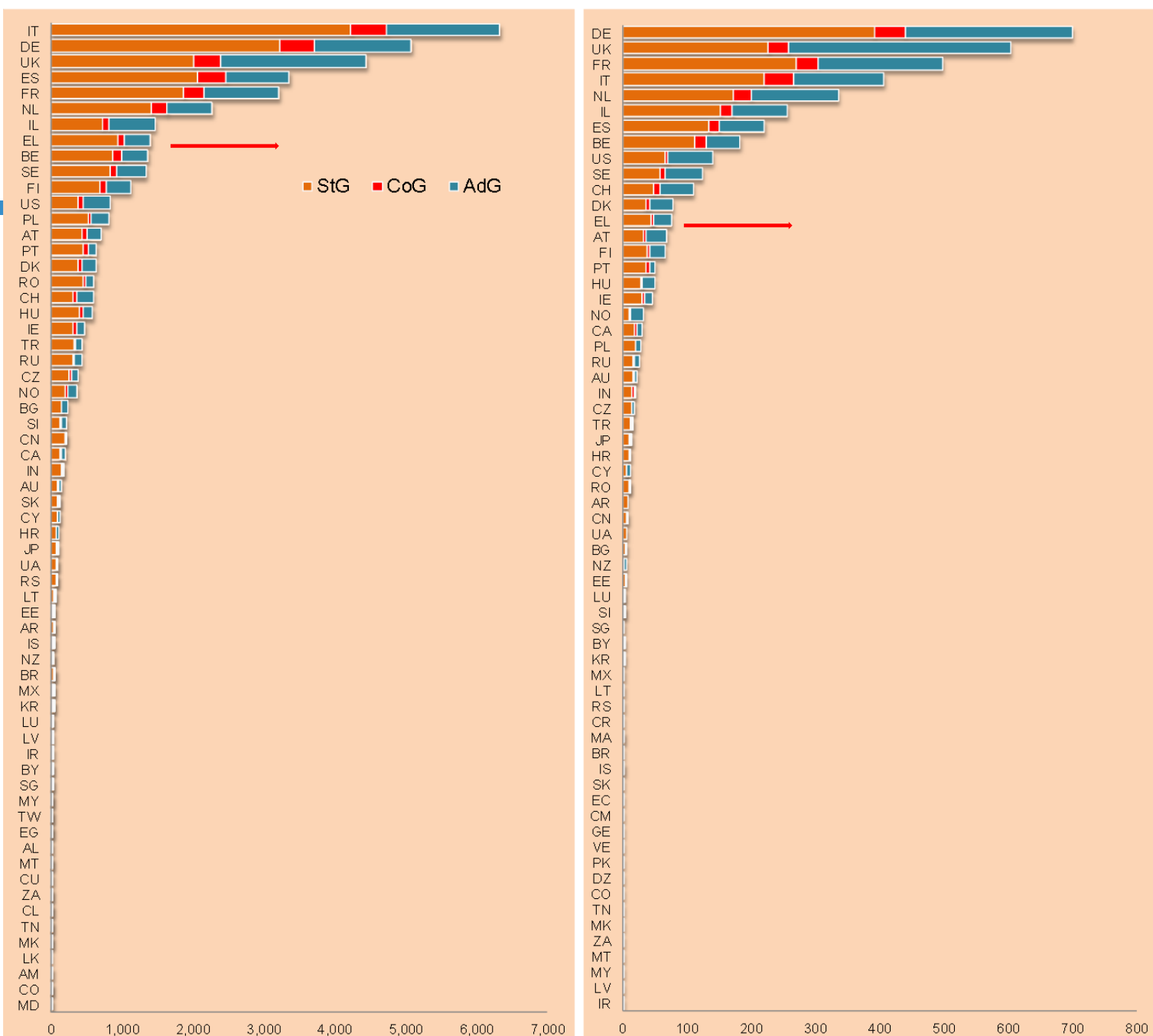


**€13 billion**  
ERC budget for 2014-2020 under  
Horizon 2020



**66**  
nationalities of  
grant holders

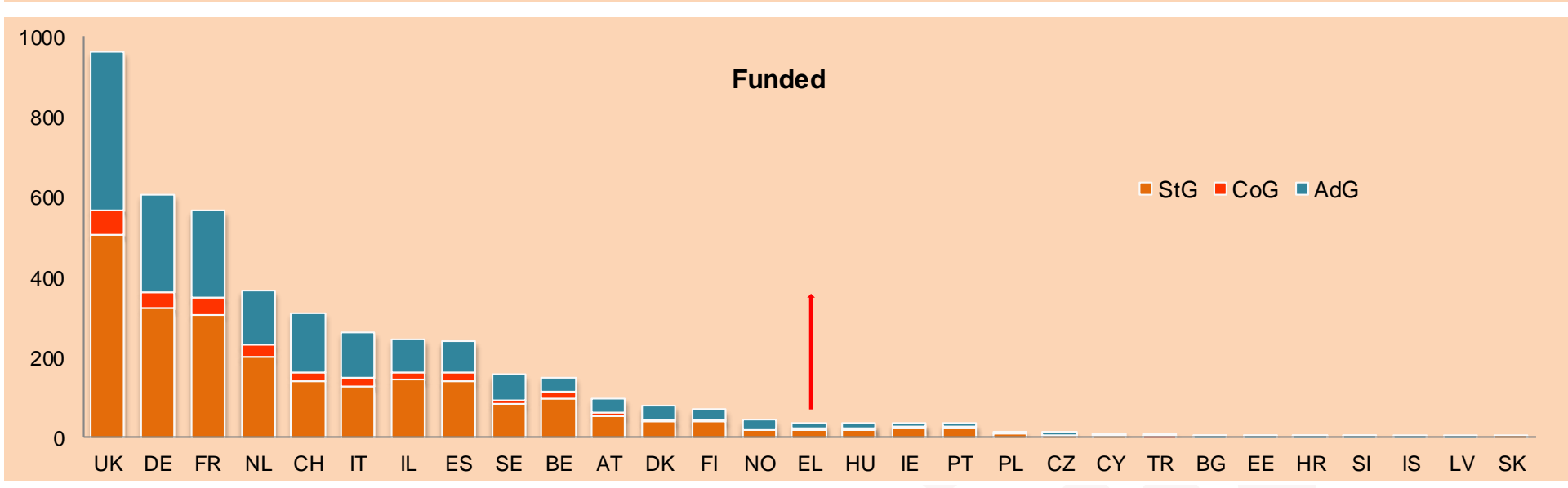
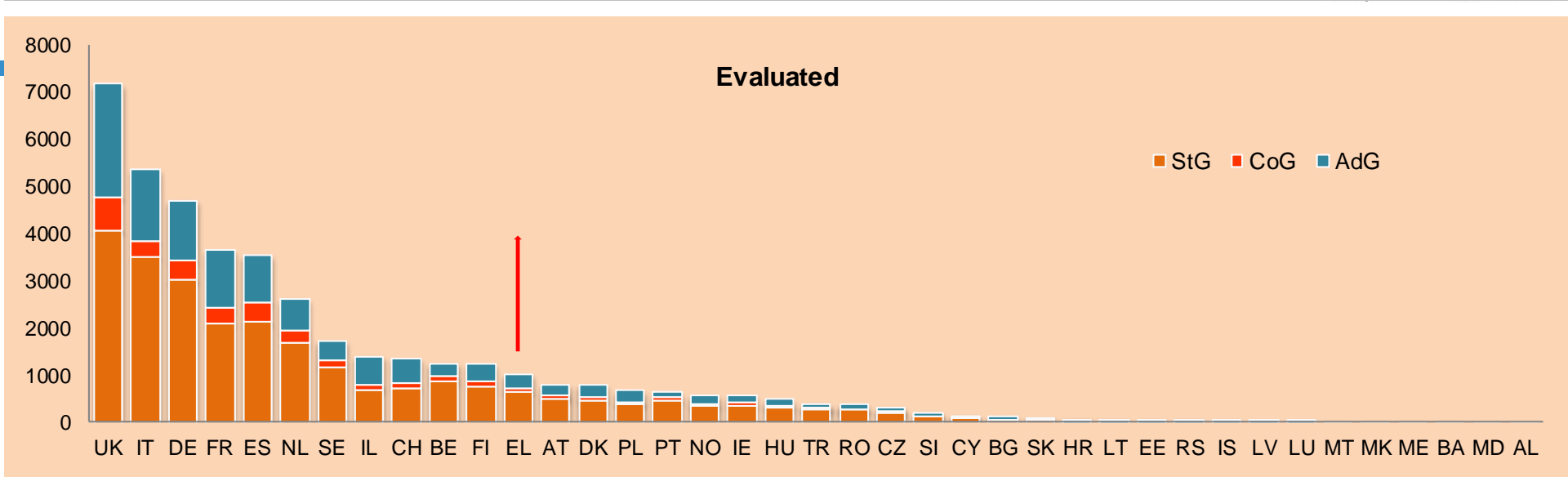
Figure 6.13: Evaluated\* and funded applicants by nationality



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**Figure 8.01: Evaluated and funded applicants by host country at application stage (StG, CoG and AdG)**



