



"This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 739593."



## Investigating potential effects of new European "teaming" actions on regional level

Judit Balogh

Member of HCEMM teaming project,  
(project manager expectedly from November 2018)

*Hungarian Regional Science Association 16th Annual Meeting*

*Section: Companies and host environments*

*- Tendencies, actors and examples of corporate embeddedness*

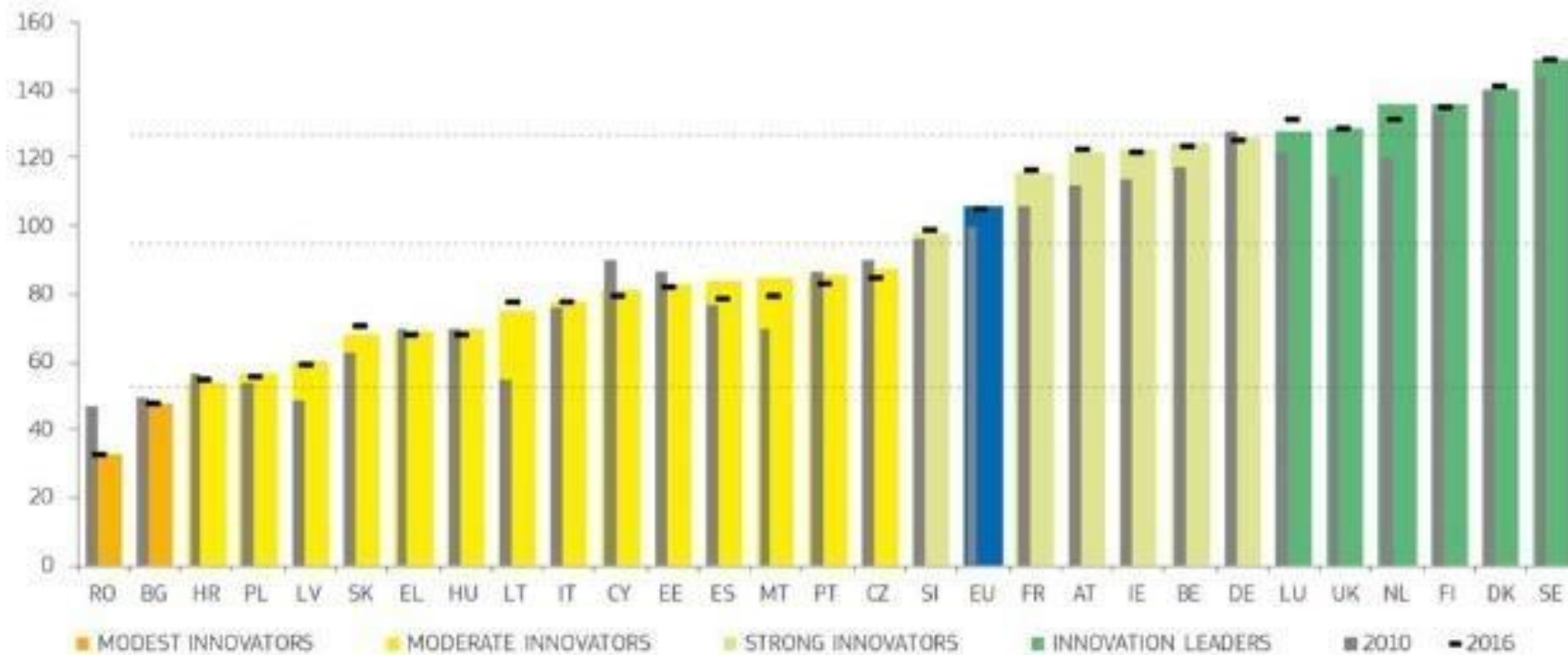
*Kecskemét, 18–19 October*



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## Widening gap between EU countries in terms of innovation performance



