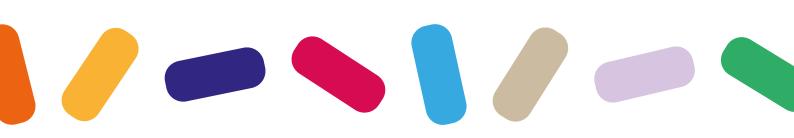


#### **POLICY BRIEF**

# Overview of the Western Balkans Research and Innovation Performance in EU Programmes and Initiatives

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POLICY ANSWERS aims at supporting regional cooperation and closer integration of the Western Balkans (WBs) in the EU's actions towards a digital, green and healthy future. One of the ways of achieving this objective is to enhance the framework conditions by promoting coherence and coordination at policy and funding programme levels with the European initiatives and platforms. This document constitutes a first step in the integration process and creates awareness about the WBs performance in the EU Programmes and Initiatives, namely the Framework Programmes, European Partnerships and Missions, EUREKA, the Instrument for Pre-Accession Assistance as well as Smart Specialisation Strategies (S3) based on mutual interests.



#### INTRODUCTION

Research and innovation (R&I) are funded through various budget lines and a number of different programmes. There are three important budgetary sources: 1) National funding sources, 2) the EU Framework Programmes Horizon 2020 and Horizon Europe and 3) Pre-accession IPA funds. The two latter sources present significant budgetary support by the European Commission (EC) to help developing standards in the enlargement region equal to the ones the EU citizens benefit of. National funding programmes for research and innovation are however out of the scope of this document.

The full association of the WB to the EU Framework Programmes for Research and Innovation has proven to be a successful instrument of systematic changes in the WBs, stimulating the progress in developing new mechanisms, infrastructures and legislation required to improve the effective use of resources. The association provides invaluable opportunities for aligning national research and innovation (R&I) oriented strategies and priorities with those of the EU, and also for the development of human resources, for the selective specialisation in scientific excellence as well as for industrially oriented research and innovation. The association to the EU Framework Programmes is also an important instrument for funding of joint R&I projects enabling mutual access to excellence, but also developing cutting edge science, research and innovation resources on the national basis.

The Framework Programme Horizon Europe has introduced firstly **Missions**<sup>1</sup> as one of the novelties to the European Research Area (ERA). EU's Missions can be considered as one of the strategic frameworks at EU level and are a new means of addressing major societal challenges. Missions aim at increasing the impact of public investments in R&I activities, as well as supporting digital and resilient

economies<sup>2</sup>. EU Members States (MS) and associated countries (AC) are currently developing national strategies and processes to address the Horizon Europe Missions most effectively (e.g. Austrian mission governance, TRAMI<sup>3</sup> project). Currently, five Missions are identified which are related to climate change, cancer, oceans and waters, cities and soil. Within the Cities Mission, a call was launched under the Horizon Europe Programme to select 100 climate-neutral and smart cities by 2030. In addition to these 100 cities, Elbasan (Albania), Sarajevo (Bosnia and Herzegovina) and Podgorica (Montenegro) from the WB region were chosen among 12 cities from countries associated to Horizon Europe. These cities will develop Climate City Contracts with their regional stakeholders, which will include an overall plan for climate neutrality across all sectors such as energy, buildings, waste management and transport, together with related investment plans.

Partnerships<sup>4</sup>, secondly, have been in practice since Framework Programme 6 (FP6). They bring together the European Commission, EU MS, public and private partners to build critical mass and to align research and innovation strategies. The new generation of European Partnerships, launched with the Horizon Europe programme, focuses on generating stronger policy impacts and to contribute to the EU policy objectives of a green, digital, and resilient Europe, including EU-wide progress towards the UN Sustainable Development Goals (SDGs). Although Partnerships are widely used among MS and AC, the WB have not been actively engaged in them. Currently, there is a portfolio of 49 thematically defined Partnerships that are in different stages of development. It is expected that participating countries will commit around €31.4 billion while the Horizon Europe programme also commits around €23.8 billion⁵. Some of the Partnerships have finalised their

<sup>1</sup> https://wbc-rti.info/glossary/157

<sup>2</sup> https://ec.europa.eu/commission/presscorner/detail/en/ip\_22\_1467

<sup>3</sup> https://www.trami5missions.eu

<sup>4</sup> https://wbc-rti.info/glossary/152

<sup>5</sup> Performance of European Partnerships, Biennial Monitoring Report (BMR) 2022 on partnerships in Horizon Europe, pg 29 https://op.europa.eu/en/publication-detail/-/publication/a6cbe152-d19e-11ec-a95f-01aa75ed71a1/language-en/format-PDF/source-search



contracts with the EC and others are in the process. These partnerships offer a great opportunity to align national priorities with EU priorities and collaborate with other MS and AC in the process.

The EU Partnership on Innovative SMEs is one of these Partnerships, involving also the EURE–KA programme. Currently, there is no WB economy in this Partnership, but they join in some of the Eureka Programmes. **EUREKA**<sup>6</sup> is an intergovernmental organisation of national ministries and funding agencies established in 1985 to support applied research and development by providing funding for international R&D projects via a bottom–up and non–bureaucratic approach. The Network currently has 43 full members, including the European Union and four associated members. All EU MS as well as Albania, Bosnia and Herzegovina, Montenegro, North Macedonia and Serbia are members of EUREKA.

