

Commission

WESTERN BALKANS RESEARCH AND INNOVATION MEETING

26-27 MARCH 2019 SARAJEVO

Updates from the Western Balkan 6



Commission

WESTERN BALKANS RESEARCH AND INNOVATION MEETING

Skopje - 21-22 March 2018

### **Towards Steering Platform meeting 2019**

#### Update from the Western Balkan 6

# Albania

#### ALBANIA & EU FRAMEWORK PROGRAMME ON R&I - H2020

 The Republic of Albania has already ratified in Parliament the Agreement with EU Commission to participate in the EU framework Programme for Research and Innovation - Horizon 2020.
 Law 132/2014 dated 23.06.2014.

In the period 2014-2017, Albania has submitted >300 applications. 27 projects are approved and has raised 2.67 million EURO

National Agency for Scientific Research and Innovation – **NASRI** acts as National Contact Point (NCP) for H2020 and manages the process of information, promotion and capacity building on H2020. Since 2014, 129 info-days are organized (public and non public HEIs)

#### COST

• Albania is one of the 38 COST Members. Albania is eligible to apply for COST actions. Albanian participants in COST actions: **70**.

#### **Strategic Documents on R&I**

#### THE NATIONAL STRATEGY FOR RESEARCH, TECHNOLOGY AND INNOVATION 2017-2022

The Working Group established by the Executive Order No. 296, dated 01.06.2016, of the Minister of Education and Sport Approved by Decision of Council of Ministers Nr 710 dated 01.12.2017

RESEARCH & INNOVATION STRATEGIES DOCUMENT

Executive Order of Prime Minister No. 1, date 10.01.2017 "On the approval of
Action plan 2017-2021 "Support the development of innovative policies based on
Triple Helix approach" based on recommendation of Organization for Economic
Cooperation and Development (OECD) programme for South East Europe

- Other Research & Innovation Related Strategies
  - "National Strategy of Intellectual Property and Copyrights 2016-2020", approved by the DCM No. 527, dated 20.07.2016 "On the approval of National Strategy of Intellectual Property and Copyrights 2016-2020"
  - "Albanian Digital Agenda 2015-2020". It is an Inter-Sectorial Strategy" approved by DCM No. 284 dated 01.04.2015 "On the approval of Inter-Sectorial Strategy " Albanian Digital Agenda 2015-2020"

### **Institutional Structure on R&I**

#### **R&I Policymaking Institutions**

- **Ministry of Education, Sport and Youth (MESY),** its responsibilities are defined by DCM No. 505 dated 13.09.2017 "On the definition of the areas of state responsibilities assigned to Ministry of Education, Sports and Youth".
  - **Ministry of Energy and Infrastructure (MIE),** since September 2017, by DCM No. 504 dated 13.09.2017 "On the definition of the areas of state responsibilities assigned to Ministry of Infrastructures and Energy"
- **National Agency for Information Society (NAIS)**. DCM No. 673 dated 22.11.2017 "On the restructuring of the National Agency of Information Society"
- **Council of Higher Education and Research (CHER)** established by DCM No . 989, dated 09.12.2015 "On the establishment, functioning, duration and fees of the members of the Council of Higher Education and Research"
  - **Parliamentary Commission on Education and Media (PCEM)** established by Decision of Parliament Nr 80/2017 dated 14.09.2017 On the Parliamentary Commission
    - **General Directory of Industrial Property- GDIP** has been renamed as according to Law No. 17/2017, dated 16.02.2017 "On the some amendment at Law Nr 9947 dated 07.07.2008, "On the Industrial Property"

### **R&I Funding Institutions**

- National Agency for Scientific Research and Innovation (NASRI) established by DCM No. 607, dated 31.08.2016 "On the establishment, structure and functioning of National Agency for Scientific Research and Innovation"

- National Agency for Investment and Development- AIDA established by Law No. 10303, dated 15.07.2010 "On the establishment and way of organization and functioning of the Albanian Agency for Development of Investment (AIDA)"

- National Agency for Funding Higher Education Institution – NAFHEI established by DCM No. 397 dated 03.05.2017

- Research & Innovation Performing Institutions

15 public HEIs (6 universities are located in different cities of Albania Durres, Elbasan, Vlore, Shkoder, Gjirokaster, Vlore, Korce)24 non-public HEIs (8 universities)

20 centers and research institutions under different ministries **TOTAL: 59** 

- In Albania also have 50 NGO registered with the status of Think-Tank mostly focused on social sciences research activities

At National Business Center – NBC in Albania, 180,000 business unit are registered but more than 90 % are SME with less than five number of employees. However the direct contribution of business sector in investment on research remain low

### **R&I Budget**

#### National Funding Instruments

**1. National Research Grant** – managed by NASRI to fund research projects (by Law Nr 80/2015 dated 22.07.2015 "On Higher Education and Research in Higher Education Institutions in Republic of Albania)

a) Projects for Research and Development on competitive basis b)Bilateral Scientific Cooperation Projects

The Budget allocated for:

- The funding amount for **2017** dedicated to scientific<u>e</u> research from education funds was 0.02 % GDP, translated in currency 360 million ALL / **2.88 M Euro**
- The funding amount for **2018** dedicated to scientifice research from education funds was 0.03 % GDP, translated in currency 415 million ALL / **3.32 M Euro**
- The funding amount for 2019 dedicated to scientifice research from education funds <u>was</u> 0.04 % GDP, translated in currency 620 million ALL / 4.96 M Euro

Comparing to year 2017, the budget is almost doubled

### **R&I Budget**

- **2.Start Up Support Fund** managed by AIDA which was established by DCM No 593 dated 10.09.2014 On the establishment of Start-Up Fund (Official Journal Nr 143, Year 2014, Page 6603)
- **3.Innovation Fund -** managed by AIDA which was established by; DCM No. 406 dated 13.05.2015 "On the establishment of Innovation Fund"
- **4.Creative economy Fund -** managed by AIDA which was established by; DCM No. 15 dated 11.01.2017 "On the establishment of the Creative Economy (handicraft) Fund"