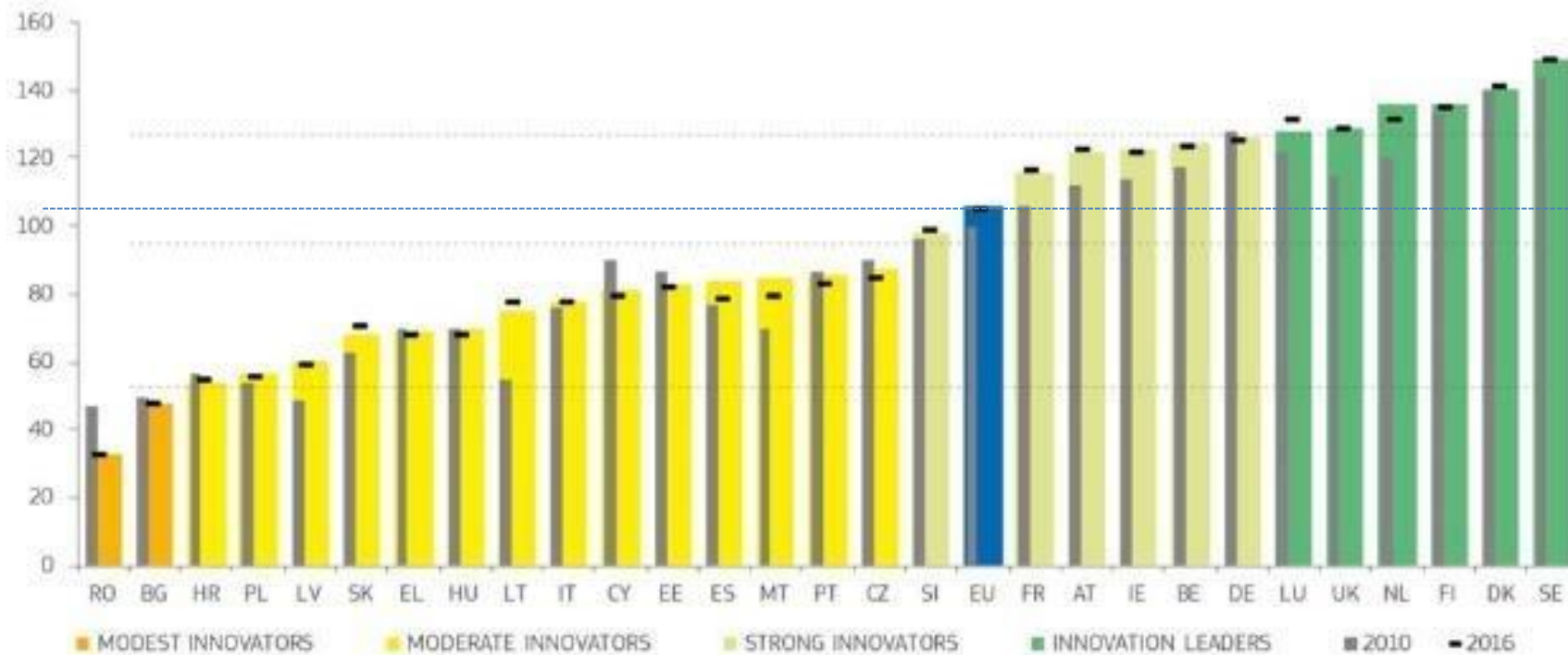
Source: European Innovation Scoreboard, 2018.