The Network has the following programmes to support international R&D collaboration:

- Eurostars
- Innowwide
- Clusters
- Network Projects
- Globalstars
- Investment Readiness

Last but not least, the third, very important budgetary heading with a foreseen share for R&I investment, capacity building and youth employment is the funding through the **Instrument for Pre-Accession Assistance (IPA)**. As indicated in the Innovation Agenda<sup>7</sup> for the WB, the EC has launched an ambitious Economic and Investment Plan for the region, to support twin green and digital transition, proposing to mobilise €9 billion of IPA III funding for the period 2021–2027, including a new Western Balkans

Guarantee Facility, with the ambition to potentially raise investments up to €20 billion.

IPA funds build up the capacities of the beneficiaries throughout the accession process, resulting in a progressive, positive development in the region with a focus on innovation. For the period 2007-2013, IPA had a budget of €11.5 billion. Its successor, IPA II, was allocated €12.8 billion for the period 2014-2020. € 2,980.2 million were used for multi-country/regional programmes<sup>8</sup>. For the multian-nual financial framework period 2021-2027, the IPA III<sup>9</sup> budgetary envelope is €14.162 billion focusing on the priorities of the enlargement process according to five thematic windows, which mirror the clusters of the negotiation chapters as per revised enlargement methodology. There is high relevance of research and innovation in particular for the:

- Window 3: Green agenda and sustainable connectivity
- Window 4: Competitiveness and inclusive growth

The new instrument is clearly aligned with the flagships and priorities of the "Economic and Investment Plan for the Western Balkans<sup>10</sup>". IPA III is therefore a good opportunity for economic recovery and sustainable development given the large budgetary envelope.

<sup>6</sup> https://wbc-rti.info/glossary/36

<sup>7</sup> https://research-and-innovation.ec.europa.eu/news/all-research-and-innovation-news/eu-and-western-balkans-launch-joint-strategy-strengthen-cooperation-innovation-research-education-2021-10-06 en

<sup>8</sup> https://ec.europa.eu/neighbourhood-enlargement/enlargement-policy/overview-instrument-pre-accession-assistance\_en

<sup>9</sup> COMMISSION IMPLEMENTING DECISION of 10.12.2021 adopting the Instrument for Pre-Accession Assistance (IPA III) Programming Framework for the period 2021-2027 https://neighbourhood-enlargement.ec.europa.eu/system/files/2022-01/C\_2021\_8914\_COMMISSION\_IMPLEMENTING\_DECISION\_EN.pdf

<sup>10</sup> https://ec.europa.eu/commission/presscorner/detail/en/IP\_20\_1811



Western Balkans
involvement in EU
Framework Programmes
(FP6, FP7, Horizon
2020, Horizon Europe),
European Partnerships
and Missions

As already pointed out, an important budgetary source for Research and Innovation are the EU Framework Programmes (FPs), i.e. Horizon 2020 and Horizon Europe. All the WBs are fully associated to the FPs, which brought systematic changes and helped developing excellence in all WBs as well as inclusion in the European Research Area (ERA). In the following, you find an overview and snapshots of the current participation of the WBs in the programmes.



### **ALBANIA**

**National resources** earmarked for research and innovation funds for 2021 are **0.06%** of GDP and for 2022 **0.05%** of GDP, well below the target of **1%** defined in the draft midterm 2020–2022 budget planning for scientific research.

In Horizon 2020, Albania has taken part in:

| Horizon 2020 projects <sup>11,12</sup> | Participations | Net EU contribution |
|--|----------------|---------------------|
| 48                                     | 53             | €5.79 mio.          |

#### The success rate of retained proposal was:

| with participation from Albania | EU MS  | Horizon 2020 |
|---------------------------------|--------|--------------|
| 8.18%                           | 11.97% | 11.95%       |

#### Overview of the use of the IPA II 2014-2020 funds:

| Albania <sup>13</sup>   | € 639.5 mio.  |
|---|---|
| Part spent for the component 'Competitiveness and Growth'   | € 297.0 mio.  |
| Environment, climate change and energy<br>Transport<br>Competitiveness, innovation, agriculture and rural development*<br>Education, employment and social policies | € 30.2 mio.<br>€ 24.0 mio.<br>€ 182.8 mio.<br>€ 60.0 mio. |

<sup>\*</sup>Support of research and innovation mostly part of this sector.

#### Sources

European Commission | DG Research and Innovation | International Cooperation | Albania

 $\underline{https://research-and-innovation.ec.europa.eu/strategy/strategy-2020-2024/europe-world/international-cooperation/albania\_enternation/albania\_enternat$ 

European Commission | R&I cooperation with Albania

https://op.europa.eu/en/web/eu-law-and-publications/publication-detail/-/publication/2b1d1cc6-87f8-11ec-8c40-01aa75ed71a1

European Commission | European Neighbourhood Policy and Enlargement Negotiations | Albania

https://ec.europa.eu/neighbourhood-enlargement/enlargement-policy/albania\_en

European Commission | European Neighbourhood Policy and Enlargement Negotiations | Albania 2021 Report

https://ec.europa.eu/neighbourhood-enlargement/albania-report-2021\_en

<sup>11</sup> European Commission | Albania Horizon 2020 country profile <a href="https://webgate.ec.europa.eu/dashboard/extensions/CountryProfile/Co

<sup>12</sup> European Commission | Horizon Dashboard | Albania <a href="https://webgate.ec.europa.eu/dashboard/sense/app/a976d168-2023-41d8-acec-e77640154726/sheet/0c8af38b-b73c-4da2-ba41-73ea34ab7ac4/state/analysis/select/Country/Albania (October 2022)</a>

<sup>13</sup> https://ec.europa.eu/neighbourhood-enlargement/enlargement-policy/overview-instrument-pre-accession-assistance/albania-financial-assistance-under-ipa-iii\_en (October 2022)



Currently, Albania is involved in the following active Partnerships and Mission Action:

| PENDING          | EUPHRESCO (self-sustained) – European Phytosanitary Research Coordination                    |
|------------------|--|
|                  | <u>JPND</u> – EU Joint Programme – Neurodegenerative Disease Research                        |
| HORIZON EUROPE   | Biodiversa-plus – The European Biodiversity Partnership                                      |
|                  | EOSC – European Open Science Cloud   |
| 1 MISSION ACTION | City Elbasan: 100 climate-neutral and smart cities by 2030 (as one of the 12 cities from AC) |

Albania participates in the following **EUREKA** programmes via <u>National Agency of Scientific Research and Innovation (NASRI)</u>: Network Projects, and Globalstars.

