Annex 1

REGIONAL ACTION PLAN

South Muntenia Region

ROMANIA

South Muntenia Regional Development Agency

October 26th, 2019

Table of Contents

1.Introduction.

ClusterFY project aims to improve regional and national policy instruments seeking to intensify Key Enabling Technologies (KET's) related clusterization processes, as well as fostering interregional cooperation between and among clusters and business networks and encourage their integration into innovative value chains. These developments advance the implementation of regional innovation strategies.

Clusters, Innovation and Smart Specialization

Although SMEs are generally open to innovation, it proves to be difficult for SMEs to actually develop their innovative ideas. This can be due to risk-avoiding behaviour, as well as a lack of knowledge, time and resources. Clusters, a concentration of interrelated businesses, stimulate and facilitate these SMEs in forming long-term strategic, cross-sectoral and cross-regional partnerships that can help boost their innovative ideas. In cooperation with the right partners, SMEs are able to develop competitive products and services and integrate into regional and interregional value chains.

Clusters can create an experimental environment that allows for the development of innovative solutions with societal impact. Therefore, clusters are crucial in the creation and promotion of innovation and can be seen as a catalyst for structural change. To support this development, governments can make use of regional or national policy instruments in order to facilitate clusterization processes and to improve cluster policies. Together with knowledge institutes, businesses and civil society, clusters contribute to the development of new ideas or new specializations, which can grow out to become innovations and, in the end even, new economic strengths. As such, clusters can play a key role in the implementation of regional innovation strategies.

2.Background

Interreg Europe's ClusterFY underlines the importance and potential of clusterization processes – and especially in KET-related sectors. Key Enabling Technologies (KETs) are central to strengthening Europe's capacity for industrial renewal and innovation. A consortium consisting of eight partner regions will investigate how EU programming of structural funding might be optimally linked to EU programming on clusterization.

In close cooperation with regional stakeholders from the Quadruple Helix (Q4), the partners of ClusterFY aim to develop recommendations on the improvement of regional and national policy instruments (such as ERDF) that address the intensification of clusterization policies in KET-related sectors. Furthermore, ClusterFY intends to foster interregional cooperation among and between clusters and business networks, as well as encourage their integration into innovative (interregional) value chains.

The purpose of ClusterFY is to develop policy on national, regional and local level that supports businesses and organizations within clusters working with *Key Enabling Technologies (KET)* for a sustainable growth. KET is an umbrella term for six technologies that can be applied in different industries and help dealing with different societal challenges:

- micro and nanoelectronics
- nanotechnology
- industrial biotechnology
- advanced materials
- photonics
- advanced manufacturing technologies

ClusterFY and Europe

Strong clusters are key in the implementation of regional innovation strategies and in furthering entrepreneurial discovery processes. Cooperation between regional Q4-stakeholders adds to the

development of solutions for the societal problems of Europe at large, thereby contributing to EU2020's goal of smart, sustainable and inclusive growth.

The project consortium consists of 8 partners, as follows:

Project Leader	Agency for Science, Innovation and Technology (MITA)	LITHUANIA	
P1	Northern Netherlands Alliance (SNN)	NETHERLANDS	
P2	Municipality of Hudiksvall	SWEDEN	
P3	Polish Agency for Enterprise Development	POLAND	
P4	South Muntenia Regional Development Agency (SMRDA)	ROMANIA	
P5	University of Castilla La Mancha (UCLM)	SPAIN	
P6	Slovak Innovation and Energy Agency (SIEA)	SLOVAKIA	
P7	Centre for Research and Technology Hellas (CERTH)	GREECE	

Economic background of South Muntenia Region

In order to analyze the economic performance of the South Muntenia Region, compared with the national and European economy, we took into account the evolution of the main macroeconomic indicators: Gross Domestic Product (GDP) and GDP / per capita.

Thus, from the analysis of the information from Table no. 1, it can be seen that at the level of Romania, during the period 2013-2017, GDP / per capita, in current prices has evolved from 7.200 Euro/per capita at 9.600 Euro/per capita.