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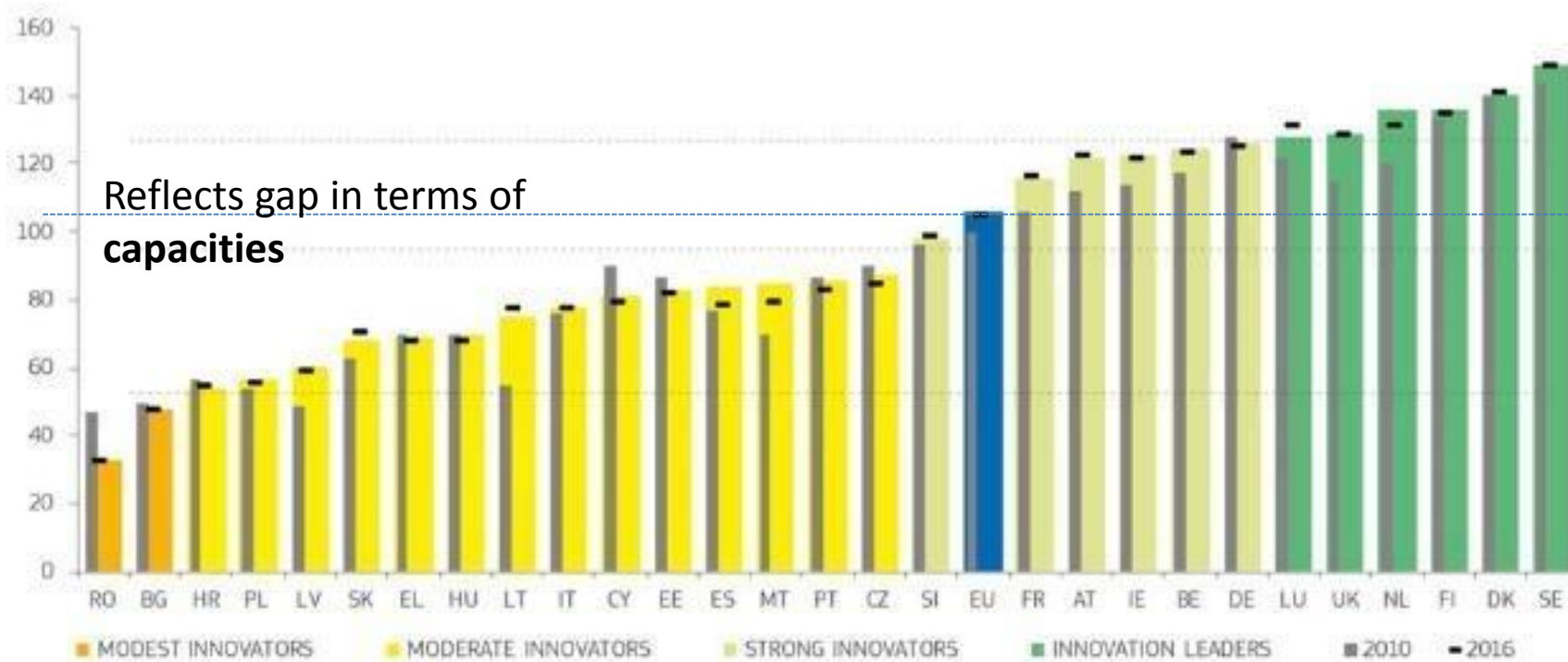
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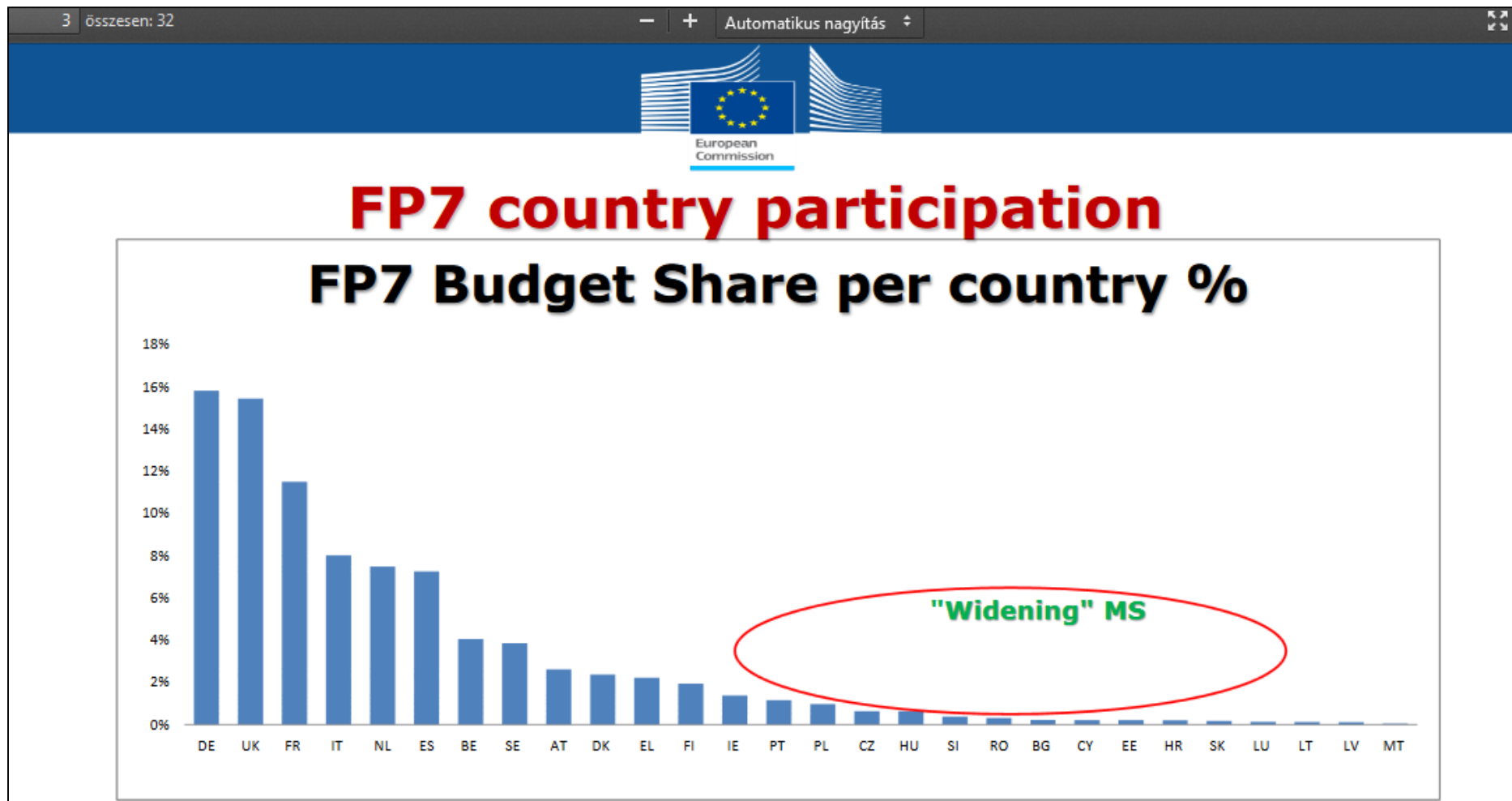
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# Do European Union tools „close” the gap?