Additionally, in the past, Albania<sup>14</sup> has been involved in:

#### **PARTNERSHIPS**

- Horizon 2020
  - GeoERA | Establishing the European Geological Surveys Research Area to deliver a Geological Service for Europe
- FP7
  - MARTEC II | ERA-NET MARitime TEChnologies II
  - SEE-ERA.NET Plus | South-East European ERA-NET Plus; joint call for European Research projects in September 2009 in order to enhance the integration of the Western Balkans countries into the European Research Area
  - <u>SEERA-EI</u> | South-East European Research Area for eInfrastructures
  - ARIMNet | Coordination of Agricultural Research in the Mediterranean
- FP6
  - SEE-ERA.NET | South-East European ERA-NET

#### **4 JOINT CALLS**

(1 time GeoERA, 1 time EMPIR, 1 time SEE-ERA.NET Plus, 1 time SEE-ERA.NET)

#### **5 FUNDED PROJECTS**

[3 times GeoERA, 1 time FACCE SURPLUS, 1 time CIRCLE]

Albania was not an official participant of EMPIR (Article 185 partnership) but took part in the EMPIR Call 2017.

It was also not an official participant of <u>CIRCLE</u> but one project funded by CIRCLE "<u>CLIMBIOMEDNET</u>" included an Albanian organisation.

And it was neither an official participant of **FACCE SURPLUS** but one project funded by FACCE SURPLUS "Agronickel" included an Albanian organisation.

<sup>14</sup> ERA-LEARN | Albania https://www.era-learn.ev/network-information/countries/al



### **BOSNIA AND HERZEGOVINA**

The total national allocations for research and innovation are estimated at 0.3% of GDP.

In Horizon 2020, Bosnia and Herzegovina has taken part in:

| Horizon 2020 projects15,16 | Participations | Net EU contribution |
|----------------------------|----------------|---------------------|
| 70                         | 118            | €8.72 mio.          |

#### The success rate of retained proposals was:

| with participation from<br>Bosnia and Herzegovina | EU MS  | Horizon 2020 |
|---|--------|--------------|
| 11.82%  | 11.97% | 11.95%       |

#### Overview of the use of the IPA II 2014-2020 funds:

| Bosnia and Herzegovina <sup>17</sup>                             | € 552.1 mio. |
|--|--------------|
| Part spent for the component 'Competitiveness and Growth'        | € 328.9 mio. |
| Environment, climate change and energy                           | € 114.2 mio. |
| Transport  | € 41.7 mio.  |
| Competitiveness, innovation, agriculture and rural development** | € 99.4 mio.  |
| Education, employment and social policies                        | € 73.8 mio.  |

<sup>\*</sup>Support of research and innovation mostly part of this sector.

- 15 European Commission | Bosnia and Herzegovina | Horizon 2020 country profile https://webgate.ec.europa.eu/dashboard/extensions/CountryProfile/CountryProfile.html?Country=BA (October 2022)
- 16 European Commission | Horizon Dashboard | Bosnia and Herzegovina https://webgate.ec.europa.eu/dashboard/sense/app/a976d168-2023-41d8-acec-e77640154726/sheet/0c8af38b-b73c-4da2-ba41-73ea34ab7ac4/state/analysis/select/Country/Bosnia%20and%20Herzegovina (October 2022)
- 17 https://ec.europa.eu/neighbourhood-enlargement/enlargement-policy/overview-instrument-pre-accession-assistance/bosnia-and-herzegovina-financial-assistance-under-instrument-pre-accession-assistance-ii-ipa-ii\_en (October 2022)

#### Sources

European Commission | DG Research and Innovation | International Cooperation | Bosnia and Herzegovina

https://research-and-innovation.ec.europa.eu/strategy/strategy-2020-2024/europe-world/international-cooperation/bosnia-and-herzegovina\_en

European Commission | R&I cooperation with Bosnia and Herzegovina

https://op.europa.eu/en/web/eu-law-and-publications/publication-detail/-/publication/d0bb87c7-87f9-11ec-8c40-01aa75ed71a1

European Commission | European Neighbourhood Policy and Enlargement Negotiations | Bosnia and Herzegovina

https://ec.europa.eu/neighbourhood-enlargement/enlargement-policy/bosnia-and-herzegovina\_en

European Commission | European Neighbourhood Policy and Enlargement Negotiations | Bosnia and Herzegovina 2021 Report

https://ec.europa.eu/neighbourhood-enlargement/bosnia-and-herzegovina-report-2021\_en



Currently, Bosnia and Herzegovina is involved in the following active Partnerships and Mission Action:

| PENDING                   | EUPHRESCO (self-sustained) – European Phytosanitary Research Coordination  |  |
|---------------------------|--|--|
|                           | EuroHPC – European Partnership for High Performance Computing (BiH aims to join soon)  |  |
| HORIZON 2020              | EMPIR – European Metrology Programme for Innovation and Research   |  |
| HORIZON EUROPE            | EOSC – European Open Science Cloud   |  |
| 1 MISSION (CITIES) ACTION | City Sarajevo – 100 climate-neutral and smart cities by 2030 (as one of the 12 cities from countries associated to the Horizon Europe) |  |

Bosnia and Herzegovina participates in the following EUREKA programmes via the Ministry of Civil Affairs (Eureka NCP): Network Projects

Since 2008, 23 organizations from Bosnia and Herzegovina participated in 17 projects with a total cost of 14 million Euros.