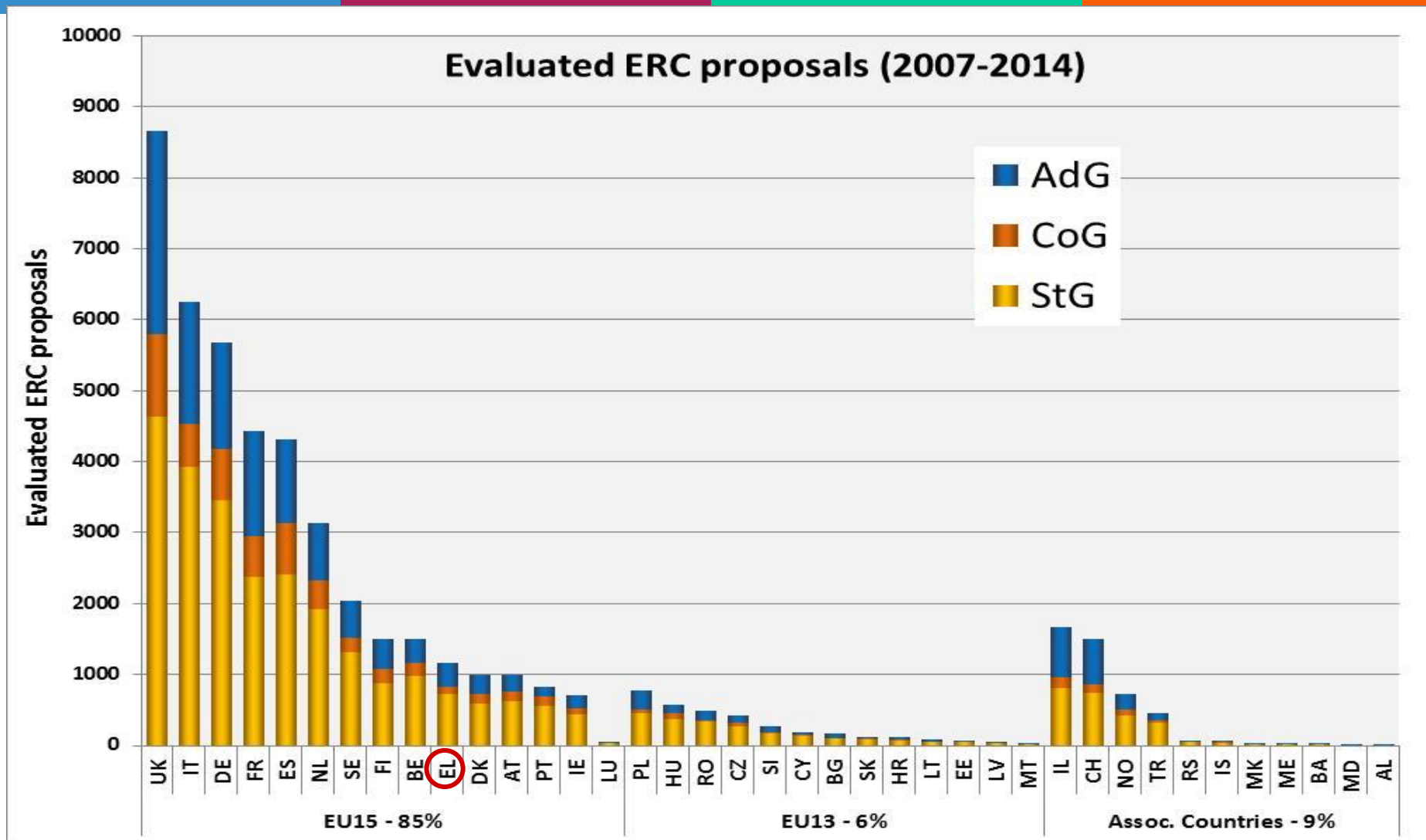
# ERC Calls 2007 - 2014

## Evaluated Proposals



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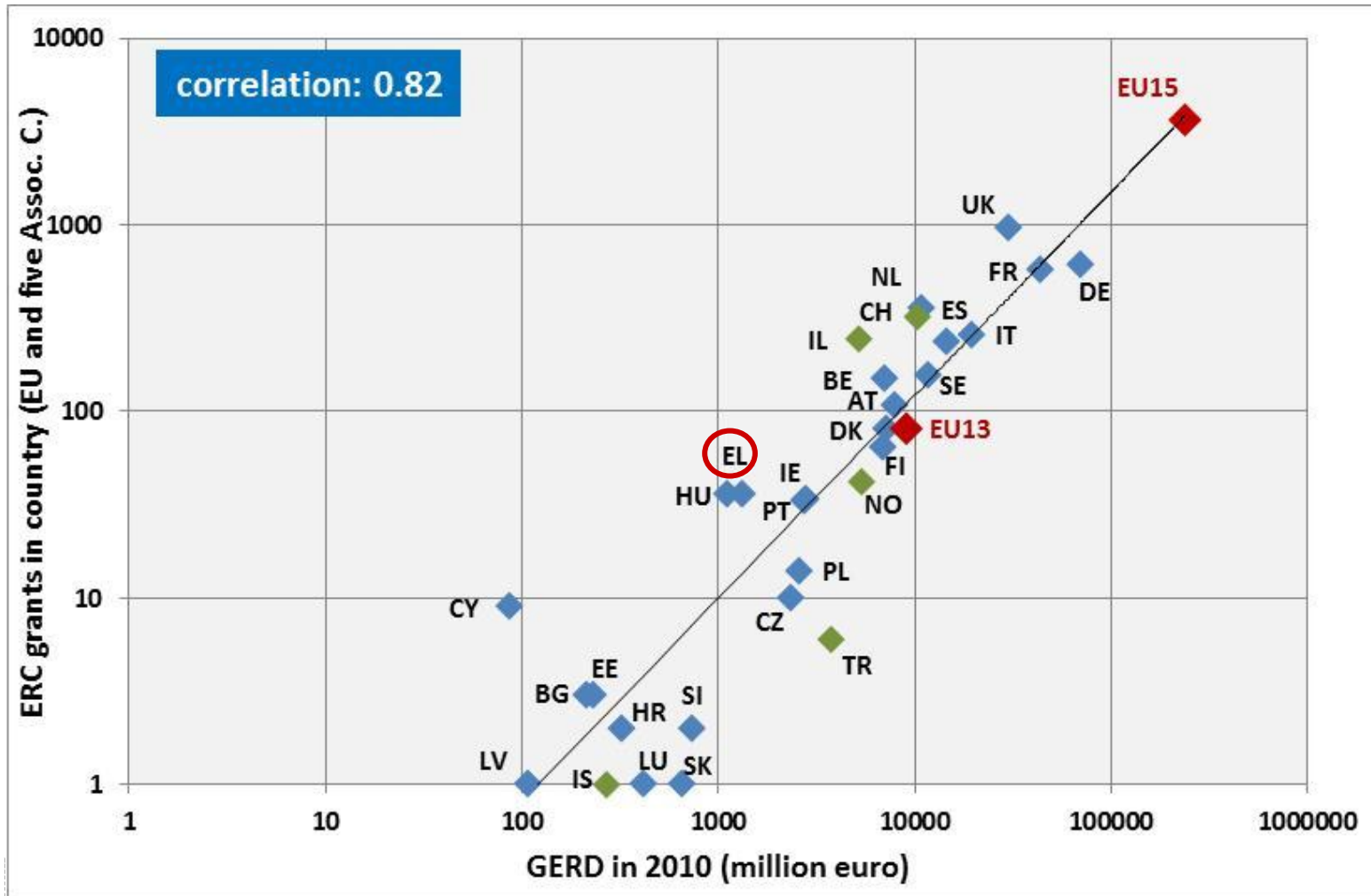


# FP7 ERC Grant Distribution vs. R&D Expenditure



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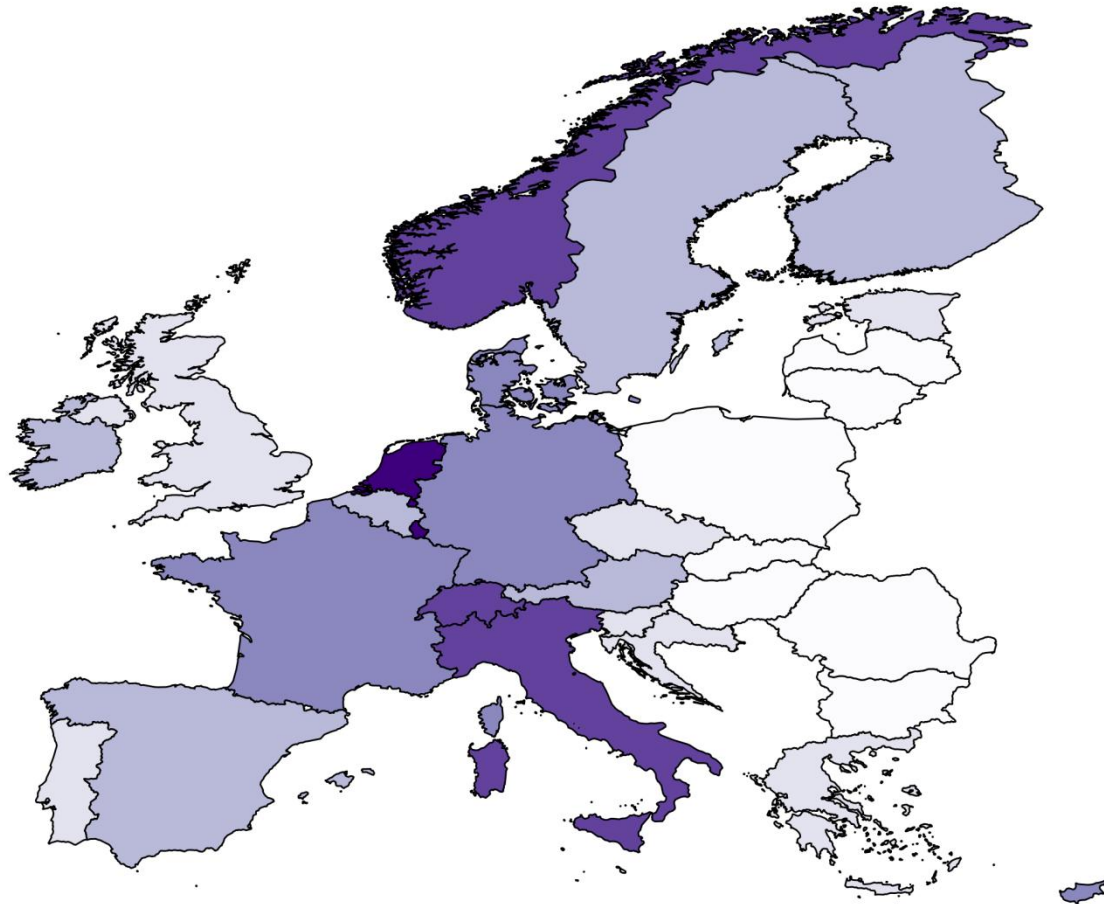
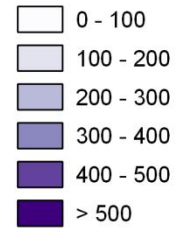
European Union funding for Research & Innovation