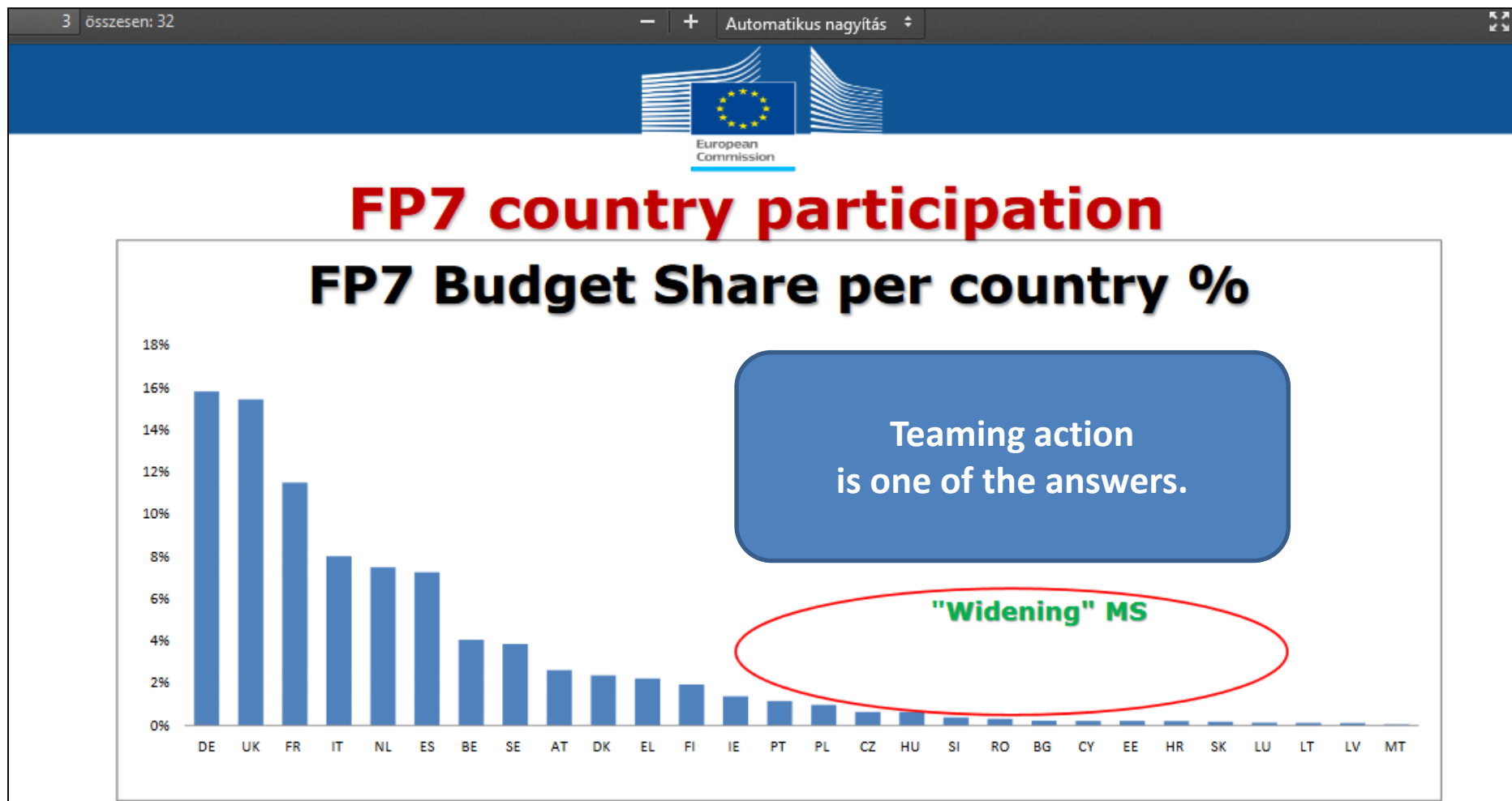




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# Do European Union tools „close” the gap?





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# Goal of teaming: build new/upgraded R&D capacities...

...ensuring

Excellence