Additionally in the past, Bosnia and Herzegovina<sup>18</sup> has been involved in:

#### **PARTNERSHIPS**

- Horizon 2020 (Pending)
  - GeoERA | Establishing the European Geological Surveys Research Area to deliver a Geological Service for Europe
- FP7
  - <u>SEE-ERA.NET Plus</u> | South-East European ERA-NET Plus; joint call for European Research projects in September 2009 in order to enhance the integration of the Western Balkan Countries into the European Research Area
  - SEERA-EI | South-East European Research Area for eInfrastructures
- FP6
  - SEE-ERA.NET | South-East European ERA-NET

#### **14 JOINT CALLS**

(7 times EMPIR (Article 185), 5 times EMRP (Article 169), 1 time GeoERA, 1 time SEE-ERA.NET)

#### **35 FUNDED PROJECTS**

[26 times EMPIR, 4 times EMRP, 4 times GeoERA, 1 time CHANSE]

Bosnia and Herzegovina is not an official participant of <u>CHANSE</u> but one project "<u>REDACT</u>" funded by the CHANSE call "<u>Transformations: Social and Cultural Dynamics in the Digital Age</u>" included an organisation from Bosnia and Herzegovina.

https://www.era-learn.ev/network-information/countries/baClimate-neutral and smart cities (europa.eu)

<sup>18</sup> ERA-LEARN | Bosnia and Herzegovina



# KOSOVO\*

\* This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo declaration of independence.

Science and research continue to be underfunded, with **public spending** amounting to only **0.01%** of GDP, despite a **0.7%** target mandated by law.

In Horizon 2020, Kosovo has taken part in:

| Horizon 2020 projects <sup>19</sup> | Participations | Net EU contribution |
|-------------------------------------|----------------|---------------------|
| 19                                  | 21             | €2.56 mio.          |

The success rate of retained proposals was:

| with participation from Kosovo | EU MS  | Horizon 2020 |
|--------------------------------|--------|--------------|
| 17.42%                         | 11.97% | 11.95%       |

#### Overview of the use of the IPA II 2014-2020 funds:

| Kosovo <sup>20</sup>  | € 602.1 mio.                 |
|---|------------------------------|
| Part spent for the component 'Competitiveness and Growth'   | € 338.65 mio.                |
| Environment, climate change and energy<br>Transport   | € 143.8 mio.<br>€ 0.0 mio.   |
| Competitiveness, innovation, agriculture and rural development* Education, employment and social policies | € 124.35 mio.<br>€ 70.5 mio. |

<sup>\*</sup>Support of research and innovation mostly part of this sector.

- 19 European Commission | Horizon Dashboard | Kosovo <a href="https://webgate.ec.europa.eu/dashboard/sense/app/a976d168-2023-41d8-acec-e77640154726/sheet/0c8af38b-b73c-4da2-ba41-73ea34ab7ac4/state/analysis/kosovo">https://webgate.ec.europa.eu/dashboard/sense/app/a976d168-2023-41d8-acec-e77640154726/sheet/0c8af38b-b73c-4da2-ba41-73ea34ab7ac4/state/analysis/kosovo</a> (October 2022)
- 20 https://ec.europa.eu/neighbourhood-enlargement/enlargement-policy/overview-instrument-pre-accession-assistance/kosovo-financial-assistance-under-ipa-ii\_en [October 2022]

#### Sources

European Commission | DG Research and Innovation | International Cooperation | Kosovo

 $\underline{\text{https://research-and-innovation.ec.europa.eu/strategy/strategy-2020-2024/europe-world/international-cooperation/kosovo\_enception.pdf.}$ 

European Commission | R&I cooperation with Kosovo

https://op.europa.eu/en/web/eu-law-and-publications/publication-detail/-/publication/a86dbb35-87fa-11ec-8c40-01aa75ed71a1

European Commission | European Neighbourhood Policy and Enlargement Negotiations | Kosovo

https://ec.europa.eu/neighbourhood-enlargement/enlargement-policy/kosovo\_en

European Commission | European Neighbourhood Policy and Enlargement Negotiations | Kosovo 2021 Report

https://ec.europa.eu/neighbourhood-enlargement/kosovo-report-2021\_en



Currently, Kosovo does not appear in the ERA-LEARN Partnership statistics<sup>21</sup> and is not formally involved in any **Partnerships or Missions**.

However, there is one project "COMBACTE-CARE<sup>22</sup>" funded by the "Innovative Medicines Initiative (IMI1)", a public-private partnership in which Kosovo participated as non-member organisation.

<sup>21</sup> https://www.era-learn.eu/network-information/countries/list-countries

<sup>22</sup> https://www.combacte.com/about/about-combacte-care-detail



## **MONTENEGRO**

The latest available official statistics (2018) indicates that national R&I funding was 0.5% of GDP with an investment share of 0.19% provided by the private sector.