## EU28 & AC

GBAORD per researcher

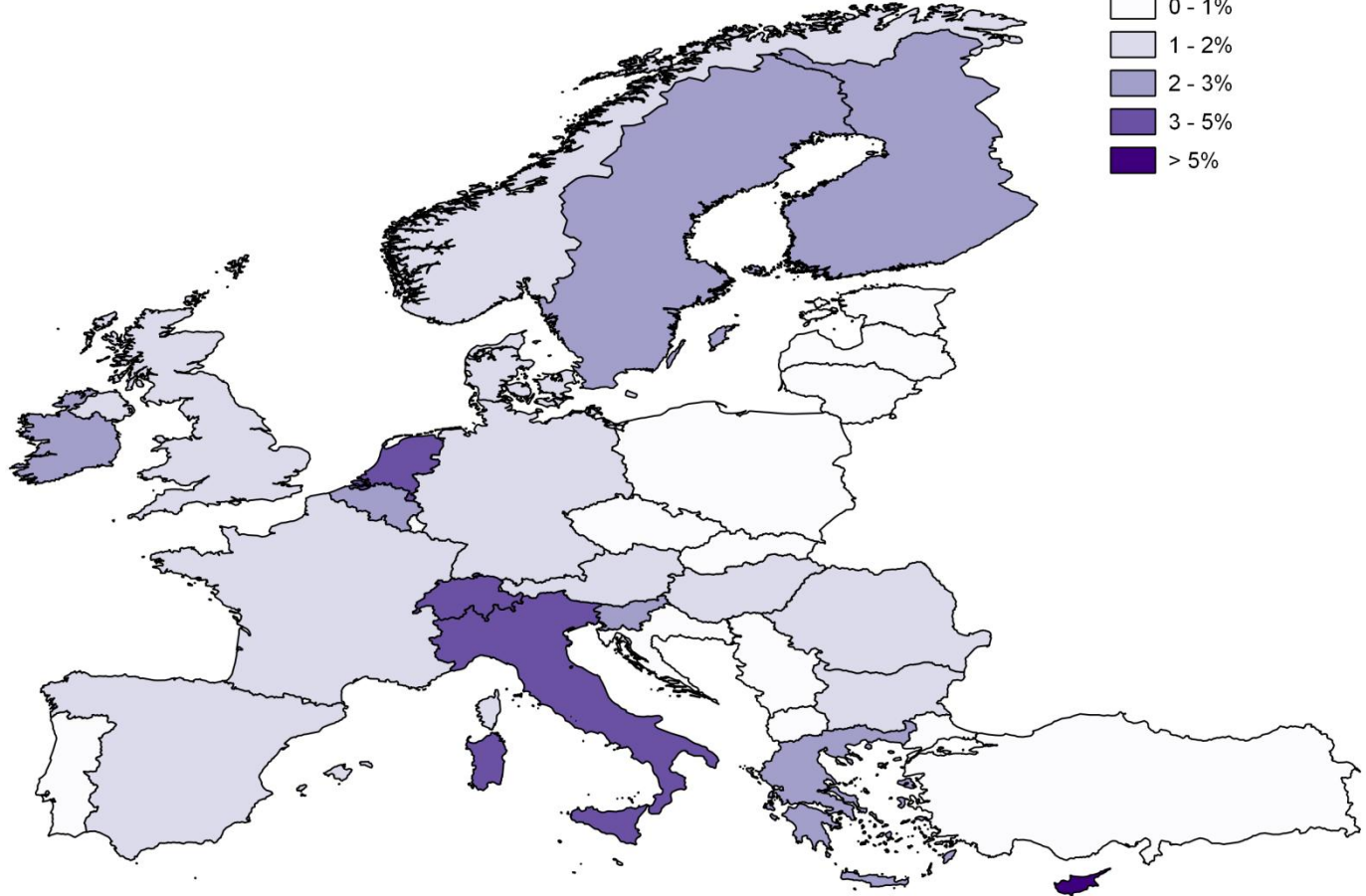
(€K for the period 2007-2013)





### EU28 & AC

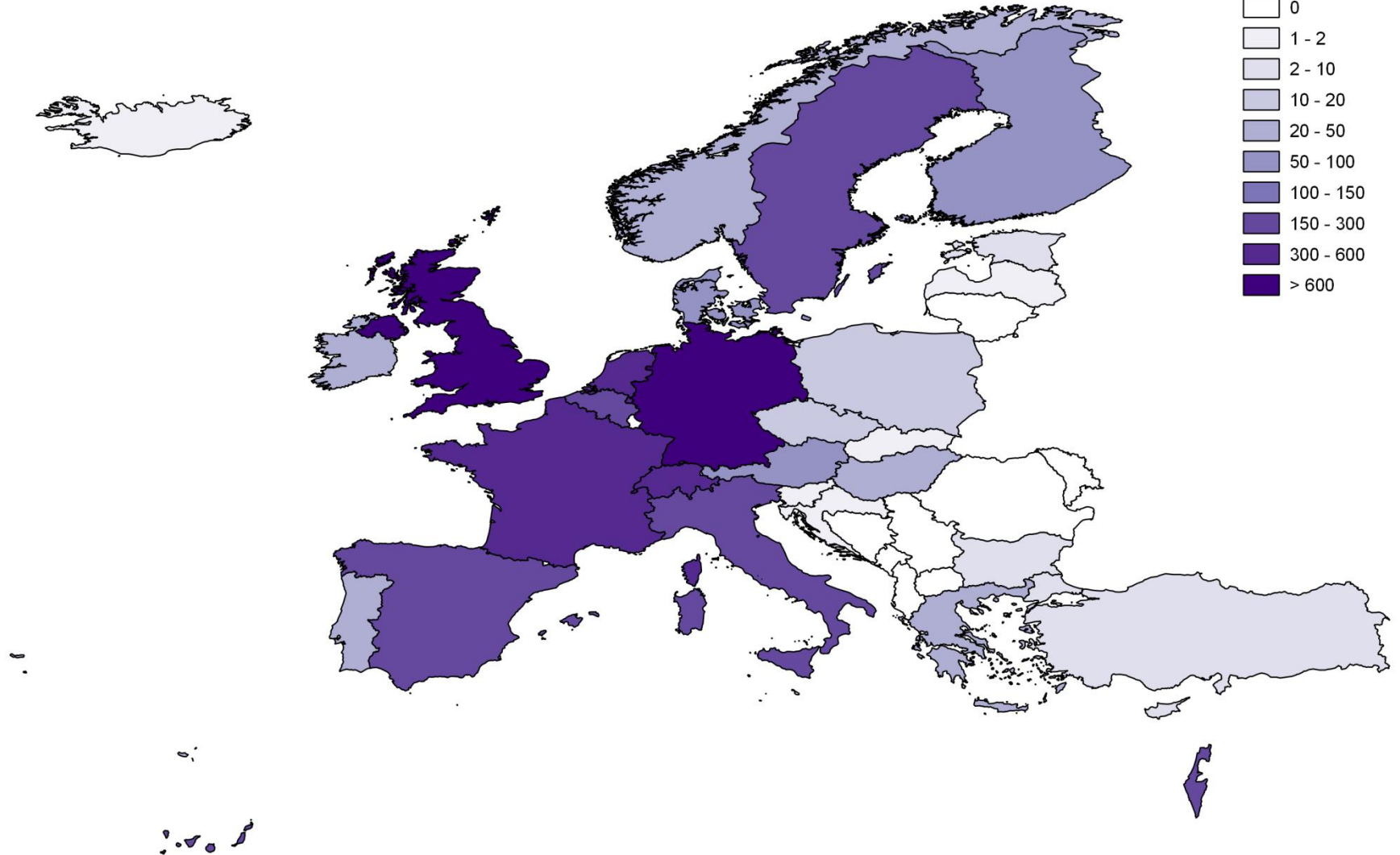
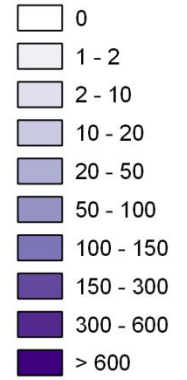
ERC applicants as % researchers