Table 1 - The evolution of GDP/per capita at the level of the European Union

Country	2013	2014	2015	2016	2017
UE - 28	26.800	27.700	29.100	29.300	30.000
Greece	16.500	16.400	16.400	16.400	16.800
Spain	22.000	22.300	23.300	24.100	25.100
Lithuania	11.800	12.500	12.900	13.500	14.900

Netherland	39.300	39.800	40.700	41.600	43.000
Poland	10.300	10.700	11.200	11.100	12.200
Romania	7.200	7.600	8.100	8.600	9.600
Slovakia	13.700	14.000	14.600	15.000	15.600
Sweden	45.400	44.700	45.800	46.700	47.200

Although in terms of the absolute value of the GDP registered in Romania, the country occupies a position in the middle of the ranking of the EU member states, however, in terms of GDP/per capita, Romania is on the last position (27/28) a lower level of this indicator being recorded only in Bulgaria.

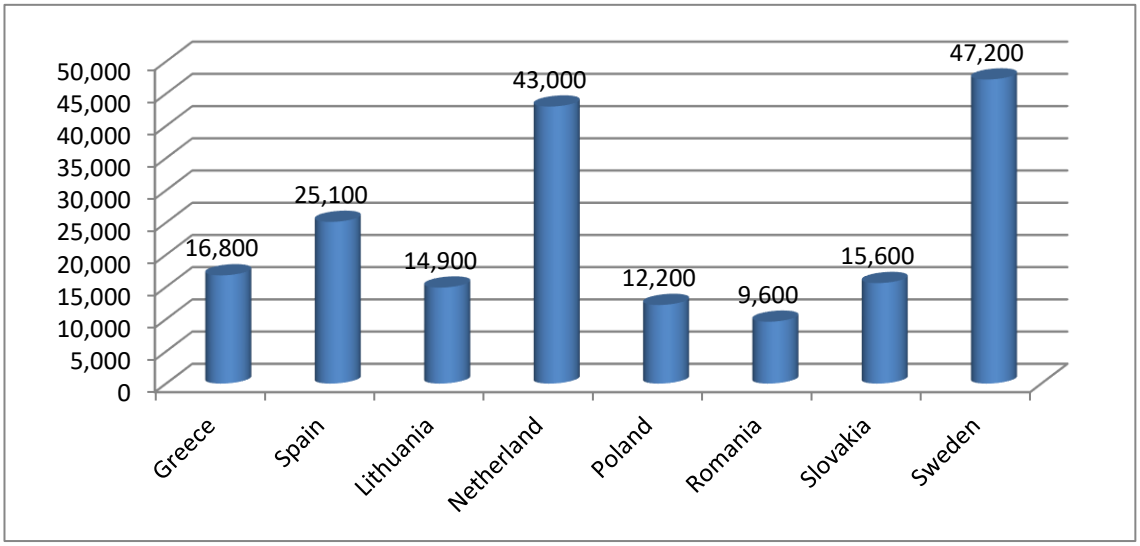


Fig. 1. GDP / per capita in EU countries in 2017

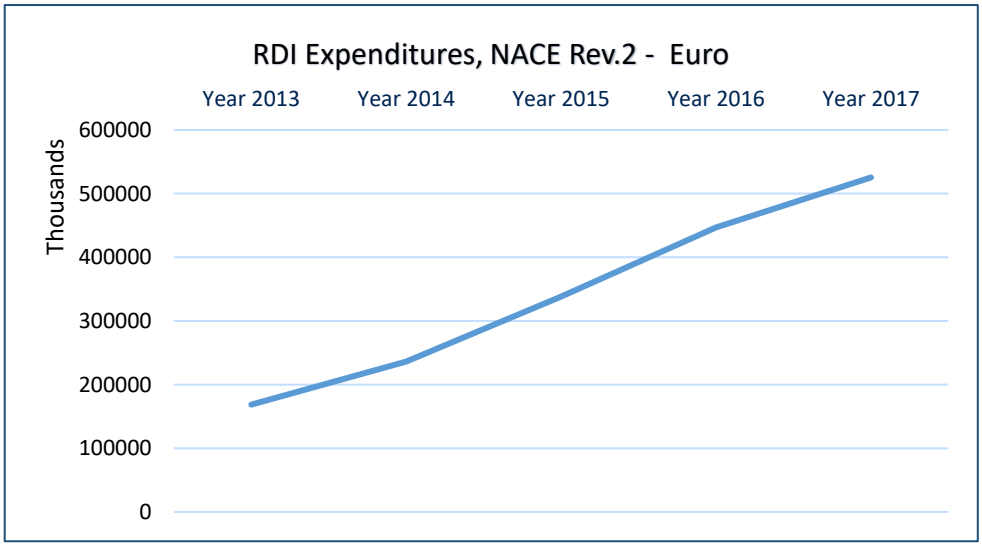
Also, the innovation potential of the South Muntenia Region is analysed through the number of innovative enterprises and their relation to the non-innovative ones. The analysis is carried out in the years 2012, 2014 and 2016, according to the data provided by the Tempo-online statistical database of the Romanian National Institute of Statistics.