In Horizon 2020, Montenegro has taken part in:

| Horizon 2020 projects <sup>23,24</sup> | Participations | Net EU contribution |
|--|----------------|---------------------|
| 39                                     | 65             | €4.62 mio.          |

#### The success rate of retained proposal was:

| with participation from Montenegro | EU MS  | Horizon 2020 |
|------------------------------------|--------|--------------|
| 12.50%                             | 11.97% | 11.95%       |

#### Overview of the use of the IPA II 2014-2020 funds:

| Montenegro <sup>25</sup>  | € 279.1 mio.   |
|---|--|
| Part spent for the component 'Competitiveness and Growth'   | € 171.4 mio.   |
| Environment, climate change and energy<br>Transport<br>Competitiveness, innovation, agriculture and rural development*<br>Education, employment and social policies | € 35.1 mio.<br>€ 29.7 mio.<br>€ 71.6 mio.<br>€ 35.0 mio. |

<sup>\*</sup>Support of research and innovation mostly part of this sector.

- 23 European Commission | Montenegro Horizon 2020 country profile https://webgate.ec.europa.eu/dashboard/extensions/CountryProfile/CountryProfile.html?Country=ME (October 2022)
- 24 European Commission | Horizon Dashboard | Montenegro https://webgate.ec.europa.eu/dashboard/sense/app/a976d168-2023-41d8-acec-e77640154726/sheet/0c8af38b-b73c-4da2-ba41-73ea34ab7ac4/state/analysis/select/Country/Montenegro (October 2022)
- 25 https://ec.europa.eu/neighbourhood-enlargement/enlargement-policy/overview-instrument-pre-accession-assistance/montenegro-financial-assistance-under-ipa-ii\_en (October 2022)

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European Commission | DG Research and Innovation | International Cooperation | Montenegro

https://research-and-innovation.ec.europa.eu/strategy/strategy-2020-2024/europe-world/international-cooperation/montenegro\_en

European Commission | R&I cooperation with Montenegro

https://op.europa.eu/en/web/eu-law-and-publications/publication-detail/-/publication/8c07f1e2-87f9-11ec-8c40-01aa75ed71a1

European Commission | European Neighbourhood Policy and Enlargement Negotiations | Montenegro

https://ec.europa.eu/neighbourhood-enlargement/enlargement-policy/montenegro\_en

European Commission | European Neighbourhood Policy and Enlargement Negotiations | Montenegro 2021 Report

https://ec.europa.eu/neighbourhood-enlargement/montenegro-report-2021\_en





Currently, Montenegro is involved in respectively one active Partnership and Mission Action:

| HORIZON EUROPE          | Biodiversa-plus – The European Biodiversity Partnership   |
|-------------------------|---|
|                         | EuroHPC – European Partnership for High Performance Computing                                   |
|                         | EOSC – European Open Science Cloud  |
| MISSION (CITIES) ACTION | City Podgorica – 100 climate-neutral and smart cities by 2030 (as one of the 12 cities from AC) |

Montenegro participates in the following **EUREKA** programmes via the <u>Directorate for Innovation and Tech</u>nological Development: Globalstars and Network Projects

Since 2009, 33 organisations were involved in 20 EUREKA (Network) projects with a total cost of 58 million Euros.

Additionally, in the past Montenegro<sup>26</sup> has been involved in:

#### **PARTNERSHIPS**

- FP7
  - <u>SEE-ERA.NET Plus</u> | South-East European ERA-NET Plus; joint call for European Research projects in September 2009 in order to enhance the integration of the Western Balkan Countries into the European Research Area
  - SEERA-EI | South-East European Research Area for eInfrastructures
- FP6
  - SEE-ERA.NET | South-East European ERA-NET

#### **3 JOINT CALLS**

[1 time EMPIR, 1 time SEE-ERA.NET Plus, 1 time SEE-ERA.NET]

#### **4 FUNDED PROJECTS**

(2 times EMPIR, 1 time AA L2, 1 time CHANSE)

Montenegro is not an official participant of **EMPIR** (Article 185 partnership)

- but took part in the EMPIR Call 2017
- one project "MetForTC" with Montenegrin participation was funded by the "EMPIR Call 2018"
- one project "15RPT03 HUMEA" with Montenegrin participation was funded by the "EMPIR CALL 2015".

#### It is not an official participant of AAL 2

but one project "<u>RESILIEN-T</u>" with Montenegrin participation was funded by the "<u>AAL CALL CHALLENGE</u> 2018".

#### It is not an official participant of CHANSE

but one project "<u>ReDigIm</u>" with Montenegrin participation was funded by the CHANSE call "<u>Transformations</u>: Social and Cultural Dynamics in the Digital Age".

https://www.era-learn.eu/network-information/countries/meClimate-neutral and smart cities (europa.eu)



<sup>26</sup> ERA-LEARN | Montenegro



### **NORTH MACEDONIA**

**National investment in R&I** remains low at **0.4%** of GDP. Participation by the private sector in overall research spending remains low at **0.1%** of GDP.

In Horizon 2020, North Macedonia has taken part in:

| Horizon 2020 projects <sup>27,28</sup> | Participations | Net EU contribution |
|--|----------------|---------------------|
| 92                                     | 122            | €14.80 mio.         |

#### The success rate of retained proposals was:

| with participation from<br>North Macedonia | EU MS  | Horizon 2020 |
|--|--------|--------------|
| 10.75%                                     | 11.97% | 11.95%       |

#### Overview of the use of the IPA II 2014-2020 funds:

| North Macedonia <sup>29</sup>                                   | € 608.7 mio. |
|---|--------------|
| Part spent for the component 'Competitiveness and Growth'       | € 421.0 mio. |
| Environment, climate change and energy                          | € 123.3 mio. |
| Transport   | € 115.2 mio. |
| Competitiveness, innovation, agriculture and rural development* | € 135.6 mio. |
| Education, employment and social policies                       | € 47.0 mio.  |

<sup>\*</sup>Support of research and innovation mostly part of this sector.