**5.Competitiveness Fund -** managed by AIDA which was established by; DCM No. 24 dated 20.01.2016 "On the establishment of the Albanian Fund on Competitiveness"

Budget allocated for 2018 : 600,000 EURO,

### **R&I Budget**

#### **International Funding Instruments**

The Project: Improving the innovative eco-system and boost start-ups creation under IPA II 2017 Competitiveness and Innovation component . Fund: 6 million EURO. It aims to support the establishment of a multi-location facility for Fabrication Laboratory type incubator, a new financing programme for the most innovative start-ups, including early-stage and women-led enterprises as well as promoting better links between academia, industry and government for the development of innovation policies based on Triple Helix approach

Albania research community is benefiting by the implementing of the **Project: Capacity building for Technology Transfer in Western Balkans ( January 2017- December 2019)** which is funded by EU-DG NEAR with technical support of JRC and leaded by a EY – Building a better working world, Inno, Mitto Technology . The project aims to support and strengthen the technology transfer and innovation ecosystem

# Some considerations

Currently, 3,182 employees work in the scientific research system. This in turn implicates that Albania has an average of 1000 researchers per million inhabitants. It should be clarified that the term "researcher" corresponds to each individual who works in a department at faculty level in a Higher Education Institution, Research Centre or Institute.

Institute of Statistics in Albania (INSTAT) still does not produce data on Research and Development, despite the fact that the increased investment for STI based in public funds and other sources alternatives up to 1% of GDP by 2022 is one of the objectives of the strategy.

According to MoESY Mid-Term Project Budget (MTPB) 2019 – 2022, the aim of the research policy, was the increase and expansion of scientific research in Albania based on the OECD indicators.

## **Bosnia and Herzegovina**

# The Republic of North Macedonia

### National policy framework

- New Action Plan 2019-2020 adopted for implementation of the National Innovation Strategy 2012 -2020
- Strategy for Smart Specialization preparation on-going
- National Roadmap for Research Infrastructure in advanced phase
- Establishment of Scientific Technology Park under an EU funded project
- A Bylaw within the new Law on Higher Education, adopted for covering costs for publishing articles in e - journals with impact factor.

## Activities of the Fund for Innovation and Technological Development

Co-financing grants to SMEs for support under the Skills Development and Innovation Support Project for :

- Newly established Enterprises: Start up and Spin-off (38 projects)
- Grants and Conditional Loans for Commercialization of Innovations (14 projects)
- Technology Extension (4 projects)
- Establishment, Operations and Investments of Business and Technological Accelerators (3 projects)
   Budget: FLTD, FUR 1,442,495, Own co. financing FUR550,610

Budget: FITD EUR 1.443.495 Own co-financing EUR550.610

- reducing air pollution in urban areas in the Republic of North Macedonia
- primary and secondary schools A challenge for young researchers in collaboration with MES
- "Meal for All" in cooperation with the Ministry of Labor and Social Policy for social entrepreneurship.
- "Access" information management system for road and cargo traffic

## Activities of the Fund for Innovation and Technological Development

October 2018 new call for Co-financed grant for Start-up and Spin-off, budget:EUR1.000.000

In 2018 for the first time co-financed grants under Pillar 3 of the Economic Growth Plan:

- Co-financed SME grants with a rapid increase ("Gazelles")
   16 projects EUR 4.533.413
- Co-financed grants to improve innovation

117 projects EUR 23.349.884

New call for grants to Improve innovation and Commercalization of Innovations expected in 2019 – total budget EUR5.000.000

## Activities of the Fund for Innovation and Technological Development

The Fund announces and implements four Competitions :

- Public call for financing projects for reducing air pollution in urban areas in the Republic of North Macedonia
- Public call for funding research projects in primary and secondary schools A challenge for young researchers in collaboration with the Ministry of Education and Science,
- Public call "Meal for All" in cooperation with the Ministry of Labor and Social Policy, which will finance projects for social entrepreneurship.
- Public call "Access" in cooperation with the Ministry of Transport and Communications and FINKI for financing projects for development of an information management system in the area of road and cargo traffic

## Kosovo\*

(\*This designation is without prejudice to positions on status and is in line with UNSCR 1244 and the ICJ opinion on the Kosovo declaration of independence.)

- Law on scientific innovation and knowledge transfer, approved November 2018
- Next steps
  - Adapting secondary legislation to give guidance on implementation.
  - Working group consisting of MEST, Research Institutes, donors, etc.
  - Incubators, licensing research institutes, voucher schemes etc.

- Kosovo\* Strategy for innovation and entrepreneurship approved (2019- 2023);
- Ministry of Innovation and Entrepreneurship has responsibility for implementation.
- Currently focusing on:
  - 1. Schemes for start ups: during 2018 supported 162 start ups;
  - 2. Focus on NGOs- during 2018 -62 funded;
  - 3. SMEs 5 grants;
  - Capital Investments for Centers Innovation and Entrepreneurship – 3 centers established;

(\*This designation is without prejudice to positions on status and is in line with UNSCR 1244 and the ICJ opinion on the Kosovo declaration of 20 independence.)

#### Other research and innovation developments

- Venture UP <u>http://venture-up.org/venture-incubation-program/</u>
  - Focuses on helping students transfer their learning into products and applications.
- Center for Sponsored research has been established
  - Support researchers with grant administration, writing, implementation, etc.

### **R&D Budget**

- MEST is supporting national research schemes with direct support to researchers
  - Research grants, Small grants for publications, mobility support;
- Total 2018 budget for Science = 0.044 % GDP equivalent to 2.97 million euro, distributed MEST, Academy of Science, Research Institutes.
- Beginning in 2018 Ministry of Innovation and Entrepreneurship established, funded with 9.8 million.
- Kosovo\* overall budget spent for R&D is 0.19 % of GDP (MEST, Academy of Science, Research Institutes, Ministry of Innovation).
- MEST for 2019 increased budgeting for 1 million more to be used in national research schemes.

(\*This designation is without prejudice to positions on status and is in line with UNSCR 1244 and the ICJ opinion on the Kosovo declaration of independence.)