## EU28 & AC

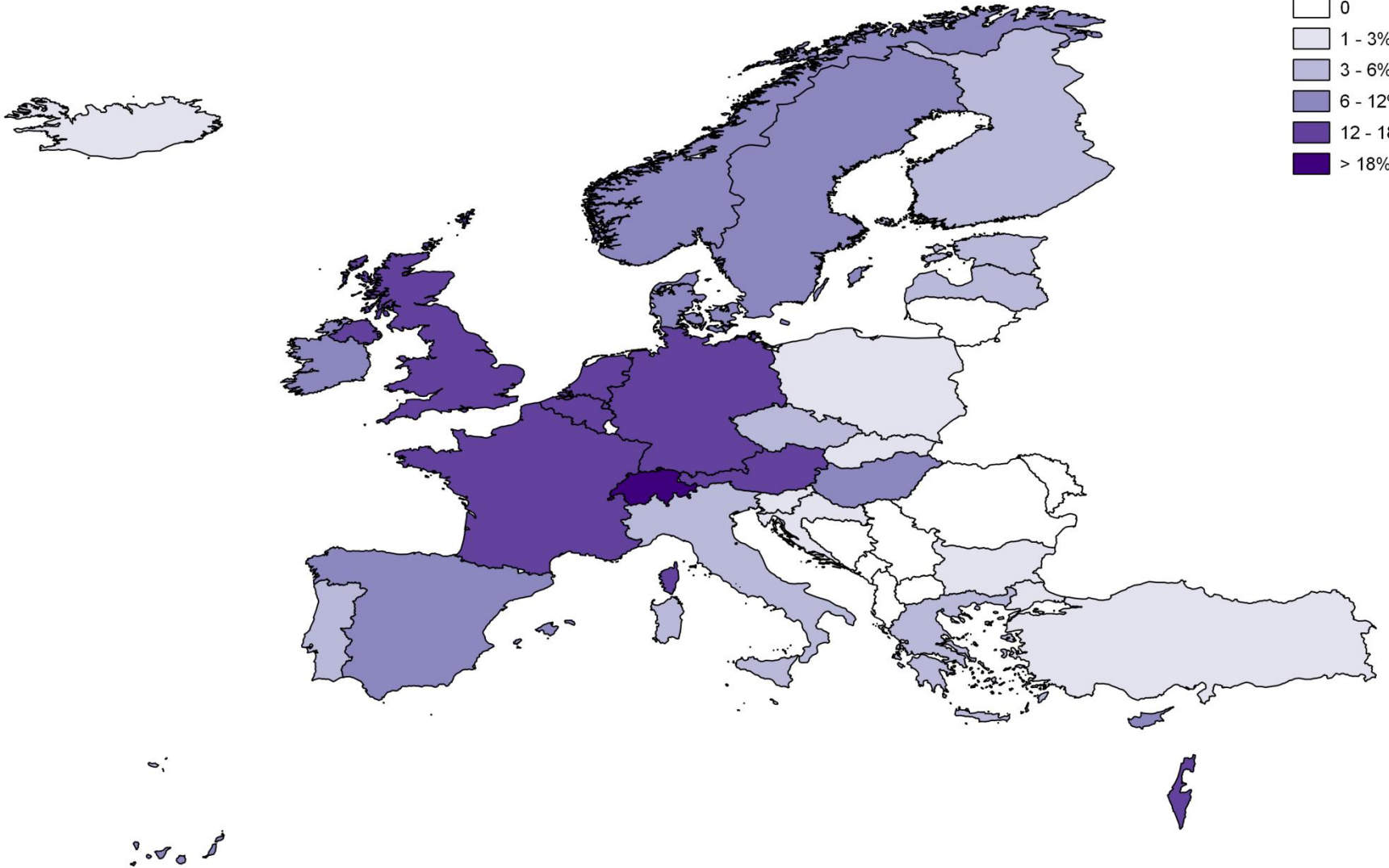
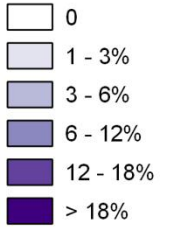
Grants at application stage





## EU28 & AC

Total success rates





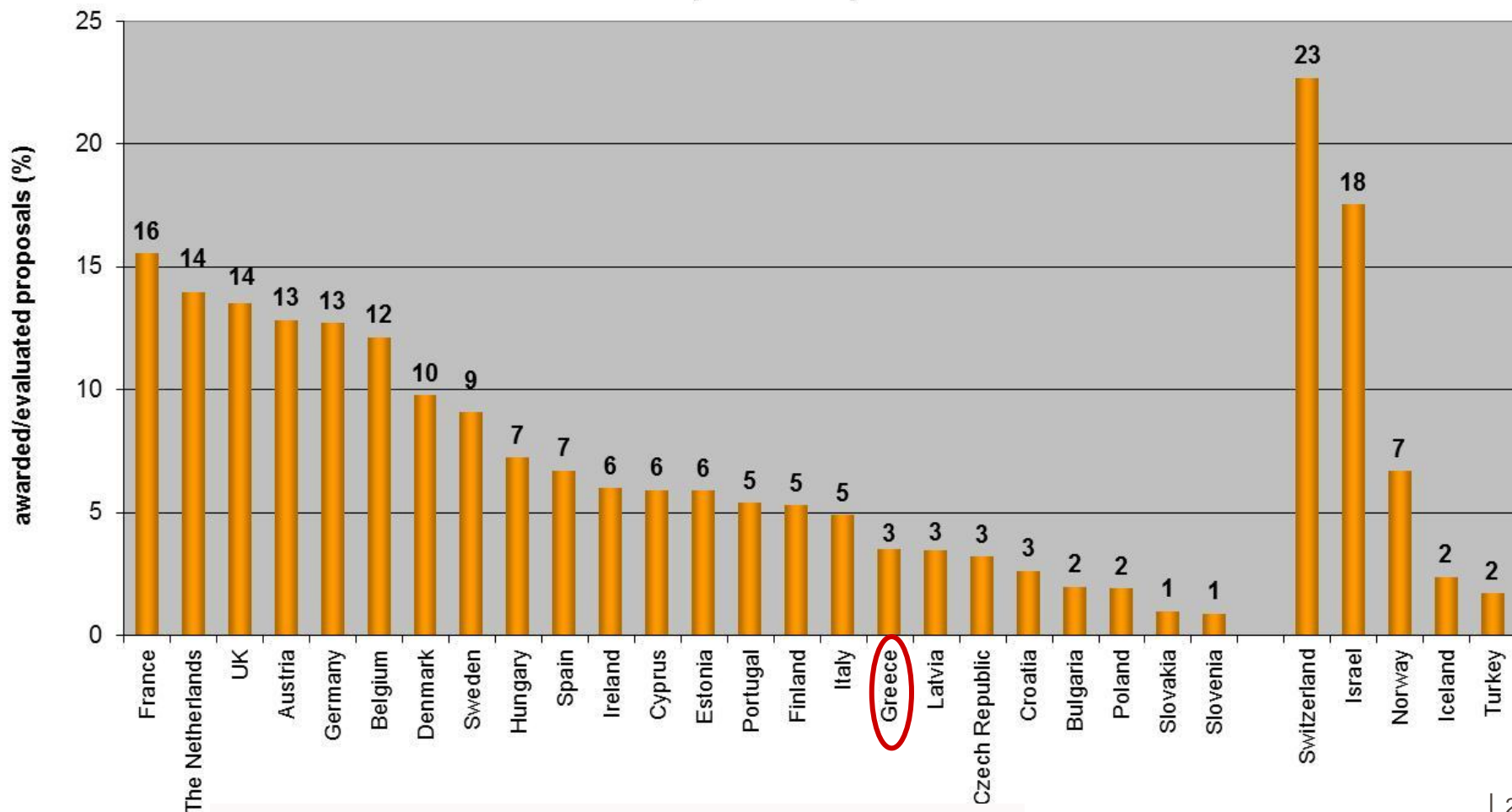
# FP7 - Success Rates Per Country of Host Institution



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### Success rates per country of HI