- 27 European Commission | North Macedonia Horizon 2020 country profile https://webgate.ec.europa.eu/dashboard/extensions/CountryProfile/CountryProfile.html?Country=MK (October 2022)
- 28 European Commission | Horizon Dashboard | North Macedonia https://webgate.ec.europa.eu/dashboard/sense/app/a976d168-2023-41d8-acec-e77640154726/sheet/0c8af38b-b73c-4da2-ba41-73ea34ab7ac4/state/analysis/select/Country/North%20Macedonia (October 2022)
- 29 https://ec.europa.eu/neighbourhood-enlargement/enlargement-policy/overview-instrument-pre-accession-assistance/north-macedonia-financial-assistance-under-ipa-ii\_en (October 2022)

#### Sources

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 $\underline{https://research-and-innovation.ec.europa.eu/strategy/strategy-2020-2024/europe-world/international-cooperation/north-macedonia\_engeneration/north-macedonia_$ 

European Commission | R&I cooperation with North Macedonia

https://op.europa.eu/en/web/eu-law-and-publications/publication-detail/-/publication/058c42b4-87f8-11ec-8c40-01aa75ed71a1ac-8c40-01aa75ed71a075ed71a075ed71a075ed71a075ed71a075ed71a075ed71a075ed71a075e071a075e071a075e071a075e071a075e071a075e071a

European Commission | European Neighbourhood Policy and Enlargement Negotiations | North Macedonia

https://neighbourhood-enlargement.ec.europa.eu/enlargement-policy/north-macedonia\_en

European Commission | European Neighbourhood Policy and Enlargement Negotiations | North Macedonia 2021 Report <a href="https://neighbourhood-enlargement.ec.europa.eu/north-macedonia-report-2021\_en">https://neighbourhood-enlargement.ec.europa.eu/north-macedonia-report-2021\_en</a>





Currently, North Macedonia is involved in the following active Partnerships:

| PENDING        | EUPHRESCO (self-sustained) – European Phytosanitary Research Coordination |
|----------------|---|
| HORIZON EUROPE | EuroHPC – European Partnership for High Performance Computing             |
|                | EOSC – European Open Science Cloud  |

Organisations of North Macedonia participating in international R&D projects are not currently eligible for funding through **EUREKA**. The Ministry of Education and Science, as national contact point, provides partner search help via the EEN Network. However, between 2008–2014, 14 organisations were involved in 7 EUREKA (Network and Eurostars) projects with a total cost of 6 million Euros.

Additionally, in the past North Macedonia<sup>30</sup> has been involved in:

#### **PARTNERSHIPS**

- FP7
  - <u>SUMFOREST</u> | Tackling the challenges in sustainable and multifunctional forestry through enhanced research coordination for policy decisions
  - EUPHRESCO II | European Phytosanitary Research Coordination II
  - <u>SEE-ERA.NET Plus</u> | South-East European ERA-NET Plus; joint call for European Research projects in September 2009 in order to enhance the integration of the Western Balkan Countries into the European Research Area
  - SEERA-EI | South-East European Research Area for eInfrastructures
  - SmartGrids ERA-NET | SmartGrids ERA-NET
- FP6
  - SEE-ERA.NET | South-East European ERA-NET

#### **4 JOINT CALLS**

[EMPIR, GeoERA, SEE-ERA.NET Plus, SEE-ERA.NET]

#### **2 FUNDED PROJECTS**

(2 in EMPIR)

North Macedonia is not an official participant of <a href="EMPIR">EMPIR</a> (Article 185 partnership) but took part in the <a href="EMPIR">EMPIR</a> Call 2017:

- one project "19RPTO2 RealMass" with participation of North Macedonia was funded by the "EMPIR Call 2019"
- one project "15RPT03 HUMEA" with participation of North Macedonia was funded by the "EMPIR CALL 2015"

https://www.era-learn.eu/network-information/countries/mk



This project has received funding from the European Union's Horizon Europ
research and innovation programme under grant agreement No 101058873

<sup>30</sup> ERA-LEARN | North Macedonia



### **SERBIA**

The **national level of investment** in research and innovation remains **0.89%** of GDP with only one third of this amount coming from the private sector.

In Horizon 2020, Serbia has taken part in:

| Horizon 2020 projects <sup>31,32</sup> | Participations | Net EU contribution |
|--|----------------|---------------------|
| 415                                    | 598            | €134.80 mio.        |

The success rate of retained proposals was:

| with participation from Serbia | EU MS  | Horizon 2020 |
|--------------------------------|--------|--------------|
| 11.36%                         | 11.97% | 11.95%       |

#### Overview of the use of the IPA II 2014-2020 funds:

| Serbia <sup>33</sup>  | € 1,539.1 mio.  |
|---|---|
| Part spent for the component 'Competitiveness and Growth'   | € 846.8 mio.  |
| Environment, climate change and energy<br>Transport<br>Competitiveness, innovation, agriculture and rural development*<br>Education, employment and social policies | € 321.8 mio.<br>€ 64.8 mio.<br>€ 336.5 mio.<br>€ 123.7 mio. |

<sup>\*</sup>Support of research and innovation mostly part of this sector.