## Montenegro

#### **R&I Strategies**

- Smart Specialization Strategy S3 very high priority of the Government of Montenegro
  - EDP process started in May 2018 continuous process: 2 conferences including over 300 participants – representatives of the public, private, research and civil sectors, "Stock Exchange of Perspective Ideas", more than 50 workshops and meetings, 2 web questionnaires
  - > TAIEX Expert mission in September 2018
  - First WB Workshop dedicated to the S3 (Cooperation for Smart Specialization) organized in Montenegro on 5 February 2019. The event was jointly organized by the MoS and the EC JRC.
  - Guidelines for S3 (2018-2024) adopted by the Government on 20 December 2018
    - 4 Strategic Priority Areas identified:
      - Renewable energy sources and energy efficiency
      - Sustainable agriculture and food value chain
      - New materials and sustainable technologies
      - Sustainable and health tourism
      - with Information and Communication Technologies (ICT) as horizontal platform
- **Report on the Implementation** of the Action Plan for Implementation of the Strategy of Scientific Research Activities (2017-2021) for 2018 adopted in December 2018
- **Report on the Implementation** of the Action Plan for Implementation of the Strategy of Innovation Activities (2016-2020) for 2018 adopted in December 2018
- Revision of the Montenegrin Roadmap for Research Infrastructures (2019-2020) ongoing 24

### **R&I Strategies**

- **H2020 Policy Support Facility** "Specific Support to Montenegro Towards Entrepreneurial Innovation Ecosystems in Montenegro" started in June 2018
  - $\rightarrow$  for creating an encouraging innovative environment for start-ups and other key actors in the innovation system
  - $\rightarrow$  2 expert missions, High level event on 25 March 2019 in Podgorica, Final report
- Programme for Strengthening Human Resources and Research Capacities in Scientific Research Institutions adopted in June 2018
- Programme for Awarding Grants for Innovative Projects (2018-2020) adopted in July 2018
- Programme for Supporting Innovative Start-ups in Montenegro with the Action Plan, based on the draft recommendations from the PSF project, adopted by the Government on 27 December 2018
- ERP (2019-2021) → Comprehensive Priority Measure 13: Strengthening the national innovative ecosystem
  - $\rightarrow$  Strengthening the instruments of the financial support for research and innovation
  - $\rightarrow$  Further development of the institutional support
  - → Development of the support for start-ups under the EC guidelines and recommendations within the Policy Support Facility (PSF)
  - → Development of a regional Large-Scale Research Infrastructure (SEEIIST Project)

#### **R&I Budgets**

- Latest official data on R&D funding for 2016 total national R&D investment 0.32 % of GDP
- **Pilot survey on innovation statistics** realized in 2018 → MONSTAT is currently working on the preparation of the Methodology for the survey in 2019 in accordance with the Oslo Manual 2018 *Guidelines for Collecting, Reporting and Using Data on Innovation*
- Increase of the state budget for science and research → 60% for 2018 compared to 2017, and 10% for 2019 compared to 2018
- Public Call for Awarding Fellowships for PhD research at the universities in Montenegro 2018/2019 - 19 fellowships awarded with a total funding of 750 kEUR
- Call for Awarding Grants for Innovative Projects 2018 (total funding of 1 MEUR for 2019-2020) → 29 applications → 9 grants were approved in December 2018 with a total funding of 1.06 MEUR (MoS support: 676 kEUR, contribution of the Grant holders: EUR 390k) → 1 additional grant approved in March 2019 107 kEUR (MoS: 55 kEUR, Grant holder's contribution: 52 kEUR)
- Call for awarding grants for scientific research projects (total funding of ~1.4 MEUR for 2019-2021) → 72 applications received by the end of the deadline for submission → 15 project applications in the Main list for funding → negotiations currently ongoing

### **R&I Budgets**

- ➤ Call for co-financing scientific research and innovation activities in 2019 → total funding of 550 kEUR → the largest so far, an increase of 37.5% compared to 2018
- Call for Centres of Excellence open until the end of March 2019 (total funding of 1 MEUR for 2019-2021)
- > Call for innovative start-ups under preparation (to be open by mid of April 2019)
- Establishment of the Science and Technology Park (STP) in Podgorica

→ Agreement on Establishing the STP of Montenegro adopted on 17 January 2019

ightarrow Building located in the University campus

 $\rightarrow$  Preparation of the project documentation for adaptation of the building ongoing

ightarrow Tender for construction works expected by the end of 2019

#### • IPA II Financial Perspective 2014-2020

**SOPEES 2015-2017**  $\rightarrow$  Collaborative grant scheme for innovative project ideas (1.1 MEUR)

Call for submission of innovative project ideas in the economic, academic and civil sectors (Deadline for Concept Notes: 18 March 2019)  $\rightarrow$  42 Concept Notes submitted

**"Competitiveness and Innovation" AP 2014**  $\rightarrow$  Service Contract for the technical specification of the laboratory equipment in the *"Tehnopolis" and training of staff* 

#### **Participation in H2020**

- 13 ongoing projects with beneficiary status, 8 projects with a "third party" status and 1 project – special support (PSF)
- Financial support of 1 MEUR under H2020 for the SEEIIST Design Study Phase
- 8 MSCA fellows with Montenegrin citizenship (7 young researchers and 1 experienced researcher) 3 approved (2 young researchers and 1 experienced) in 2018
- 2nd meeting of the Joint EU-Montenegro Committee on Research and Innovation in September 2018
- In 2019: 3 new project with beneficiary status approved

COMPASS2020 - H2020-SU-SEC-2018 Coordination Of Maritime assets for Persistent And Systematic Surveillance	IA	Maritime Safety Department of Montenegro	150,000
ANDROMEDA H2020-SU-SEC-2018 An EnhaNceD Common InfoRmatiOn Sharing EnvironMent for BordEr CommanD, Control and CoordinAtion Systems	IA	Maritime Safety Department of Montenegro	123,000
Open Science Cloud Initiative		UoM- Electrical Engeneering Faculty	104,000

# Serbia

### Legislative Framework in the Field of Science

• The Law on the Science Fund of the Republic of Serbia was adopted.