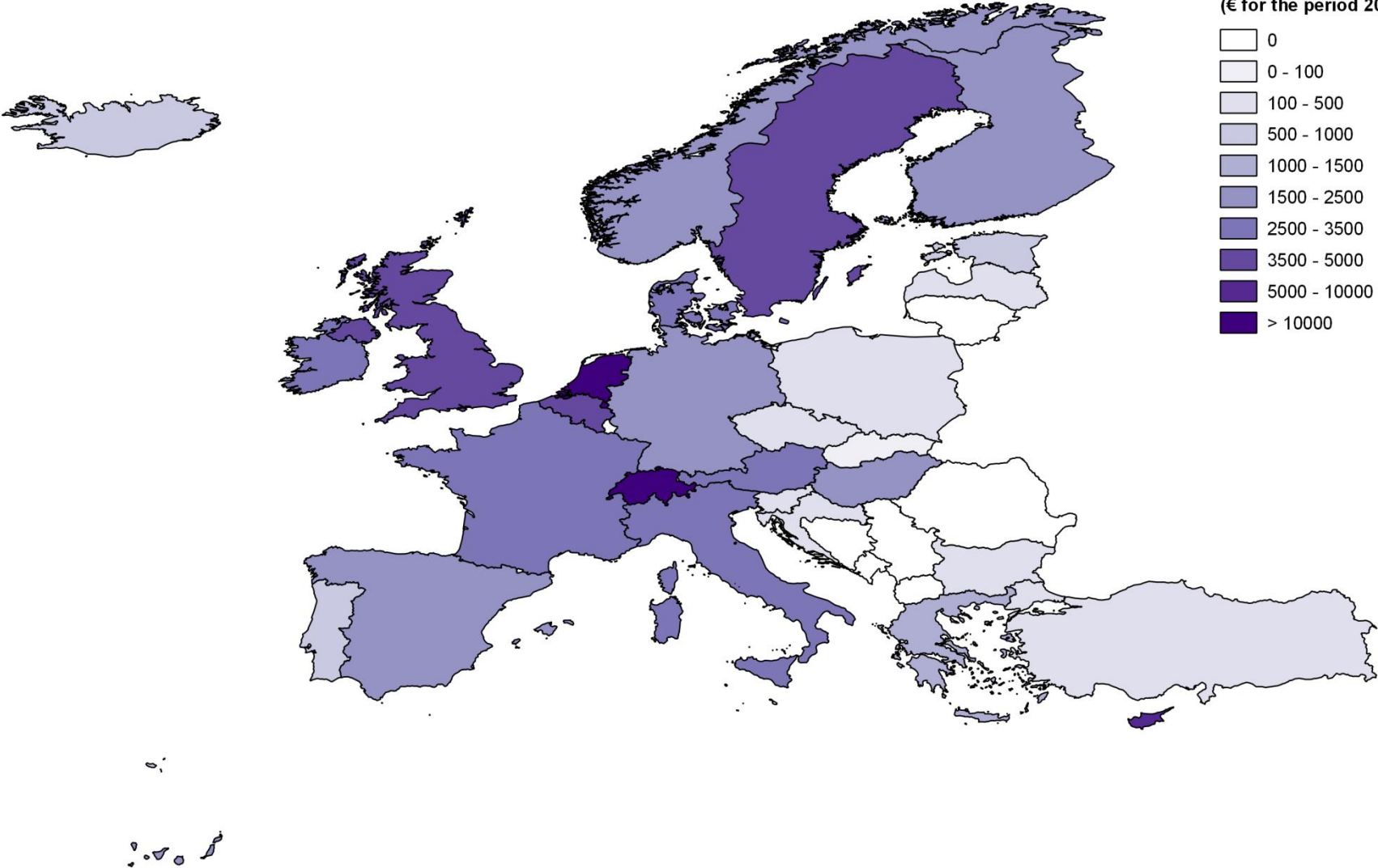
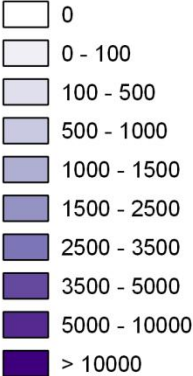


\*) First legal signatories of the first grant agreement taken into account

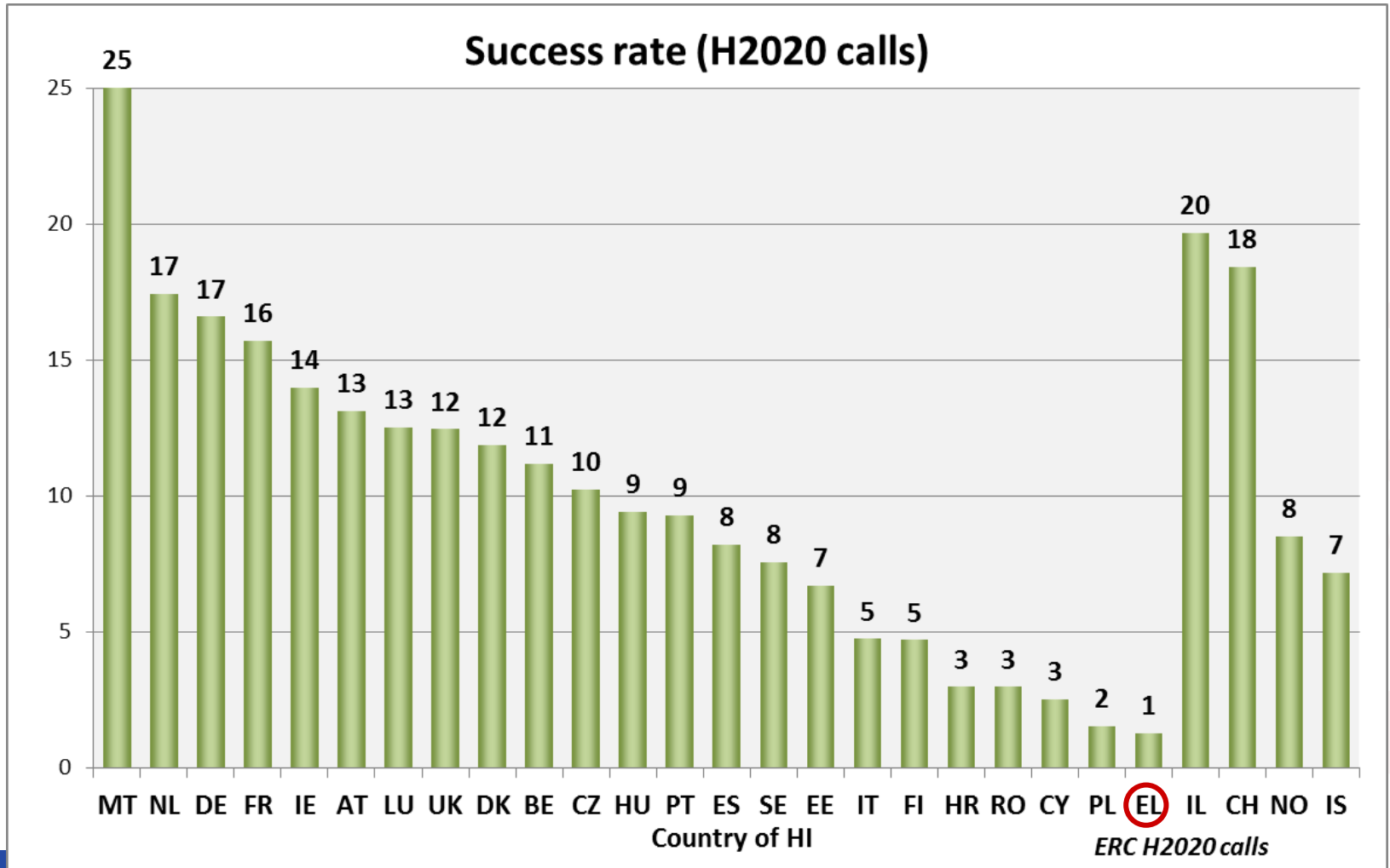


### EU28 & AC

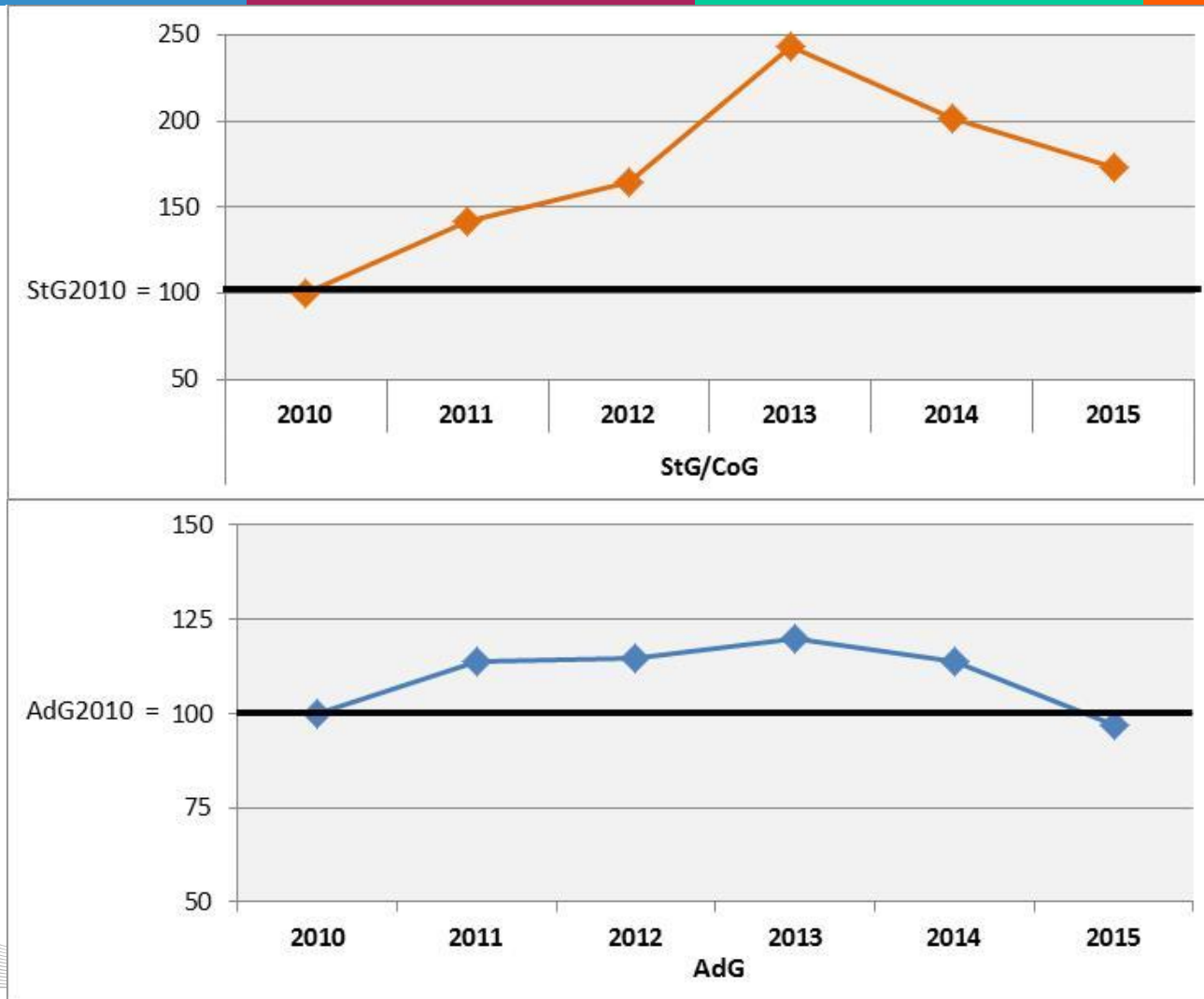
ERC funding per researcher  
(€ for the period 2007-2013)