Sustain-  
ability

Motivation

Autonomy

Transfer

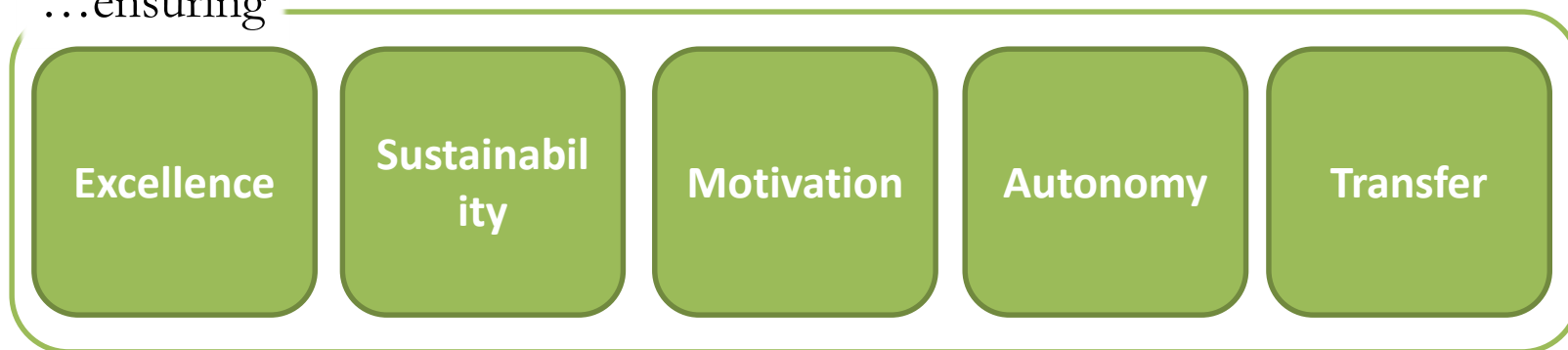


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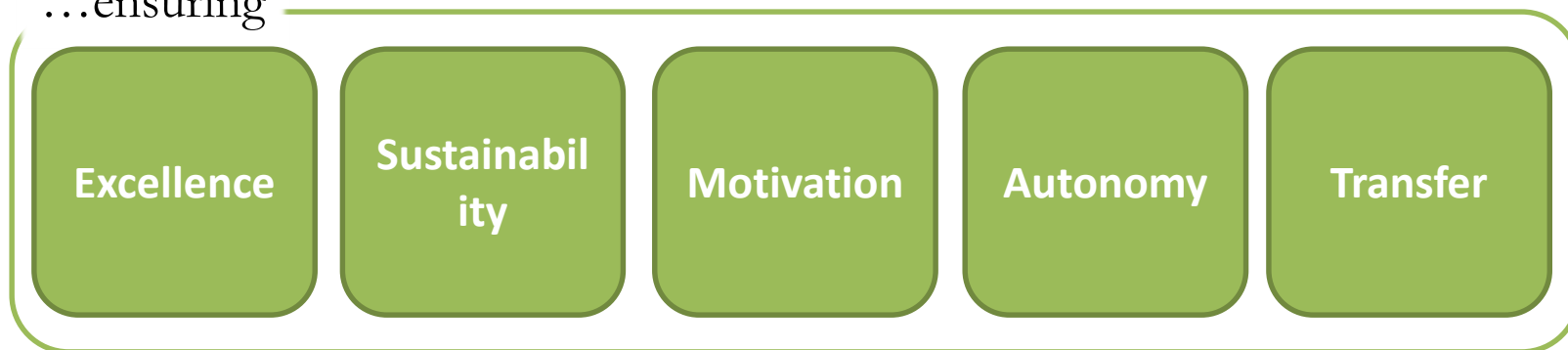


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## How does „teaming” work?