Table 2 - Evolution of the number of innovative enterprises at the level of development regions in Romania

Regions	Year 2012	Year 2014	Year 2016
North-East	974	444	424
South-Muntenia	**520**	**353**	**132**
South-West Oltenia	365	120	57
North-West	593	401	592
West	384	175	218
South-East	1108	560	508
Centre	838	463	280
Bucharest-Ilfov	1186	1129	714

Source: statistici.insse.ro

During 2013-2017, in Romania, the expenditure on research and development increased continuously, as shown in Fig.2, the largest volume of these expenditures being recorded in 2017, when the amount spent was three times higher than that registered in 2013. The same type of evolution can be seen in all Romanian regions.



Source: statistici.insse.ro

Fig. 2. RDI Expenditures, NACE Rev.2

3.ClusterFY – Status of policy instrument in South Muntenia Region

In the last three years, South Muntenia RDA has had an important contribution to the development of the implementation mechanism for Priority Axis 1 and the funding priorities at regional level. Significant contributions and recommendations from the Local Working Group (LWG) were provided, based on the findings from the baseline assessment stage and the priority areas for the regional sectors identified with the LWG. Also, a Regional Innovation Board was established at regional level that includes also stakeholders of ClusterFY project. The Regional Innovation Board is an advisory partnership entity in the development, implementation and monitoring of the Regional Specialization Strategy of South Muntenia Region 2014 - 2020 and the analysis of project ideas for innovation and technology transfer structures funded under Priority Axis1.

Overview of present situation

At this moment, based on the 17 Letters of Interest received from potential beneficiaries for funding under Priority Axis 1, 11 projects have been developed. From these, 4 projects have been summitted on Operation A – Supporting the Technological Transfer Innovation Entities and 7 were submitted on Operation C – Investments for SMEs to implement a research-innovation result, in partnership with a TTE. The total amount envisaged in the applications summitted, unfortunately cover only 18% of the financial allocation for this Priority Axis. The result of all this effort was negative, due to the fact that of these applications have been evaluated and no contract was signed.

4.Interregional learning and local stakeholder involvement

Interregional learning is designed as a process, taking its departure in overall questions searching for answers and new perspectives that can lead to new insights and policy implications. The idea is to move forward and deepen the analysis as the project develops.

Exchange of experience through workshops is a part of interregional learning process, which is considered the main catalyst for generating the expected policy change in the participating regions. The production of new knowledge at the regional level relies on multi-actor innovation networks/communities, in which key stakeholders and policy makers come together to find solutions and answers to various social, economic and environmental problems, associated with policy development.

In the first part of the process Local Stakeholders Group was created. This LSG included key actors in the region, that are representatives from businesses, cluster initiatives, the Universities, Research centers and Public sector, interested on improving of cluster's policy.

A document elaborated in the first year was **"Romanian findings on cluster analysis**" based on findings within 7 clusters, from interviews and workshops conducted with key actors in the region, in the local and regional context.

The purpose of the interviews and of the two workshops has been to identify the key actors who are working with key manufacturing technologies in the region, what their interests are and the links between them. The aim was also to understand how the technology can be used in the developing society, what is required to lead to a growth connected to the technology and what are the key factors when the public sector (local, regional, national and EU) focuses on these technologies.

The conclusions of this analysis were:

Cluster types

- 86 % of clusters are organized as classic cluster;
- 14% of clusters are organized as a project (Auto Muntenia Competitiveness Pole).

