# **KEY HIGHLIGHTS**

For Czechia, the new landscape of European Partnerships represents a significant opportunity to further develop the existing platforms and strengthen the newly emerging ones related to international cooperation in research, development and innovation. European Partnerships are viewed as an opportunity to capitalise on Czechia's research capacities and capabilities at the international level, which can ultimately help to address topics with an international dimension. Therefore, in order to ensure sustainable economic growth and an ability to cope with the socio-economic challenges, it is crucial that Czechia is actively involved in new European Partnerships.

**35** H2020 public partnerships (\*)

**35.35%** of total (99 partnerships

**39** H2020 public partnerships (\*) participations

Or **1.81%** of total • H2020 public partnerships (\*) coordinations

**0%** of total

#### Source: ERA-LEARN database (cut-off date June 2021), H2020 period (2014-2020) excluding EIT-KICs, EuroHPC and ECSEL

(\*) Horizon 2020 public-public partnerships include ERA-NET Cofund, EJPs, Art 185 initiatives and JPIs. Partnership participations: number of partnerships a specific country takes part as participant – for certain countries more than one national organisation may take part. Thus the participations may be more than the number of partnerships a country is part of. Total partnership participations: number of partners from a specific country participating with any role (i.e. coordinator, participant, observer, other) in partnerships. Partnership coordinations: number of partnerships a specific country coordinates.



#### Source: ERA-LEARN database (cut-off date June 2021), H2020 period (2014-2020)

Actual national contributions is the funding given by each country to cover the participation of national science and technology groups in the funded projects of the joint transnational calls launched by the public partnerships. Actual contributions for each researcher are the total actual contributions by a country divided by the number of researchers in the country estimated in full-time equivalents (FTE) average between 2014-2019 based on EUROSTAT data.

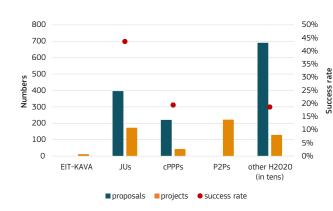
### **KEY INTENTIONS FOR THE FUTURE**

In line with the National Research, Development and Innovation Policy of Czechia 2021+, Czechia will continue in efforts to effectively promote the priority orientations or themes of Czechia's research and innovation in the Horizon Europe. However, the priority areas for the national participation within the European Partnerships are not limited and will depend primarily on the absorption capacity of the research performing organisations as well as financial capacity of the state budget to finance their participation.

# TABLE 1: Distribution of funding under the different H2020 instruments (P2Ps, JUs, cPPPs and other H2020projects, i.e. CSAs, RIAs, IAs, etc.) across thematic priorities

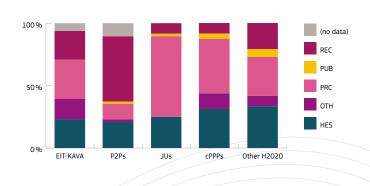
THEMATIC PRIORITIES	P2Ps PROJECTS	JUs PROJECTS	CPPPs PROJECTS	OTHER H2O2O PROJECTS
Nanotechnologies, Advanced Materials, Advanced Manufacturing and Processing, Biotechnology	18.08%	0.60 %	1.60%	10.47 %
Climate action, environment, resource efficiency and raw materials	20.68%	0.23%	13.21%	4.69%
Europe in a changing world - inclusive, innovative and reflective Societies	12.24%		4.75%	5.74%
Food security, sustainable agriculture and forestry, marine and maritime and inland water research	0.00 %	2.82%		8.75%
Future and Emerging Technologies	10.47%		1.68%	5.12%
Health, demographic change and wellbeing	36.98%	3.33%		8.71%
Information and Communication Technologies		19.46%	76.75%	15.83%
Secure, clean and efficient energy	1.55%	1.72 %	2.01 %	11.58%
Smart, green and integrated transport	0.00%	71.85%		29.10%
	100,00%	100,00%	100,00%	100,00%

Source: ERA-LEARN database (cut-off date June 2021) based on actual national contributions for P2Ps; eCORDA based on net EU contribution; values are calculated as the share of investments of the specific instrument in the specific theme in the total investments under the specific instrument.



#### FIGURE 1: Eligible proposals, projects and success rates FIGURE 1: FIGURE 1: Eligible proposals, projects and success rates FIGURE 1: Eligible proposals, projects an





Source: ERA-LEARN database for P2Ps (cut-off date June 2021); eCORDA for EIT-KAVA, JUs, cPPPs, other H2020 projects (RIAs, CSAs, etc.)

No proposal data for P2Ps, EIT-KICs (Figure 1). EIT-KAVA: KIC Added Value Activities; HES: higher education; OTH: other; PRC: private for-profit companies; PUB: public bodies; REC: research organisations (Figure 2)



#### IMPACT OF EU CONTRIBUTION

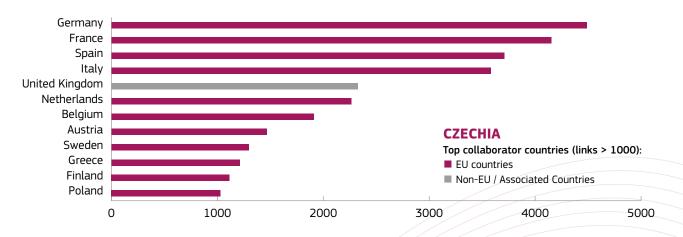
The funding mechanism for current programmes and initiatives based on joint funding has proven to be effective. The top-up contribution served as a positive motivating factor, especially for research performing organisations, which perceived this opportunity as a means to maximise the impact of their scientific contributions while receiving a higher level of funding than would have been possible from national contributions.

### ADDITIONAL INVESTMENTS TRIGGERED

In Czechia, the Ministry of Education, Youth and Sports is the central coordinating body for international research and development cooperation. The ministry supports a number of research areas at the horizontal level. In the future, Czechia will aim to link national sectoral policies even more closely to the European Partnerships portfolio and thus involve other sectoral ministries, which have so far participated partially in international research and development cooperation within the EU's framework programmes. This will allow them to cooperate even more closely in their respective thematic areas in order to achieve the maximum possible impacts.

## COMPLEMENTARY AND CUMULATIVE FUNDING

The aim of Czechia is to make the best use of ESIF in order to strengthen the capacity of research consortia within international programmes so as to have a practical impact at the national and macro-regional levels. Therefore, it is essential to establish clear guidance for synergic cooperation mechanisms, in a way that allows for a variable portfolio of co-funding.



# FIGURE 3: Top collaborators of Czech researchers under Horizon 2020 projects (including JUs, cPPPs, P2Ps and other H2020 projects)

Source: eCorda; Showing countries with links > 1 000



## **SUCCESS STORIES**

- Public-to-public partnerships have proved to be an important tool for Czechia to strengthen cooperation in research and innovation at the international level, especially in the framework of initiatives implemented on a legislative basis (Joint Undertakings).
- International cooperation under joint programming initiatives has also achieved the expected results, broadening the portfolio of cooperation and, above all, enabling research organisations to establish the necessary networks with partner institutions from abroad. The research community could therefore benefit from the opportunity to build their international profiles. On the other hand, national funding authorities were able to make use of the exchange of experiences.
- Due to the experience acquired so far, a need has been identified to set up a functional coordination system in Czechia which would interconnect the Ministry of Education, Youth and Sports, which has the central role in the research and development governance system, and sectorial ministries and agencies in order to better define the needs and the necessities of the national research community, and to find more effective forms of supporting the involvement of organisations doing research in the international programmes and initiatives.
- Under EuroHPC, Czechia is hosting the Karolina supercomputer, which became operational in 2021.