Organization(s) in a „low performing” member state **build new/upgraded R&D capacities**

„Low RDI performing member states” were defined by Research Excellence Composite Indicator Scores, based on the ratio of highly cited publications, PCT patents, ERC grants, top universities and pub. research organisations per GERD.



## How does „teaming” work?



Organization(s) in a „low performing” member state **build new/upgraded R&D capacities**



Mentor from an **advanced country teaches how to play** , how to ensure juniors, and how to manage networks and host institutions.

Mentor participates intensively in the project implementation phase!



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## How does „teaming” work?



Organization(s) in a „low performing” member state build new/upgraded R&D capacities



Mentor from an advanced country teaches how to play , how to ensure juniors, and how to manage.



(Co-)financing ensured for 7 years to play in the Champions League

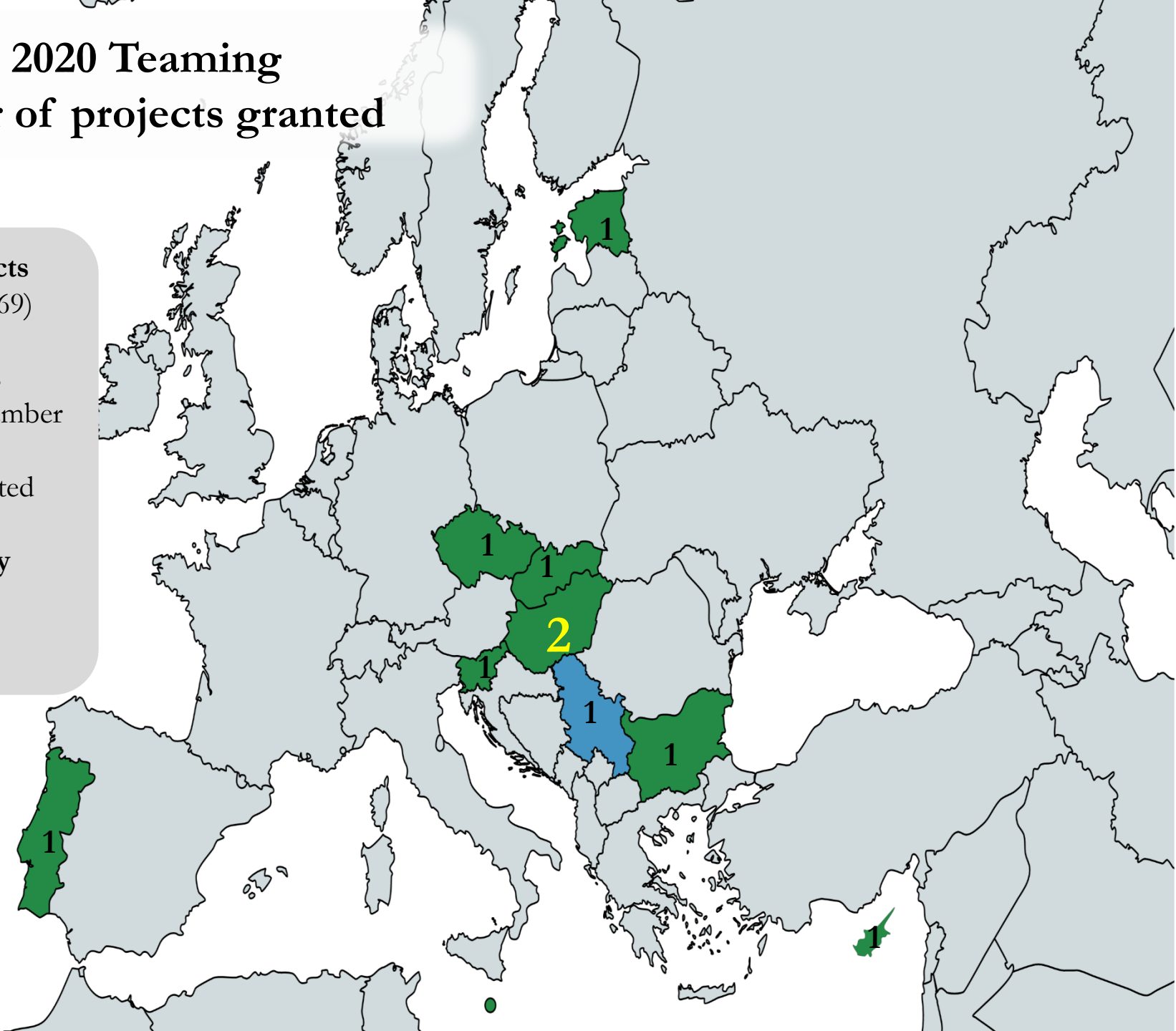
Budget approx. EUR 50 million per project!