Clusters collaboration

- The purpose of each cluster is to consolidate the region into its own specific sector;
- All clusters focus on their own strategy.

European Cluster Excellence Initiative

- All 7 clusters perceive the Initiative as a great added value.
- 3 from 7 clusters benefit from this Initiative. *Romanian Textile Concept* and *IND-AGRO POL* received the Silver Label of the European Cluster Excellence Initiative. *MECHATREC* received the Bronze Label of the ECEI(ESCA).

Spearheads from EU cluster policy

- Most of the clusters focus on implementing Smart Specializations and building on their own regional strengths.

ERDF programming

- Applying for the funding is less accessible and attractive for both clusters and SME's.

Key Enabling Technologies (KET's)

- There is a low awareness of KETs even if clusters work on daily basis with the technologies;
- There is no clear vision about the importance and implementation of KET's.

5.Part I – General information

Project: Fostering Clusters' Interregional Collaboration and Integration into International Value Chains

Partner organisation: South Muntenia Regional Development Agency

Other partner organisations involved (if relevant): n/a

Country: Romania

NUTS2 region: South Muntenia

Contact person: Daniela TRAIAN

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phone number: +40 7280 026713

6.Part II – Policy context

The Action Plan aims to impact:

- X Investment for Growth and Jobs programme
- ☐ European Territorial Cooperation programme
- ☐ Other regional development policy instrument

Name of the policy instrument addressed: Regional Operational Programme (ROP) 2014-2020, Priority axis 1 - Promoting technology transfer, Investment priority 1.1 - Promoting investments in Research & Innovation, developing networks, links and synergies between businesses, the research and development centres and higher education"

Please describe

In Romania there are a large number of research activities, but the connection between education, research and business remains weak, that is evidenced by reduced market transfer of new ideas.

At national level, are accredited 48 infrastructures for innovation and technology transfer, 24 located in the seven regions lagging behind. These entities, according to the monitoring reports of National Authority for Scientific Research, are not able to acquire full information about all the innovations in the market, their sustainability, capacity to use the crosscutting technologies. Development of the Science and Tech Parks is closely linked to the development of the knowledge base, opportunities for further training of qualified staff, creates major effects on supply and demand and further stimulates the technological development of undertakings.

In the international ranking, according to the Innobarometer 2014, Romania occupies the last place in terms of technology transfer and commercialization of innovation, with the lowest percentage of companies that have innovations and markets at EU level. Thus, the main problem concerns the companies' ability to absorb innovation (ability to solve problems and to help develop innovation processes) and how that knowledge is transferred to industry.

Accordingly, it is necessary to set up new infrastructure for innovation and technology transfer, as well as developing the existing ones so that they can operate best as an intermediary between demand for innovation based on the needs identified in the market and its diverse offer of research results, adapted according to the application.

Accordingly to the Regional Innovation Scoreboard 2019, Sud - Muntenia (RO31) is a Modest - Innovative; innovation performance has decreased over time (-16.8%).

The first Priority Axis for Thematic Objective 1, of ROP 20142020, that should be improved by the CLUSTERFY project, consist of 3 components(see here https://regio.adrmuntenia.ro/axa-1/static/1196).

At this moment, in addition to the 17 letters of interest received, within the process of entrepreneurial discovery, project ideas were identified and are currently in different stages of development and afterwards, may be financed under the Priority Axis 1.

Considering that the efforts made so far have not led to the signing of contracts, the actions proposed by this Action Plan will lead to the submission of a number of qualitatively improved projects, which will ensure the absorption of the financial allocations for each component.

The actions of Project ClusterFY aim to influence all of these three components :

- Component 1.1.A - Supporting the Technological Transfer Innovation Entities

Total budget of the policy instrument: 5.72 mil. €

Allocation/project: Min. 75,000 € - Max. 3,000,000 €

Co-financing: 50% Public entities;

60% - Medium entreprises;

70% - Small enterprises

Eligible activities:

Creation and development of Innovation and Technology Transfer infrastructure, respectively the construction, extension and equipping with the necessary equipment and software;

Acquisition of specific technology transfer services (other than those provided by employees of the innovation and technology transfer centres).