- 31 European Commission | Serbia Horizon 2020 country profile https://webgate.ec.europa.eu/dashboard/extensions/CountryProfile/CountryProfile.html?Country=RS (October 2022)
- 32 European Commission | Horizon Dashboard | Serbia https://webgate.ec.europa.eu/dashboard/sense/app/a976d168-2023-41d8-acec-e77640154726/sheet/0c8af38b-b73c-4da2-ba41-73ea34ab7ac4/state/analysis/select/Country/Serbia (October 2022)
- 33 https://ec.europa.eu/neighbourhood-enlargement/enlargement-policy/overview-instrument-pre-accession-assistance/serbia-financial-assistance-under-ipa-ii\_en (October 2022)

#### Sources

European Commission | DG Research and Innovation | International Cooperation | Serbia

 $\underline{https://research-and-innovation.ec.europa.eu/strategy/strategy-2020-2024/europe-world/international-cooperation/serbia\_enternation/serbia\_e$ 

European Commission | R&I cooperation with Serbia

https://op.europa.eu/en/web/eu-law-and-publications/publication-detail/-/publication/adbc2e04-87f9-11ec-8c40-01aa75ed71a12ec-8c40-01aa75ed-8

European Commission | European Neighbourhood Policy and Enlargement Negotiations | Serbia

https://neighbourhood-enlargement.ec.europa.eu/enlargement-policy/serbia\_en

European Commission | European Neighbourhood Policy and Enlargement Negotiations | Serbia 2021 Report

https://neighbourhood-enlargement.ec.europa.eu/serbia-report-2021\_en



Currently, Serbia is involved in 4 active **Partnerships**:

| HORIZON EUROPE | EuroHPC – European Partnership for High Performance Computing   |
|----------------|---|
|                | SCAR AE – European Partnership for Accelerating Farming Systems Transition:<br>Agroecology living labs and research infrastructures |
|                | EOSC – European Open Science Cloud  |
| PENDING        | ERA-CAPS (self-sustained)   ERA-Net for Coordinating Action in Plant Sciences   |
|                | EUPHRESCO (self-sustained)   European Phytosanitary Research Coordination   |
|                | SAF€RA self-sustained   Coordination of European Research on Industrial Safety towards Smart and Sustainable Growth                 |
| HORIZON 2020   | EMPIR   European Metrology Programme for Innovation and Research  |

Serbia participates in the following **EUREKA** programmes via the <u>Ministry of Education</u>, <u>Science and Technological Development</u>: Globalstars and <u>Network Projects</u>

Since 2007, 294 organisations were involved in 149 EUREKA (Network and Eurostars) projects with a total cost of 165 million Euros.

Since 2002, 590 Serbian organisations have been involved in EUREKA projects and received on average €70,000.

Additionally, in the past, Serbia<sup>34</sup> has been involved in:

#### **PARTNERSHIPS**

- FP7
- ERA.Net RUS plus | Further linking Russia to the ERA: Coordination of MS/ AC S&T programmes towards and with Russia
- ERACAPS | ERA-NET for Coordinating Action in Plant Sciences
- EUPHRESCO II | European Phytosanitary Research Coordination II
- SAF€RA | Coordination of European Research on Industrial Safety towards Smart and Sustainable Growth
- <u>SEE-ERA.NET Plus</u> | South-East European ERA-NET Plus; joint call for European Research projects in September 2009 in order to enhance the integration of the Western Balkan Countries into the European Research Area
- SEERA-EI | South-East European Research Area for eInfrastructures
- FP6
  - SEE-ERA.NET | South-East European ERA-NET

https://www.era-learn.eu/network-information/countries/rs

<sup>34</sup> ERA-LEARN | Serbia



#### **15 JOINT CALLS**

(7 in EMPIR, 2 in ERACAPS, 1 in ERA-CAPS (self-sustained), 2 in SAF€RA, 1 in GeoERA, 1 in ERA.Net RUS plus, 1 in SEE-ERA.NET)

#### **24 FUNDED PROJECTS**

[16 in EMPIR, 5 in GeoERA, 1 in CHANSE, 1 in ENUTC, 1 in SUSFOOD2]

#### Serbia is not an official participant of "GeoERA"

- but took part in the "GeoERA Cofund Call"
- and five projects with Serbian participants were funded by this call: "GeoConnect3D", "HOVER", "Mintel-I4EU", "RESOURCE", "TACTIC"

#### It is not an official participant of **CHANSE**

but one project "<u>REDACT</u>" with Serbian participation was funded by the CHANSE call "<u>Transformations</u>:
 Social and Cultural Dynamics in the Digital Age".

#### It is not an official participant of "ENUTC"

but one project "COOLSCHOOLS" with Serbian participation was funded by the ENUTC call "1st ENUTC Call 2021".

#### It is not an official participant of "SUSFOOD2"

but one project "SUSPUFA" with Serbian participation was funded by the call "SUSFOOD2 ERA-NET CO-FUND".



#### **Association to the Framework Programmes**

Horizon 2020 **\*** N





PILLAR III - Innovative Europe

#### 49 European Partnerships in the first Horizon Europe Strategic Plan 37 Partnerships Biennial Monitoring Report

#### PILLAR II – Global challenges & European industrial competitiveness

■ Co-programmed

#### Cluster 6: Food, bioeconomy, natural resources, The European Institute of Innovation and Cluster 4: Cluster 5: Digital, industry and space Cluster 1: **European innovation** Climate, energy and mobility ecosystems agriculture and environment Innovative Health Initiative Key Digital Technologies Circular Bio-based Europe Clean Hydrogen Innovative SMEs Smart Networks and Biodiversa+ Global Health EDCTP3 Clean Aviation High Performance Single European Sky ATM Research 3 EIT Digital Transformation of Health Care Systems Blue Economy Risk Assessment of Chemicals European Metrology (Art. 185) Water4All Europe's Rail Connected, Cooperative and Automated Mobility EIT Health Animal Health and ERA for Health AI-Data-Robotics Welfare Accelerating Farming EIT RawMaterials Batteries Race Diseases **Photonics** Systems Transitions \* 🔪 🛐 😻 💥 😇 EIT Manufacturing One-Health Zero-emission Waterborne Transport Made in Europe Agriculture of data Resistance EIT Urban Mobility Personalised Medicine **Food Systems** EIT Culture & Creativity\* Pandemic Preparedness Processes4Planet Built4People \* This KIC operates from 2023 Globally Competitive Space Systems Clean Energy Transition **CROSS-PILLARS II and III** Driving Urban Transitions European Open Science Cloud 🔼 🥄 🚾 💥 💳