# H2020 ERC – Success Rate by HI Country



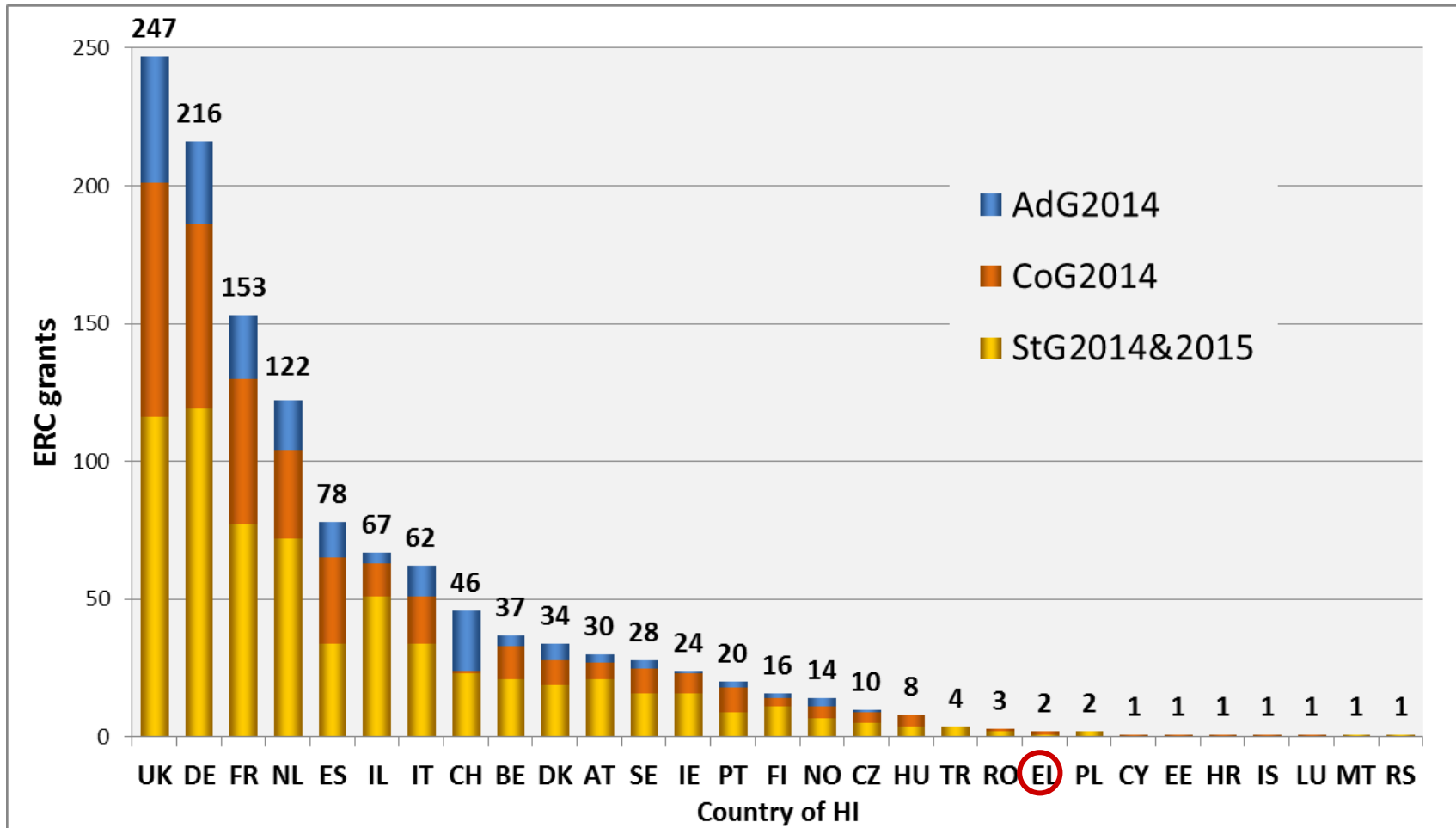
# Submitted Proposals Compared to 2010



# H2020 ERC Funded Projects by Country of HI



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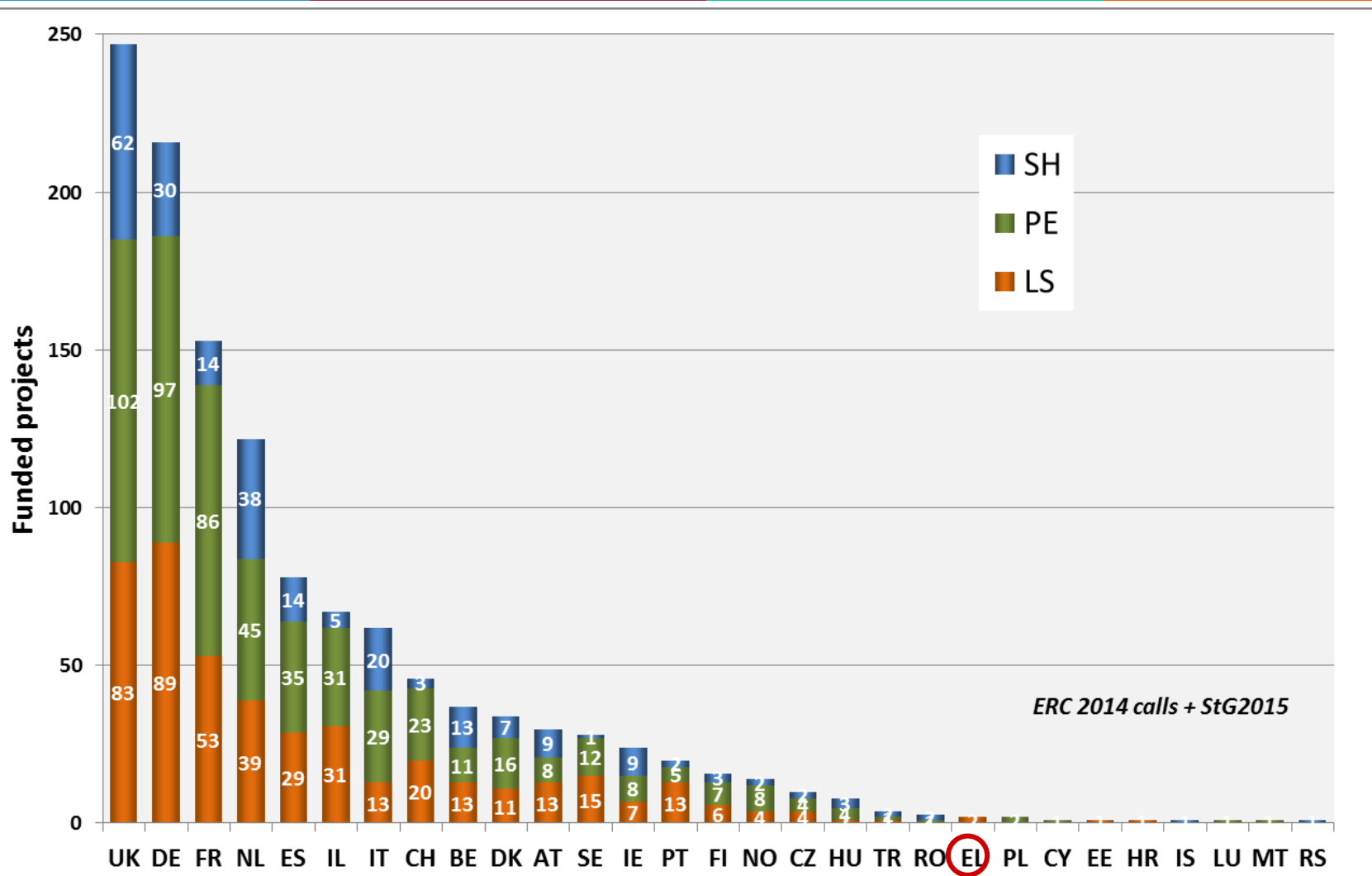




# H2020 ERC Funded Projects by Domain



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Country	Higher-Education Institution	No	StG	CoG	AdG	Total	LS	PE	SH
UK	University of Cambridge	1	72	21	60	153	58	70	25
UK	University of Oxford	2	68	17	65	150	45	63	42
UK	University College London	3	58	16	33	107	50	28	29
IL	Weizmann Institute	4	51	13	30	94	54	38	2
CH	Swiss Federal Institute of Technology Zurich (ETH Zurich)	5	34	4	54	92	30	58	4
CH	Swiss Federal Institute of Technology Lausanne (EPFL)	6	47	2	42	91	27	62	2
IL	Hebrew University of Jerusalem	7	47	6	31	84	38	32	14
UK	Imperial College	8	45	4	24	73	28	45	
UK	University of Edinburgh	9	26	8	27	61	19	25	17
NL	University of Amsterdam	10	28	8	18	54	3	18	33
IL	Tel Aviv University	11	37	2	14	53	21	28	4
DK	University of Copenhagen	11	29	9	15	53	19	22	12
BE	University of Leuven	12	28	8	16	52	14	25	13
DE	University of Munich (LMU)	13	24	2	25	51	19	20	12
UK	University of Bristol	14	22	5	21	48	8	29	11
NL	Radboud University Nijmegen	15	29	4	13	46	20	12	14
NL	Delft University of Technology	16	22	8	12	42	5	32	5
IL	Technion - Israel Institute of Technology	16	29	5	8	42	14	27	1
CH	University of Zurich	17	19	3	19	41	26	6	9
NL	Leiden University	17	24	3	14	41		19	22
NL	Utrecht University	18	20	7	12	39	7	19	13
UK	University of Manchester	19	19	4	15	38	10	20	8
NL	Free University and Medical Center Amsterdam (VU-VUmc)	20	18	6	13	37	9	11	17
UK	University of Warwick	20	18	7	12	37	1	28	8
SE	Lund University	21	18	4	13	35	15	18	2
CH	University of Geneva	21	14	4	17	35	22	11	2
Country	Research Organisation	No	StG	CoG	AdG	Total	LS	PE	SH
FR	National Centre for Scientific Research (CNRS)	1	163	41	73	277	82	161	34
DE	Max Planck Society	2	75	13	58	146	79	59	8
FR	National Institute of Health and Medical Research (INSERM)	3	38	16	19	73	67	3	3
FR	French Alternative Energies and Atomic Energy Commission	4	38	3	11	52	8	43	1
ES	Spanish National Research Council (CSIC)	5	23	10	15	48	18	25	5
FR	National Institute for Research in Computer Science and Automatic Control	6	24	2	12	38		38	