- Component 1.1.B - Supporting the Scientific and Technological Parks (STP)

Total budget of the policy instrument: 5.72 mil. €

Allocation/project: 5.72 mil. €

Min. 75.000 - Max 200.000 €

Beneficiary: is the partnership between the members of the joint venture, established for the creation of the STP and the Park Manager

Co-financing: 50%

Eligible activities:

- Creation of a new technology transfer service unit
- Extending the capacity of an existing unit
- Diversification of a unit's output through products / services

- Component 1.1.C - Investments for SMEs to implement a research-innovation result, in partnership with a TTE

Total budget of the policy instrument: 8.67 mil €

Allocation/project: Min. 25,000 € - Max. 200,000 €

Beneficiaries: SMEs

Subsidy: 90%

Own resources of SMEs: 10%

Eligible activities:

A. Investments in tangible assets

B. Investments in intangible assets

C. Investments in the development of on-line marketing tools for SMEs' services / products

D. Experimental development investments (if the staff is qualified) and / or acquisition of services

E. Investments in other innovation activities

F. Investing in product development activities (good / service) or process

The ClusterFY Project could influence in South Muntenia region at least a number of 6 projects to be financed from Components 1.1.A and 1.1.B, thru identifying innovation projects.

7.Part III – Details of the actions envisaged

ACTION 1 – Concentrated effort for preparation and launch of three calls for proposals for the Prority Axis 1 of ROP, Components 1.1.A, 1.1.B and 1.1.C

1. **Background** (*please describe the lessons learnt from the project that constitute the basis for the development of the present Action Plan)*

➢ **Connecting KETs with challenge driven innovation and smart specialization**

In the north of Netherlands, the Smart Specialization Strategy, S3, does not focus on any specific sector. The strategy is instead focused on **societal challenges.** There stakeholders are involved in the process of identifying challenges and prioritization. One of the smart specialization priorities is healthy living. There is a range of activities and initiatives around this that focus on that region (around the university, within the companies, with the citizens in the region, in public organizations).

➢ **The role of clusters in scaling up KETs**

In Warsaw, Poland and Vilnius, Lithuania cluster initiatives exist around KETs. These initiatives have been developed to strengthen the application of KETs in other industries. In Poland one of the companies was funded by researchers from CERN with a strong network with NASA and the European Space Agency (ESA). This gave them a competitive advantage in winning tenders from the European Space Agency. The success of this company strengthens the companies in the cluster in Warsaw and these skills form the basis of the whole cluster. **The lessons learned are a strong buyer can promote the development of KETS and in a longer term the regional cluster.**

E.g: **InoGeb LT Project –(Lithuanian Business Support Agency, Communication Division: d.petrulevicius@lvpa.lt Phone: (8 5) 268 7411)**

The goal of whole programme is to foster progress of technology and innovation by providing innovation support and consulting services for private companies. Also, the aim is to increase knowledge level of innovation for enterprises, which should lead into more active participation in R&D and innovation activities/programmes/projects, etc.

Eligible activities:

- Popularization of technological advancement and innovations
- Creation and development of new innovative enterprises
- The development of clusters in RDI field
- Participation in international RDI programs and projects
- Search for technology, evaluation and technology transfer

- Consultations on the protection of intellectual property rights
- Other activities regarding consultations in RDI field

2. Action (*please list and describe the actions to be implemented)*

Concentrated effort for preparation and launch of three calls for proposals for the Prority Axis 1 of ROP, Components 1.1.A, 1.1.B and 1.1.C

The Management Authority for ROP and SM RDA in cooperation with European Joint Research Centre will identify the innovation projects and adapt the documents for three calls of proposals. The aim of cooperation is to identify innovation projects as a result of an enterprenorial discovery process(EDP), as well, these projecs should be developed within clusters or in their technology transfer capacities .

This action was proposed by the project stakeholders after analyzing the activity of the clusters in our region.

As 9 clusters are already established in the South Muntenia Region, the proposed action should address some of the challenges identified by these clusters, which are, as follows: a decreased level of innovation, internationalization and low cooperation and clustering.

In addition, these proposed actions would support cluster members, SMEs, TTEs to promote their innovative ideas and receive high-quality assistance from the Joint Research Centre experts, with the scope that, they would be able to elaborate high-quality applications.