#### **5 EU Missions**

Source: European Commission

Institutionalised partnerships

(Art. 185/7, EIT KICs)

Adaptation to Climate Change: support at least 150 European regions and communities to become climate resilient by 2030

100 Climate-Neutral and Smart Cities by 2030 \* \*

Cancer: working with Europe's Beating Cancer Plan to improve the lives of more than 3 million people by 2030

Co-funded

A Soil Deal for Europe: 100 living labs and lighthouses to lead the transition towards healthy soils by 2030

Restore our Ocean and Waters by 2030

☐ Not covered in the BMR 2022

due to a later start date

Adaptation by POLICY ANSWERS based on the Performance of European Partnerships, Biennial Monitoring Report (BMR) 2022 on partnerships in Horizon Europe, page 5 https://op.europa.eu/en/publication-detail/-/publication/a6cbe152-d19e-11ec-a95f-01aa75ed71a1/language-en/format-PDF/source-search and various sources on participation of WB.



### CONCLUSIONS

There is clear evidence that some WB economies show greater progress than others in terms of the level of national funding in R&I; in particular, Serbia invests up to 1% of GDP in research and innovation. Despite a rather low level of national funding in R&I, the progress in most of the WBs is achieved by setting up new mechanisms to implement programmes which provide funding opportunities in the area of R&I, like Innovation Funds, National Agencies for Innovation and Funds for Science. These new mechanisms should support better strategical planning for increasing the investment in R&I. Given that research and innovation are highly relevant to the "Economic and Investment Plan for the Western Balkans", developing an investment policy approach with a clear focus on the green and digital transition and the implementation of smart specialisation strategies would help in achieving synergies with IPA funds. This would significantly increase innovation potential and capacity. The new strategical approach should aim at interconnecting policies, strategies and programmes, and at building awareness of the need of R&I for economic recovery, development, growth and job creation.

The IPA funds also provide an important supplementary source to increase the innovation potential and capacity in relevant areas, given that innovations are closely interlinked and relevant to the Economic and Investment Plan with the overall objective to increase competitiveness and growth. To achieve that, a stimulus is needed to facilitate access to the relevant information and to raise awareness of and to better integrate academic and business communities (including SMEs and start-ups) in all processes of the programming of IPA funds.

The IPA funds will continue to provide an important part of the funds for R&I through an increased focus on innovation and for the development of a smart economic transformation in the WB. Thus, the complementarities and synergies of IPA with other national R&I opportunities and EU funding programmes should be fully exploited. The recent publication by the EC of a practical and user-friend-

ly guidance on new opportunities to maximise synergies between Horizon Europe and the European Regional Development Fund programmes (ERDF) could be a very useful base. The document contains legal and implementation details of opportunities for achieving synergies, such as for the Seal of Excellence, European Partnerships, for combined funding — Teaming, upstream/downstream synergies including Missions.

On one hand, there was a steady progress in participation of all the WB in the EU Framework Programme Horizon 2020 with a success rate at or even above the EU average success rate. Furthermore, WBs also participated in Horizon Europe Calls relevant to the implementation of the Missions. Within the frame of the Horizon Europe Missions Work Programme 2021-2022, 6 WBs are involved in projects of the following Missions: Albania (Ocean), Bosnia and Herzegovina (Cities), Montenegro (Cities and Ocean), North Macedonia (Soil), and Serbia (Ocean, Soil). These results clearly show that R&I actors in the WB have the capacity to improve their involvement in Horizon Europe projects and actions, including the EU's Missions and Partnerships, if the national framework conditions (availability of funding, policy commitment, experience and knowledge of Partnerships, etc.) are supportive.

On the other hand, the WBs have limited experience in participation in European Partnerships, which was mostly gained during the FP7 period, but the WBs lost momentum during Horizon 2020. Within Horizon Europe, WBs continue to have a limited participation in European partnerships. WB participation include European Open Science Cloud, European Metrology Program (EMPIR), EIT, Biodiversa, High Performance Computing and Accelerating Farming Systems Transitions. There is no evidence about the reasons behind this limited participation. It can be due to a lack of strategic decisions, commitment for national funding, experience, or access to these networks. The recent survey on European Partnerships, conducted by the ERA-LEARN project may help to understand the challenges better. The



POLICY ANSWERS<sup>35</sup> project will build bridges between the national and regional priorities and the EU priorities; it will also provide support for the WB' inclusion in the relevant Horizon Europe Partnerships, Missions and S3 platforms towards a green, digital and resilient economies.

Last but not least, the EUREKA Programme offers excellent opportunities for companies to internationalise their R&D activities. EUREKA projects usually carry an excellence hallmark which helps them gain access to other public and private funding opportunities; they gain an advantage for joining international networks and promoting their technological competencies. In order to increase the competitiveness of the SMEs in the region, the WB stakeholders are encouraged to participate more actively in the EUREKA programme.



#### **Partners**





























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