# Horizon 2020 Teaming

## Number of projects granted

### Phase 2.

- 10 projects  
(alt. of 169)
- From 9  
countries
- 8 EU member  
states
- 1 associated  
country
- Hungary  
wins 2  
projects





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How does „*our teaming*” work?



**Independent Research Groups  
System of Advanced Core  
Facilities (ACFs)**

New  
organization:  
**HCEMM**





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## HCEMM Ltd. & Building

- ✓ Independent company – **New Coordinator of the Project**
  - ✓ Non-profit Ltd.
  - ✓ Established by USz, BRC, SU
- ✓ **HCEMM Building** in Szeged
  - ✓ Headquarters, Labs & Offices
  - ✓ At ELI Science Park
  - ✓ ca. 1,500 m<sup>2</sup>
  - ✓ Opening: by the end of 2019





# HCEMM Research Groups

- ✓ **24-25 groups recruited in 5 years**
- ✓ Senior, Junior, and Translational Groups
- ✓ **Hosting**
  - ✓ 16-19 Groups at USz, BRC, SU
  - ✓ 5-6 Groups at HCEMM Building
- ✓ Selection
  - ✓ Based solely on Excellence
  - ✓ Independent international selection
- ✓ Double affiliations for researchers
- ✓ Joint PhD programs
- ✓ **Attractive package for 5+4 years**
  - ✓ >40 MHUF/year for Senior PIs
  - ✓ >20 MHUF/year for Junior and Translational PIs
  - ✓ „Extras” from Hosting Institutions
- ✓ **Evaluation**
  - ✓ Independent international after 5 years