Government of the Republic of Serbia appointed Director of the Science Fund, dr Milica Djuric-Jovicic, on 21. February 2019

- Draft Law on Science and Research was prepared and a public hearing procedure was conducted.
- Working group formed for drafting the new Law on Innovation activity
- MESTD published Platform on Open Science (9. July 2018) and Platform on Development of Research Infrastructure, (27. December 2018).
- 4S Final stage of the development

- Financing of the 773 projects of the National Program of Basic Research and Program of Technological Development continued.
- MESTD increased budgetary allocation for scientific programs for 15%
- MESTD increased budget for Innovation Fund for 51%
- November 2018 MESTD published second public call for talented young researchers - students of doctoral academic studies for participation in scientific research projects.

#### Number of scientific results and researchers

#### Scientific results (June 2018-march 2019)

\*Total number of published scientific results of researchers from Serbia is 3788

#### Researchers

\*\*Number of "full time" researchers per million inhabitants is 1740 Number of newly included young researchers, by invitation, in scientific research organizations is 462

\* Source: Clarivate

\*\* Source: MESTD

#### Program of Development of scientific research staff

Researchers at scientific meetings abroad Requested 587/approved 500 Invited researchers from abroad hosted in RS 560 researchers/ 119 requests 441 researchers / 90 requests Scholarship to young people and talents Requested 350/approved 200 Procurement of scientific and professional literature from abroad el.bl\*4 No.j.\*\*over 20.000 in 17 databases Books\*\*\*158.124 in 2 databases DOI No. 56 Legend \* el - index electronic database \*\* No.j. - the number of full text journals contained in the electronic

databases

\*\*\* books - number of books

DOI number - number of domestic journals with DOI numbers <sup>33</sup>

#### **Program of international cooperation**

Bilateral cooperation Joint committees with Austria approved 27 projects Montenegro approved 35 projects Germany approved 15 projects Slovakia approved 17 projects

Multilateral cooperation Participation in Horizon 2020, EUREKA, COST, Transnational Danube program, BMBF continued.

#### **Important Events**

- The Best Technology Innovation Competition December 2018 Belgrade, 6 best teams were granted;
- UNESCO L'Oréal Competition "For Women in Science" 3 most successful scientists from the field of natural-mathematical sciences were awarded;
- Final conference of project ERASMUS+, IF4TM Institutional framework for development of third mission of universities of Serbia: transfer technology and innovation, social engagement and lifelong learning ;
- H2020 Workshop on proposal writing 26-27.11.2018. Belgrade jointly organized by EC and MPNTR
- COST connect event, 22. 10. 2018.
- President of the European Research Council, professor Jean-Pierre Bourguignon and his team visited Serbia on 3-4 September 2018.
- Director general of JRC Mr. Vladimir Sucha visited Serbia on October 1, 2018.

# Serbia: Innovation Fund

Program	Description	Results in the period June 2018- March 2019
Mini Grants Program	Support for private young enterprises which are engaged in the development of technological innovations with a clear market need	<ul> <li>Implementation of 33 inovative projects, funded with EUR 2.5M</li> </ul>
Matching Grants Program	Support for enterprises looking for significant financial resources for the commercialization of research and development.	<ul> <li>Implementation of 14 inovative projects, funded with EUR 3.04M</li> </ul>
Collaborative Grant Scheme Program	Support for consortia consisting of Serbian private sector company and registered Serbian R&D organization to engage in joint R&D projects with the goal of creating new products and services, as well as innovative technologies	<ul> <li>Completed implementation of 14 supported projects, EUR 3M</li> <li>67 project proposals submited and they are in the evaluation process</li> </ul>
Innovation Vouchers Scheme	Financial incentive that aim to encourage SME to use the services of the R&D sector to raise the level of innovation of their products	<ul> <li>Two public calls: 220 innovation vouchers for 180 SME, in the total amount of EUR 1.17M</li> </ul>
Transfer Technology Program	TTO capacity building, public R&D innovation commercialization	<ul> <li>19 R&amp;D projects have been awarded, EUR 380,350</li> </ul>
		www.inovacionifond.rs 36

# **Center for the Promotion of Science (CPN)**

#### Important Events between June 2018 and March 2019:

- **ESOF** conference (EuroScience Open Forum) in Toulouse, France, held in July 2018, CPN has been involved since in the preparation of the next ESOF conference, scheduled for July 2020 in Trieste, with strong SEE agenda
- **Next-Lab** H2020 workshop for science teachers held at the CPN Science Club in August 2018
- In September 2018, Center received *eighth positive evaluation* from the Commission for the applications since December 2017, six out of eight projects are funded through Horizon 2020
- **European Researchers' Night** Last Friday in September was traditionally reserved in Belgrade, as well as in thirteen other towns across Serbia (members of the Network of Science Clubs)
- **CREATIONS** H2020 project CPN as a beneficiary participated at the final conference held near Athens, Greece, on November 2-3, 2018
- **European ARTificial Intelligence Lab**, Kick-off meeting of the large Creative Europe project held under CPN premises on November 12-13, 2019

# **Center for the Promotion of Science (CPN)**

#### Important Events between June 2018 and March 2019:

- International conference *art+science:makers* was organised by the CPN at the Faculty of Drama Arts in Belgrade in November 2018; the event gathered more than 50 speakers from 20 countries with 200 attendees, offering a platform for the interaction, dialogue and mutual learning between scientific and artistic researchers and professionals
- Workshop on Responsible Research & Innovation as a cross-cutting issue of Horizon 2020 Organisation of the TAIEX-supported at the Science Club in Belgrade (December 2018, in collaboration with the MESTD)
- **Scientix** Final national conference of the H2020 project and largest virtual network of STEM teachers was held in Belgrade on February 22-23, 2019; around 200 participants and speakers from 10 European countries presented their achievements and discussed the future of science education and STEM concept in Europe
- CPN is currently (March 2019) involved as a partner in *fourteen European projects*:
- seven H2020,
- four Erasmus+,
- one Creative Europe,
- two COST actions

(overall 31 EC-funded projects and actions since 2012)