For these three calls will be allocated important amounts of money :

- for Component 1.1.A 5,782,134 euros,
- for Component 1.1.B 5,721,027 euros and
- for Component 1.1.C 8,67 mil.euros).

The ClusterFY Project could influence in South Muntenia region at least a number of 6 projects to be financed from these funds, of which 1 project with a value of 3 mil.euro.

Preparation of calls will consist of:

- Organizing in cooperation with Joint Research Centre, a training course on technology (KETs) management for potential beneficiaries (Transfer Technology Entities and Science Parks). Key enabling technologies – a basis for innovation, growth and employment, should be promoted within clusters and their technology transfer capacities by this kind of action. This action was proposed by the project stakeholders following the analysis of clusters activity in our region. The conclusions were: even if clusters were working on a daily basis with KETs, they had a low knowledge of KETs and no clear vision of the importance and implementation of KETs existed at that point.

- Support to deepen private sector involvement in RIS3, including clusters by: Organizing a workshop to introduce the S3 Thematic Platforms (Industrial Modernisation, Agri-Food, and Energy Efficiency) to Romanian companies and clusters and stimulate their participation. This action was proposed by the project stakeholders following the V ClusterFY Interregional Seminar "Building up Global Clusters of Innovation: Roles, Policies and Management Issues", attended by some of them. During this event one of the topics was S3 Thematic Platforms (Energy Efficiency). Another course on project writing for H2020 or ROP was organised in June 2019 in Ploiesti. This action was a part of a Joint Research Centre project that aimed to ensure a coherent and sustainable approach to national and regional RIS3, by promoting a broad range of activities, e.g. support to identification of RIS3 priorities and development of RIS3 projects through an Entrepreneurial Discovery Process (EDP), support to institutional capacity-building; methodological guidance and provision of expertise for the implementation of RIS3-related activities; support to RIS3 policy-making and policy implementation, including national and regional governance for RIS3 and enhanced coordination at national and regional levels.

- Supporting the technology-focused events on relevant horizontal RIS3 topics, such as: analysis of global value chains, Key Enabling Technologies (KETs), other industrial and emerging technologies, Industry 4.0 and Digital agenda, etc. This action was proposed by the project stakeholders after attending the European Cluster Conference 2019, that took place at the Parliament Palace, in Bucharest, Romania.

- Support to increase internationalisation in research and innovation: Measures for international collaboration. SM RDA will participate in several rollout activities to enhance international/inter-regional linkages and provide opportunities for joint projects, clusters and their members, e.g. technology-focused events on relevant horizontal RIS3 topics-

The documents of the three calls will be elaborated taking into account the discussions held with the potential beneficiaries during these meetings.

The preparation phase will be 4 months (January-April 2020).
In the last month, the documents will be published for public consultation.

b. Launching of calls will consist in:

- Collecting feed-back;
- Modifying of the Guides and annexes during 2 weeks (April/May 2020);
- Launching the calls. The calls will end after a period of 3 months (May-July 2020).

In the second phase of project implementation, the project team will monitor the results of these actions that would be reflected in the number of contracts signed under Priority Axis 1 of ROP.

1. **Players involved** (please indicate the organisations in the region who are involved in the development and implementation of the action and explain their role)

P1. Ministry of Regional Development and Public Administration – General Directorate for Regional Operation Programme, Managing Authority of ROP

P2. Experts of the Joint Research Centre

P3. South Muntenia RDA

P4. Stakeholders: Regional stakeholders of the Quadruple Helix.

2. **Timeframe**

Preparation of calls: January- April 2020

Launching of calls: May -July 2020

Selection / evaluation process: August-October 2020

Contracting projects : November 2020

Monitoring implementation of projects contracted: December 2020-October 2021

3. **Costs** (*if relevant)*

SM RDA Staff cost and Travel cost for preparation of calls (January-April 2020) = 3000 euro

4. **Funding sources** (*if relevant):*

Technical assistance - ROP 2014-2020, (ERDF, National Funds)

Date: _____

Name: Liviu Gabriel MUSAT, Director

Signature: _____

Stamp of the organisation (if available): _____