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EMBL



European Molecular Biology Laboratory



# Our Partnership with EMBL

Europe's center of excellence in life science research, services and training

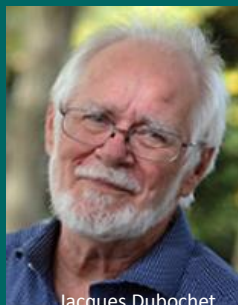
6 Sites >1600 Staff >80 Nationalities

>190 patents granted, >3000 license & collaboration agreements, 18 spin-outs

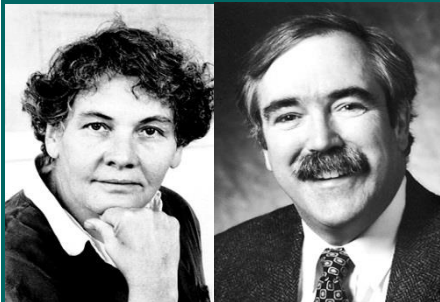
2 Nobel prizes

2017 Nobel Prize

**CHEMISTRY**



Jacques Dubochet



1995 Nobel Prize

**Medicine**

Christiane Nüsslein-Volhard

Eric Wieschaus

>650

scientific publications per year on average

31

scientists in Thomson Reuters' list of Highly Cited Researchers

EMBL ranks in top

**10**

research institutes

45%

of EMBL's publications in the top

5%

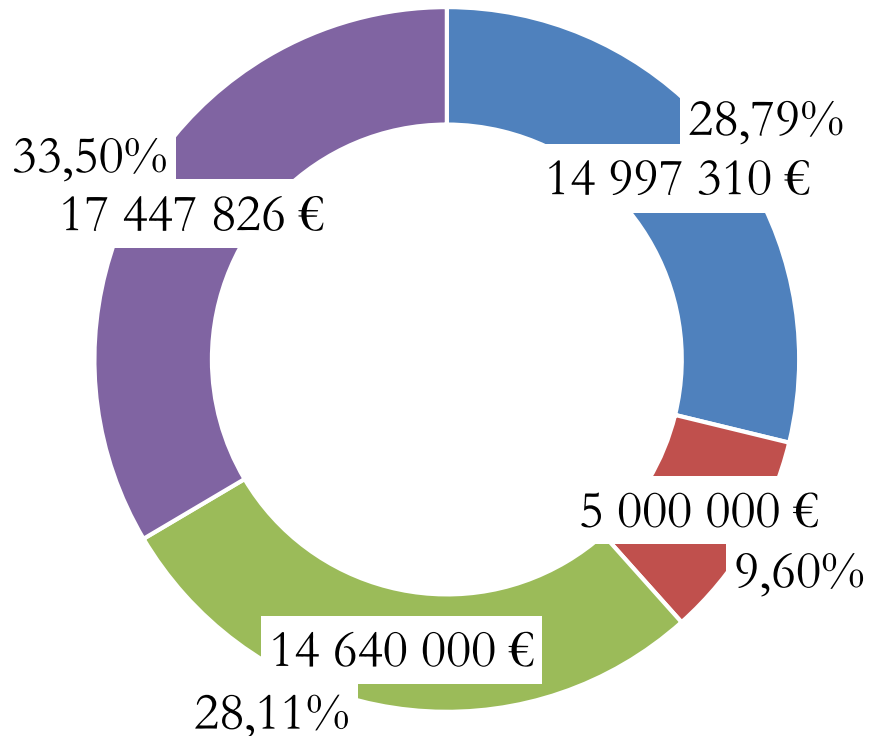
of journals in biochemistry, genetics and molecular biology



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# Multiple Funding Pillars – Unprecedented!!!



- Horizon 2020
- National Research, Development and Innovation Fund
- Own contribution
- Structural Funds



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# Factors influencing project implementation and results

Industrial effect

Impact on society

Influencing RDI Policy

Frauenhofer modell

UK Life Science Modell

OECD policy papers



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**Sector and role of domestic companies** in manufacturing, development and supply chain



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Sector and role of domestic companies in manufacturing, development and supply chain

- Length of innovation chain, business models;
- **Target group (SMEs above x employees);**
- Method of communications;
- Tailor made services and system solution;
- Professional project management.



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- **Focusing on results important for the society; Involving patients (data);**
- Providing an unrivalled ecosystem **attracting investors;**
- Participate in large PPP projects and
- Connecting large European projects.



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- **Quantifying research spill-over effects**, if possible;
- Independent monitoring and evaluation of research;
- „Joining forces” to carry out large projects in a given sector.



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Thank you for your attention!





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## Nyertes projektek listája országonként

Tagállam	Koordinátor intézmény	Projekt rövid címe	Projekt címe
Szerbia	BIOSENSE INSTITUTE - RESEARCH AND DEVELOPMENT INSTITUTE FOR INFORMATION TECHNOLOGIES IN BIOSYSTEMS	ANTARES	Centre of Excellence for Advanced Technologies in Sustainable Agriculture and Food Security
<b>Magyarország</b>	Nemzeti Kutatási, Fejlesztési es Innovációs Hivatal	EPIC	Centre of Excellence in Production Informatics and Control
Csehország	FYZIKALNI USTAV AV CR V.V.I	HiLASE CoE	HiLASE Centre of Excellence
Ciprus	UNIVERSITY OF CYPRUS	KIOS CoE	KIOS Research and Innovation Centre of Excellence
Lettország	LĀTVIJAS UNIVERSITĀTES CIĒTVIELU FIZIKAS INSTITŪTS	CAMART2	Centre of Advanced Materials Research and Technology Transfer CAMART <sup>2</sup>
Portugália	FUNDAÇÃO PARA A CIÊNCIA E A TECNOLOGIA	THE DISCOVERIES CENTRE	Implementation of The Discoveries Centre for Regenerative and Precision Medicine, a new Centre of Excellence in Portugal
Szlovénia	UNIVERZA NA PRIMORSKEM UNIVERSITA DEL LITORALE	InnoRenew CoE	Renewable materials and healthy environments research and innovation centre of excellence
Bulgária	INSTITUTE OF MOLECULAR BIOLOGY AND BIOTECHNOLOGY	PlantaSYST	Establishment of a Center of Plant Systems Biology and Biotechnology for the translation of fundamental research into sustainable bio-based technologies in Bulgaria
Szlovákia	TRENCIANSKA UNIVERZITA ALEXANDRA DUBCEKA V TRENCINE	FunGlass	Centre for functional and surface-functionalized glasses
<b>Magyarország</b>	Nemzeti Kutatási, Fejlesztési es Innovációs Hivatal	HCEMM	Establishing the Hungarian Center of Excellence for Molecular Medicine in partnership with EMBL