**Top European Institutions Hosting at least 35 ERC Grantees by Funding Schemes**

ERC calls 2007-2014

Current signatories of the grant agreement

Data as of 19/11/2015

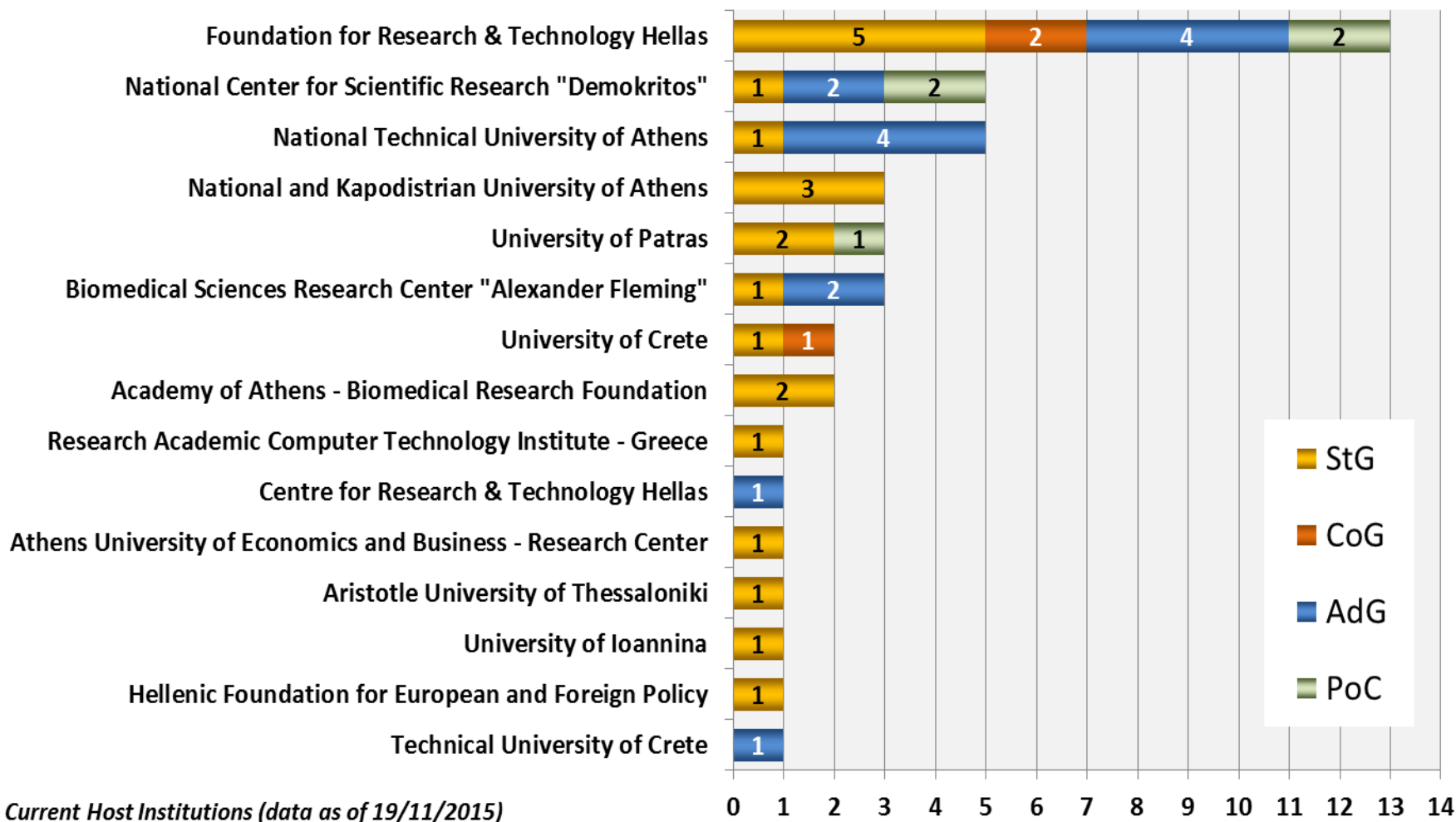
# FP7 – H2020 ERC Calls

## Host Institutions in Greece



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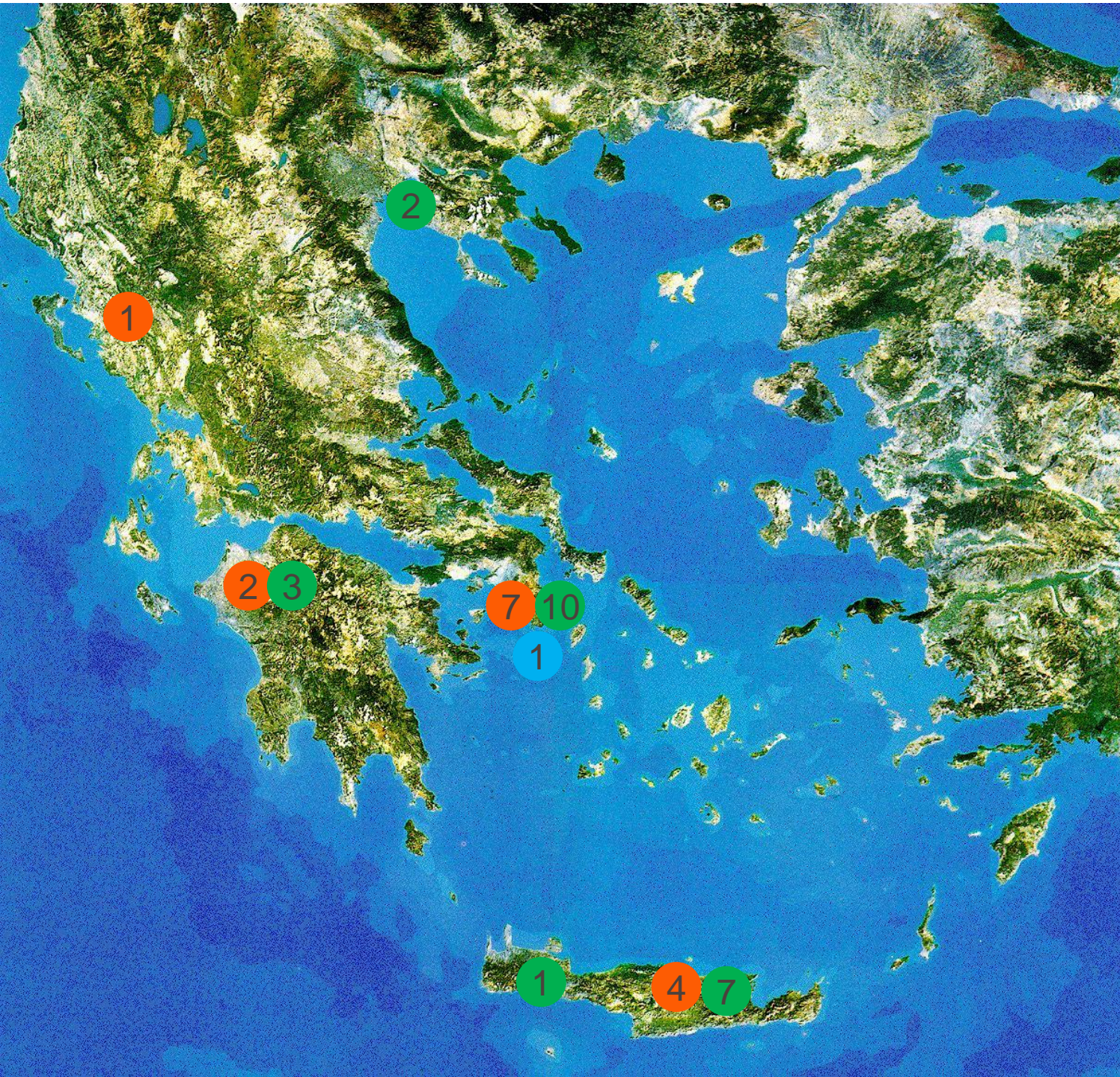