Commission

WESTERN BALKANS RESEARCH AND INNOVATION MEETING

Skopje - 21-22 March 2018

# Conclusions and Summary of the preparatory tasks for the Steering Platform meeting / Ministerial Meeting

Regional research and innovation flagship initiatives

# Albania

### **Regional Cooperation on R&I (1)**

#### Western Balkan Center for Scientific Research and Innovation –WISE

Albania has expresses its own interest and commitment to contribute at Western Balkan Center for Scientific Research and Innovation –WISE, based in Split through ratification of the Agreement by Law No. 16/2016, dated 10.03.2016 "On the ratification of the Agreement on the establishment of Western Balkan Center for Scientific Research and Innovation (WISE)

#### Multi Year Annual Action Plan- Regional Economic Area : Component III. Mobility

Ministry of Education, Sports and Youth (MESY) and National Agency for Scientific Research and Innovation (NASRI) are part of Working Thematic Group established in Albania to implement the Multi-annual Action Plan on a Regional Economic Area in the Western Balkans (*MAP REA*), prepared by the RCC, at the Berlin Process summit on 12 July 2017, in Trieste, Italy. Since the MAP stems from the commitments undertaken within the framework of the Central European Free Trade Agreement (CEFTA) and South East Europe 2020 Strategy (SEE2020) and is based on CEFTA and EU rules and principles as reflected in the Stabilisation and Association Agreements (SAAs). Amongst four components of REA 1. Trade 2. Investment, 3. Mobility and 4. Digital Integration, Ministry of Education, Sports and Youth (MESY) and National Agency for Scientific Research and Innovation (NASRI) putting efforts on III.1 Mobility of Researchers

### **Regional Cooperation on R&I (2)**

#### South-East European International Institute for Sustainable Technologies- SEEIIST

Albania has supported the initiative for establishment of the International Institute for Sustainable Technologies in the Balkans with the mission of "Science for Peace", undertaken by Minister of Science of Montenengro Sanja Darmanović. Albania was amongst the signature of the Declaration of Will to Establish South-East European International Institute for Sustainable Technologies- SEEIIST which took place in CERN, Geneva, on 25 October **2017 during the** Meeting on a South-East European International Institute for Sustainable Technologies at CERN, organised by the Ministry of Science of Montenegro and hosted by CERN Director-General F. Gianotti. The idea for establishment SEEIIST is based on the model of the SESAME project, implemented in Jordan bringing together nine Middle East countries with different political systems and religions, including both Israel and Iran. The founder of the SESAME project, Professor Herwig Schopper (the former Director-General of CERN), was the main initiator of establishing the International Institute on the territory of Southeast Europe, with the support of the UN, UNESCO and CERN that was first presented to the Board of the World Academy of Arts and Sciences (WAAS) in Dubrovnik in 2016". The objectives is to promote cooperation between science, technology and industry, bring together people from different countries in the region and being a platform to educate talented young people and engineers on the basis of knowledge and technology transfer from European centres such as CERN and others. The idea on SEEIIST is based on two option. The first option is 'Synchrotron Light Source' with a new technique that was first used in Sweden. This project would enable research in various fields such as biology, chemistry, pharmacology, ecology, geology and engineering, with wide application in various industries and over 1.000 researchers to work in this institute. The second option is Hadronic Cancer Treatment and **Research in Bio-medicine.** This institute could be built on the model of CNAO-Pavia. If 50 percent of the time is devoted to the research, about 500 patients per year would be treated at the institute and about 1.000 researchers would work in it, a large number of which would be from the countries outside the Balkans.

### **Regional Cooperation on R&I (2bis)**

# Central Eastern Exchange Programme of European Studies- CEPPUS III

Albania has expressed its commitment to continue the implementation of CEEPUS III. By Executive Order No. 4 of Minister of Education, Sports and Youth, dated 16.02.2018, "On the implementation of Central European Exchange Programme of University Studies – CEEPUS III in the Republic of Albania.

#### Western Balkan Platform on Research and Innovation

Albania since 2006 at Western Balkan Steering Platform on Research and Innovation. Its main objective is to support the enhanced integration of the WBCs in the European Research Area.

### **Regional Cooperation on R&I (3)**

#### **RCC Working Group on Open Science** (WGOS)

**Under the six flagships of Regional Cooperation Council** such as 1)Connectivity; 2) Competitiveness; 3)Skills and Mobility; 4)Roma Integration; 5)Rule of Law; 6) Security Cooperation, regarding research and innovation, Albania is committed to work under priority area of Skills and Mobility.

It regularly participates at RCC Working Group on Open Science (WGOS) meetings aims to promote the adoption of Open Science policies and associated measures in the region through adoption of the **EU 2012 recommendations on Open Science in the Western Balkan economies and in particular** to: a)Define clear policies for the dissemination of and open access to scientific publications resulting from publicly funded research [EC recommendation No. 1]; b)Define clear policies for the dissemination of and open access to research data resulting from publicly funded research [EC recommendation No. 3]; c)Ensure synergies among national e-infrastructures at European and global level [EC recommendation No. 6]; 4) Designate a National Point of Reference for Open Access [EC recommendation No. 8].

### **Regional Cooperation on R&I (3bis)**

#### **JSC-Joint Science Conference of Berlin Proces**

Through Academy of Science – Albania has participated at Berlin Process – Joint Science Conference which is led by the German National Academy of Sciences Leopoldina as part of science diplomacy which has brought together key national stakeholders of the science and education systems in a newly established platform. The first conference, held from 15 to 17 July 2015 in Halle and Berlin (Germany), was the starting point for a series of annual conferences in synchronization with the summits of heads of state and government. Subsequently, the second conference took place from 22 to 25 May 2016 in Vienna (Austria). The third conference convenes from 14 to 16 June 2017 in Paris (France) meanwhile in 2018, the 4<sup>th</sup> annual conference took place on 30 May – 1 June in Italy. Albania is tried to include in its policymaking actions the results of ISC which are summarized in Three Joint Statements or Communiqués and fed into the annual Western Balkans summits of heads of state and government as 1)Perspective Europe: Building Future with Science (2015), 2)Moving Forward: Guidelines for Improved Science Systems (2016) 3)Turn Ideas into Action: Growth, Convergence and Cooperation in Southeastern Europe require Forward-Looking Investment in Junior Scientists and in Higher Education, Research and Development (2017), Turn Ideas into Action: Growth, Convergence and Cooperation in Southeastern Europe require Forward-Looking Investment in Junior Scientists and in Higher Education, Research and Development (2018).