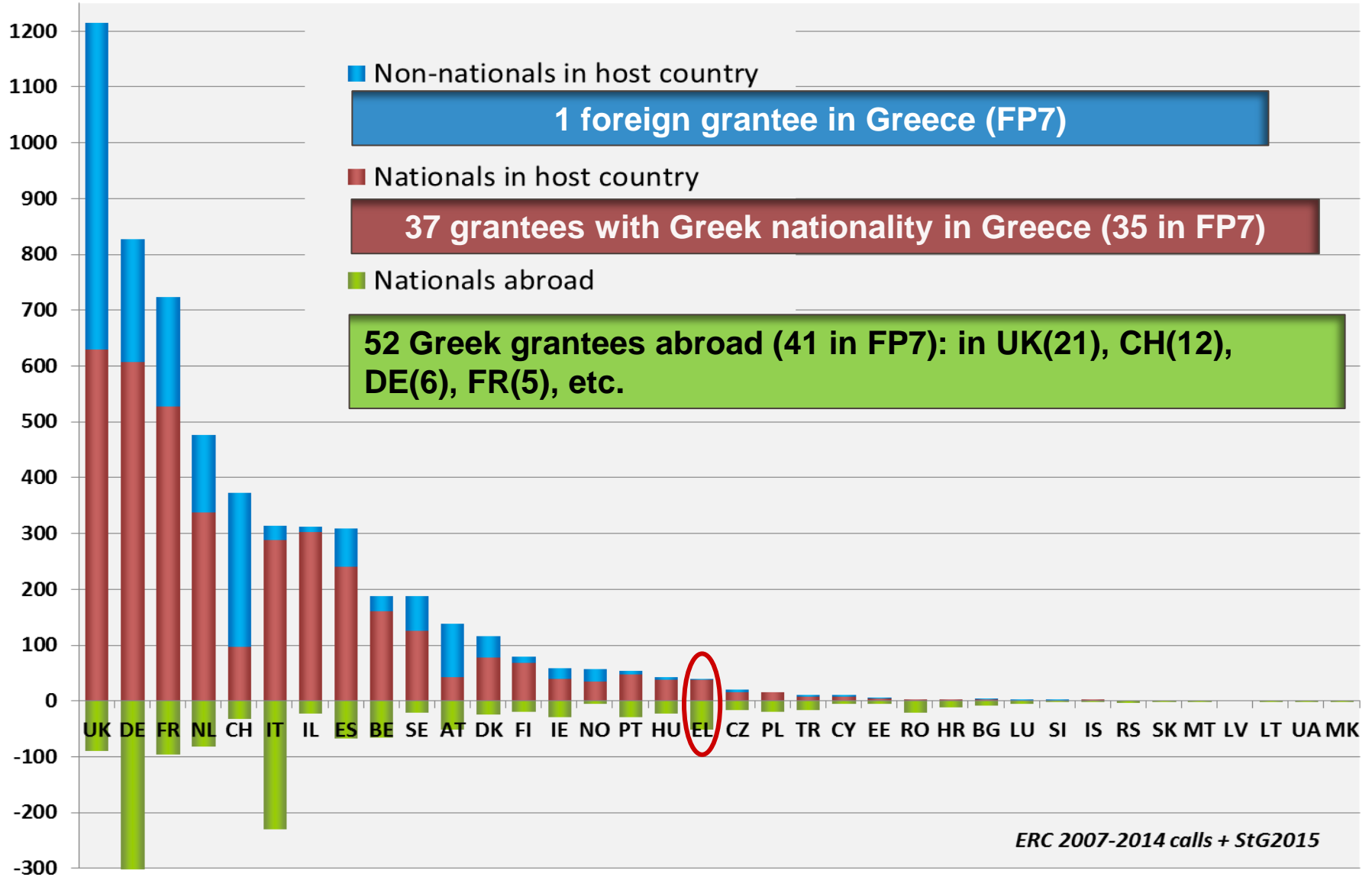
European Research Council

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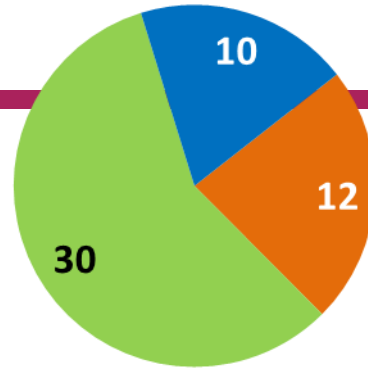


# Grantees at Home and Abroad

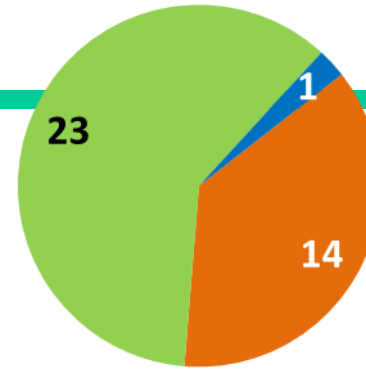


# Greek ERC grantees outside Greece

Greek PIs outside Greece



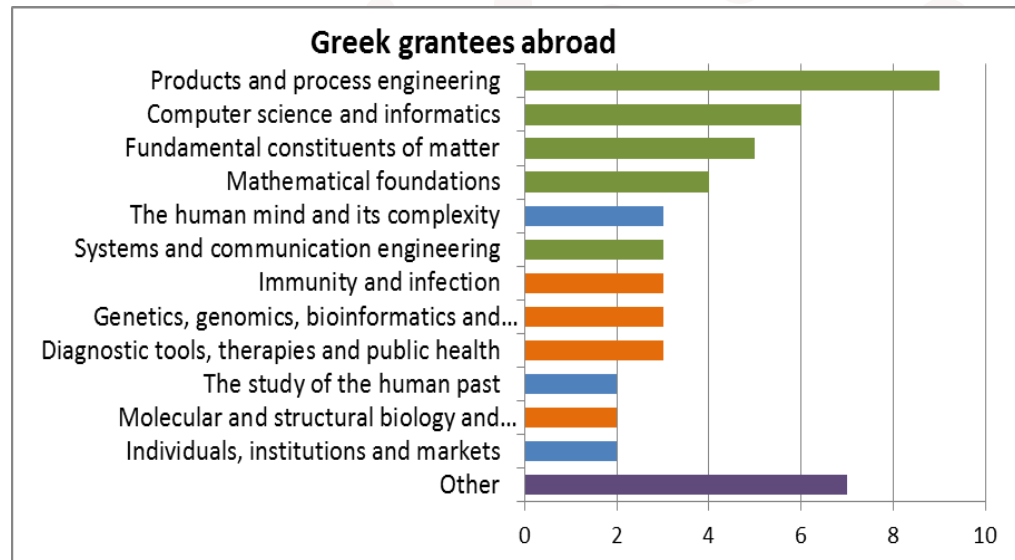
ERC grants in Greece  
(1 foreign grantee)



Greeks applying with a HI outside Greece	evaluated	grantees	s.rate
resident in Greece	41	3	7%
resident in other ERA countries	502	46	9%
resident outside ERA	12	2	17%
<b>Total</b>	<b>555</b>	<b>51</b>	<b>9%</b>

Greeks applying with a HI in Greece	evaluated	grantees	s.rate
resident in Greece	1124	32	3%
resident in other ERA countries	23	1	4%
resident outside ERA	47	5	11%
<b>Total</b>	<b>1194</b>	<b>38</b>	<b>3%</b>

Host institution	Greek PIs
University of Oxford	5
Imperial College	5
ETH Zurich	4
University of Cambridge	4
EPFL	4
University of Geneva	3
CNRS	3
Other	24
<b>TOTAL</b>	<b>52</b>





# Frontier Research and Innovation: ERC Proof of Concept



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**5 PoC  
in Greece**

- ➔ Initiated to help ERC grant-holder to bridge the gap between their research and the earliest stage of a marketable innovation
- ➔ Supporting grant-holders during the pre-demonstration
- ➔ Up to 150.000 Euro per grant

	2011	2012	2013	TOTAL in FP7		2014	2015-1	2015-2
<b>Submitted</b>	<b>151</b>	<b>143</b>	<b>292</b>	<b>586</b>	<b>Submitted</b>	<b>442</b>	<b>96</b>	<b>107</b>
<b>Evaluated*</b>	<b>139</b>	<b>120</b>	<b>279</b>	<b>538</b>	<b>Evaluated*</b>	<b>426</b>	<b>90</b>	<b>101</b>
<b>Funded</b>	<b>51</b>	<b>60</b>	<b>67</b>	<b>178</b>	<b>Funded</b>	<b>120</b>	<b>45</b>	<b>44</b>

\* withdrawn and ineligible proposals not taken into account



Horizon 2020  
European Union funding  
for Research & Innovation

\* withdrawn and ineligible proposals not taken into account

# WP2016 – Calls Planning



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ERC calls	Budget	Call Publication	Submission Deadline(s)
<b>Starting Grants</b> ERC-2016-StG	485 M€	29 July 2015	17 November 2015
<b>Consolidator Grants</b> ERC-2016-CoG	605 M€	15 October 2015	2 February 2016
<b>Advanced Grants</b> ERC-2016-AdG	540 M€	24 May 2016	1 September 2016
<b>Proof of Concept</b> ERC-2016-PoC	20 M€	22 October 2015	DL1: 16 February 2016 DL2: 26 May 2016 DL3: 4 October 2016

# Preparing an Application

## Hints and Tips (Generalities)

- **Register early**, get familiar with the system and templates and start filling in the forms
- A submitted proposal can be **revised until the call deadline** by submitting a new version and overwriting the previous one
- Follow the formatting rules and page limits.
- Make use of the **help tools and call documents** (Information for Applicants, Work Programme, Frequently asked questions) to prepare your proposal
- Talk to the National Contact Points and your Institution's grant office

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- More information: [erc.europa.eu](http://erc.europa.eu)
- National Contact Point: [erc.europa.eu/national-contact-points](http://erc.europa.eu/national-contact-points)
- Sign up for news alerts: [erc.europa.eu/keep-updated-erc](http://erc.europa.eu/keep-updated-erc)
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