# **Bosnia and Herzegovina**

# The Republic of North Macedonia

# Regional Research and innovation flagship initiatives

- Support for the establishment of the South East European International Institute for Sustainable Technologies
- Letter of interest for membership in the European Archive for Social Science Databases (CESSDA ERIC) submitted
- Active involvement in the implementation of the Multi-annual Action Plan activities coordinated by the RCC (mobility of researchers and Open science)
- MES provides access to the EBSCO Academic Search Complete databases of scientific journals with 8,000 scientific full-text journals for all state universities and public scientific institutions

# Regional Research and Innovation flagship initiative

 COST – "All 2018 figures are improving and RNM has the strongest increase among all COST countries"

65% participations in running actions in 2018, EUR 471 transferred to the country, 17 ITC Conference Grantees

- CEI RNM among the most active participants with 75 approved projects
- IAEA active national, regional and interregional cooperation within the technical cooperation programme with 4 national, 20 regional and 10 interregional projects
- CEEPUS successful participation
- Bilateal cooperation successfully on-going with countries in the Region and wider

# Kosovo\*

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# Montenegro

## Measures for the integration to ERA

#### International cooperation

- Participation in H2020
  - → 13 ongoing projects beneficiary status, 8 projects "third party" status and 1 project special support (PSF) → Financial support of 1 MEUR under H2020 for the SEEIIST Design Study Phase
  - $\rightarrow$  In 2019: 3 new project with beneficiary status approved

#### Participation in COST

- → 2011-2018: Montenegrin teams involved in 89 actions 24 action successfully completed
- ightarrow 2018: 27 new actions with involvement of the Montenegrin teams

#### Participation in EUREKA

- $\rightarrow$  5 ongoing projects
- → National budget for EUREKA projects increased (from EUR 60k to 90k)

#### Participation in IAEA projects

- → Cycle 2018-2019: 2 national projects approved, Montenegrin institutions expressed interest for participation in 22 regional projects
- → Cycle 2020-2021: 2 proposals for national projects submitted, proposal for the regional TC project "Human Resources Development for the Joint South-East European International Institute for Sustainable Technologies (SEEIIST)" in the final stage of preparation

#### NATO "Science for Peace" Programme

- $\rightarrow$  3 ongoing projects
- Continuous support for the participation in activities related to CERN (CMS experiment, including Phase2 Upgrade; Students summer school and Teachers' programme, "Art@CMS"), ICGEB, EMBL/EMBO (Study visit of students), European Institute for Innovation and Technology – EIT (summer/winter school 2018 + 1 proposal submitted for research call under EIT Raw Materials, etc.)

### • Bilateral cooperation

- In 2018: 96 bilateral S&T projects in the implementation phase (Austria, Croatia, Hungary, Italy, Serbia, Slovenia) + 61 new projects approved in 2018 – implementation period 2019-2020 (Austria, Italy, PR China, Serbia)
- Montenegro obtained Guest status in the European Social Survey of the European Research Infrastructure Consortium (ESS-ERIC) - October 2018: Participation in the 9th round of the ESS
- Open Access: Draft Guidelines for Open Access in Montenegro under preparation; Financial support for publishing in open access journals, since 2018
- Call for co-financing scientific research and innovation activities in 2019 (suport for participation in H2020, in the IAEA TC programme, in EUREKA, mobility of researchers, PhD students, participation at the scientific conferences, publication of open access journals, editorial activities, protection and development of inventions/patents, promotion of science in society, smaller support for S3)
- All activities in line with the activities envisaged in the MAP REA

- Regional project of the establishment of the South East European International Institute for Sustainable Technologies (SEEIIST, <u>http://seeiist.eu)</u> - Facility for Tumour Therapy and Biomedical Research with Protons and Heavier Ions
  - > Preparatory activities for the SEEIIST Design Study Phase started
  - First direct financial support of 1 MEUR for the Design Study Phase received by the EC DG-RTD

  - Project coordinator nominated: Dr. Horst Wenninger
  - CERN (for the design of the accelerator) and GSI in Darmstadt (for the biomedical research part) agreed to host the headquarters for the Design Study phase of the project until the selection of the site
  - Capacity building: Regional TC IAEA project under preparation (EUR 500k), MSCA ITN project proposal submitted
  - Clinical Network: Meeting of the Oncologists and Radiologists of the South East Europe in Podgorica (September 2018)

# Serbia

#### **BioSense Institute**

National co-founding already being absorbed, construction permit obtain, works start in Jun 2019

First Digital farm in Serbia 20.03.2018.

BioSense Accelerator 04.04. 2019

#### Verrocchio – Institute of Physics Belgrade

Verrocchio Center is currently in its two-year pilot phase which coincides with building and equipping of its specialized facilities: one building primarily dedicated to education and training and another dedicated to prototyping and innovation.

During the pilot phase Verrocchio relies on the existing capacities of IPB and PSC - Petnica Science Center. Full implementation of Verrocchio will start in 2021.

#### FAMA – Vinča Institute of Nuclear Sciences

The facility for modification and analysis of materials with ion beams (FAMA), as of 30. 10. 2017. it is part of CERIC-ERIC consortium



Commission

WESTERN BALKANS RESEARCH AND INNOVATION MEETING

Skopje - 21-22 March 2018

# Smart specialisation in the context of R&I capacity building

# Update from the Western Balkan 6 Smart specialisation activities

# Albania

## S3 as part of MAP REA

### On e of the 4 pillars of MAP REA:

- ≻<u>Trade</u>
- Digital integration
- ➢<u>Mobility</u>

### ≻<u>INVESTMENT</u>

Regional investment agenda Formalisation of agenda through appropriate instrument(s)

Implementation and monitoring of investment reforms Promotion of WB as a common investment destination Diversification of financial systems to boost investment Smart Growth -> Smart specialization

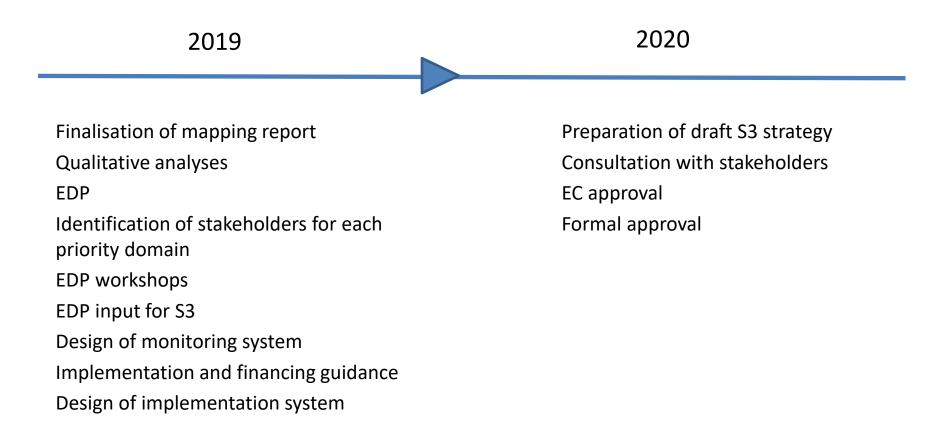
### **S3 Working Group**

Linda Pustina, *Ministry of Education, Sport and Youth* Florensa Haxhi, *Prime Minister's Office* Arben Shkodra, *Union of Manufacturers of Albania* Genci Kojdheli, *Municipality of Tirana* Arben Skënderi, *Regional Development Agency 2* Kseanela Sotirofski, *University "Aleksander Moisiu" Durrës* Majlinda Hafizi, *Ministry of Finance and Economy* Geron Kamberi, *Expert on Research and Innovation* 

#### Analitycal Team Core

#### 2018 2017 December 2016 Formalisation and enlargment of the Registration on the S3 Platform First event on S3: working group Decision of place of S3 in the Informal working Skopje and Ljubljana meeting group on S3 strategic framework 7 S3 Team meetings Desk Research 1 telematic meeting Several informal group meetings Agreement with JRC Participation in S3 training Identification of the analytical team Decision on the national/regional Data collection dimension of S3 Awareness/work presentation event Call for expertise for preparation of the

mapping report



# **Bosnia and Herzegovina**

# The Republic of North Macedonia

### Smart Specialization Strategy

Phase	No.	Stage of the process	Planned achievement	
	1	Decision to start smart specialisation process		
<b>INSTITUTIONAL</b> CAPACITY	1.1	Formal request	Done - March 2 <sup>nd</sup> 2018	
	1.2	Analysis of context – country specific conditions	Done	
	1.3	Discussion with public administration	Done	
	1.4	Awareness event	Done – Feb. 2019	
	1.5	Establishment of national/regional S3 team/s	Done – Feb.2018	
	1.6	Participation in S3 training	Done-2 trainings	
BUILDING	1.7	Agreement with JRC	Done- March 2018	
	2	Analysis of strategic mandates		
	2.1	Overview of existing policies and priorities relevant for S3	Ongoing	
	2.2	Decision of place of S3 in the strategic framework	Ongoing	
	2.3	Decision on the national/regional dimension of S3	Ongoing	

### **Smart Specialization Strategy**

Phase	No.	Stage of the process	Planned achievement	
DIAGNOSIS (MAPPING EXERCISE)	3	Analysis of existing economic, scientific and innovative potential (quantitative)		
	3.1	Provision of statistical data	ongoing	
	3.2	Mapping of economic, innovative and scientific potential	ongoing	
	3.3	Creation of the local expert team	done	
	3.4	Additional analyses	Q1 2019	
	3.5	Consultation with stakeholders	Q2 2019	
	3.6	Publication of the report	Q2 2019	
	4	In-depth analysis of priority domains (qualitative)		
	4.1	Expert interpretation of the results of mapping exercise	Q2 2019	
	4.2	Publication of the report	Q3 2019	
	4.3	Decision on priority domains for EDP	Q3 2019	

### Smart Specialization Strategy

Phase	No.	Stage of the process	Planned achievement	
STAKEHOLDER DIALOGUE	5	Entrepreneurial Discovery Process (EDP)		
	5.1	EDP training	Q3 2019	
	5.2	Identification of stakeholders for each priority domain	Q3 2019	
	5.3	EDP plan and working rules	Q3 2019	
	5.4	Definition of EDP working groups	Q3 2019	
	5.4	EDP workshops	Q4 2019	
	5.5	EDP input for S3	Q4 2019	
INSTITUTIONAL CAPACITY FOR IMPLEMENTATION	6	Analysis of strategic mandates		
	6.1	Monitoring guidance	2020	
	6.2	Design of monitoring system	2020	
	6.3	Implementation and financing guidance	2020	
	6.4	Design of implementation system	2020	
FINAL STRATEGY	7	Preparation of S3 strategy document		
	7.1	Preparation of draft S3 strategy	2020	
	7.2	Consultation with stakeholders	2020	
	7.3	EC approval	2020	
	7.4	Formal approval	2020	

# Kosovo\*

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- Early stage in the process of developing S3
- Team for Smart Specialization Platform established in 2018/all stakeholders included.
- First steps on data collection initiated.
- Exchange experiences within the region/workshop in Montenegro.
- S3 expected to be finalised by 2020.

# Montenegro



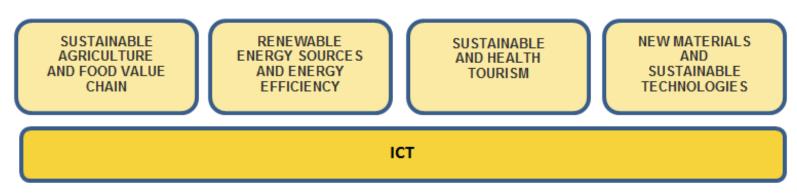
### **Dynamics of the S3 preparatory process**

- May 2018 Start of the EDP process (kick-off conference with ~ 200 representatives of the economic, academic, public and civil sectors)
- Followed by **more than 50 Workshops** (about ten per priority area) with more than 300 participants
- September 2018 Final EDP conference with ~ 140 representatives from the five priority sectors
- End of September 2018 TAIEX expert mission
- October 2018 a special event '**Stock Exchange of Ideas**' as a continuation of the EDP to incorporate comments of experts
- November-December 2018 open **public consultations** on document Guidelines for S3
- December 2018 the Government of Montenegro adopted **Guidelines for S3**
- January 2019 Continuation of the EDP Flagship initiatives methodically selected from EDP process ~ 80 key representatives from the five priority sectors
- February 2019 First international workshop in the WB dedicated to S3 (EC JRC&MoS)

### **Dynamics of preparation of S3 Strategy**



### **Vertical priorities**





#### Cooperation for Smart Specialisation

### 1st Western Balkans Workshop

Tuesday 5th February 2019 CentreVille Hotel, Podgorica, Montenegro

### **Horizontal priority**

First international workshop in the WB dedicated to S3 – jointly organised by the MoS and the EC JRC on 5 February 2019 in Podgorica

### Cooperation for Smart Specialization





# Serbia



Serbia

- Smart Specialization Strategy of Republic of Serbia, 4S national level
- Strong support of JRC
- The document Mapping of economic, innovative and scientific potential in Serbia have been prepared, as a quantitative part of the developing process of 4S
- Harmonizing RIS3 strategic mandates to ensure wider government stakeholder involvement and support
- RIS3 Serbia event workshop was organized in October 2, 2018 and explored expectations of stakeholders from industry, academia and government
- TAIEX Expert Mission on Capacity Building for Serbian Smart Specialisation Team was organized in December 17-21, 2018. Experts have given recommendations for all next phases and guidance for preparation of the RIS3 first draft.
- Serbia finished the qualitative analysis based on 143 quality interviews and published the QA report
- Web site <u>www.pametnaspecijalizacija.mpn.gov.rs</u>; logo
- Intensive preparation for Entrepreneurial Discovery Process (EDP) with detailed rules, plans and accompanying documentation harmonized with JRC
- On March 29, 2019 in STP Belgrade will be EDP SWOT Workshop for each priority domain recognized by the QA's
- Defining of national priority domains, niches for further interventions
- The first draft of Smart Specialization Strategy Serbia 4S will be developed until mid 2019



# **Priority areas**

Vertical priority areas:	Horizontal (supporting) areas:
<ul> <li>Information and communication technologies</li> <li>Big Data</li> <li>Cloud Technologies</li> <li>Internet of Things</li> <li>Custom Software Development</li> <li>Embedded Systems</li> </ul>	<ul> <li>Key Enabling Technolo,</li> <li>Technologies</li> <li>Photonics</li> <li>Advanced materials</li> <li>Advanced manufacturing</li> <li>Industrial biotechnologies</li> <li>Blockchain technologies</li> <li>Autonomous driving, aerc</li> <li>Energy Efficient and Ec</li> <li>Eco-Smart Energy Sources</li> </ul>
<ul> <li>Food for Future</li> <li>High Tech Agriculture</li> <li>Value-Added Food</li> <li>Sustainable Food Chain</li> </ul>	
<ul> <li>Creative industries</li> <li>Creative Digital Media Production and Services</li> <li>Gaming industry</li> <li>Smart and Active Packaging</li> </ul>	and el s and el soluti
<ul> <li>Future Machines and Manufacturing Systems</li> <li>Application Machines</li> <li>Data to Decision – Industry 4.0</li> <li>Premium Tools and Smart Mobility Solutions</li> </ul>	electronics id engineering <b>tions</b>

- Sustainable heat appliances and devices
- Solutions for smart Ecosystem



# Lessons learned

- Limitations of quantitative analysis related to statistical data importance of qualitative analysis
- (Mis)trust of stakeholders- constant dialogue and the role of the ambassadors
- Complexity of the process **Constant communication and harmonization**
- Scope of work Motivated team, good preparation and proactive leadership
- Timely **provide human and financial resources for the design** (and implementation) of RIS3
- Availability of financial resources for the implementation of the RIS3 may be a major bottleneck. This bottleneck needs to be addressed now with high priority and from various perspectives of potential financing.



WESTERN BALKANS RESEARCH AND INNOVATION MEETING

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### Integration of the Western Balkans in the EU

# Needs for technical assistance and capacity development

# Albania

- International Expertise on Centres of Excellence
- Mapping of Scientific Infrastructure
- Capacity building on Evaluation of Scientific Research
- Digitalization of the Scientific Magazines (repository)

## **Bosnia and Herzegovina**

# The Republic of North Macedonia

# Needs for technical assistance and capacity development

**Smart Specialization Strategy** - Entrepreneurial discovery process - trainings for coordinators of focus groups

**Roadmap to Infrastructures** – Study visit to a neighboring country where this document has been prepared – exchange of experiences -

### Horizon 2020 – targeted trainings

- Marie Sklodowska Curie Actions
- SME Instrument
- Spreading excellence widening participation twinning, era-chairs

### Kosovo\*

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- Capacity Building/ Innovation
- Training for different stakeholders in H2020
  - In the upcoming EU framework program
     "HorizonEU" Kosovo will upgrade the status.
  - Requires knowledge of the parameters of the new status and additional policy making.
  - Workshops & Trainings for stakeholders with an emphasis on proposal writing.

### Montenegro

### Needs for Technical Assistance and Capacity Building

- TAIEX Mission/Expert support "Good practices in financial management of universities, which foster research and innovation project activity"
- Capacity Building for H2020 (project proposal writing, infodays, workshops)

# Serbia

- TAIEX Expert missions:
  - 4S
  - HorizonEurope
- The Policy Support Facility
  - Peer Reviews of national R&I systems