

PA 1 Promoting technological transfer ROP 2014-2020

- Experience of design and implementation in brief-

Smart specialization implementation in Romania is in an initial phase. In order to start implementing it in Romania, a set of necessary premises had to be built up.

During the 2014-2020 programming period, the existence of a Smart Specialization Strategy was an ex-ante conditionality for the use of FESI for innovation and competitiveness. The subject was treated by Romania in National Strategy for Research Development and Innovation 2014-2020 (approved by Government Decision 929/2014), which was considered insufficiently reflected at the level of development regions in Romania.

National Strategy for Research Development and Innovation that played the role of **Smart specialization strategy** was considered limited in its weak territorial focus, as it does not reflect and establish areas of competitive advantage in the regions. Basically, there were identified the following national fields: Bio economy, ICT, environment, advanced materials, health.

Meanwhile, at regional level - not all the regions have elaborated a RIS 3 (only 5 out of 8). In the period 2014-2015 there were regions that adopted an innovation strategy through the decision of the Regional Development Council (RDC), such as NE, West regions. At the same time, there were regions that had not shown such an initiative and concern, and others who were concerned about the strategic approach to innovation.

In order to be in position to consider the ex-ante conditionality regarding the smart specialization fulfilled, the EC services requested the completion of the National R & D-Innovation Strategy with the location, the economic sectors and the types of services identified at regional level that could be financed (ERDF) through technological transfer offices (TTOs), scientific technological parks and SMEs that can implement a technology transfer result.

Although in the initial version (June 2015) of the Regional Operational Program (ROP) 2014-2020, Priority Axis 1 was dedicated to the exclusive financing of TTOs providing technology transfer activities, following discussions (July - November 2015) between MA ROP and various actors, including DG REGIO, it was highlighted the need to modify this priority axis, both by completing TTOs activities and by extending the support given to this priority axis to SMEs and scientific and technological parks.

Moreover, following the discussions on Priority Axis 1, a 4-steps Implementation Mechanism for Priority Axis 1 of the ROP was identified with DG Regio, out of which the first step was:

- Carrying out the Regional Concept Note (RCN): for the launch of project calls it was necessary to develop the Regional Concept Note. MA ROP elaborated the RCN Methodology (January - June 2016, including consultation with EC, TAIX conference, integrating different positions, etc.). The Regional Concept Note methodology was submitted to the regions on June 28, 2016; The regions had a maximum of 6 months to complete (by the end of 2016, at most by January 2017). Therefore:
 - ✓ For regions that had already approved a Regional Specialization Strategy (RIS3), the RCN had to summarize the provisions of RIS3, namely a more detailed substantiation leading to conclusions regarding the location, the economic sectors and the types of services that could be funded by technology transfer entities, scientific and technological parks and by SMEs in collaboration with a TTO in order to implement a technology transfer result.
 - ✓ For regions that did not have such a strategy approved, the RCN will be a stand-alone document that will also identify smart regional specialization areas based on EDP mechanism. Until identifying areas of smart specialization at the regional level through RIS 3, the areas of national smart specialization will be applicable in the framework of calls for projects.

Basically, in order to be eligible under Priority Axes 1 from ROP, DG Regio recommended RDAs - to develop Regional Concept Notes (RCN) based on a common methodology elaborated by the MA ROP (in order to create sub-national capacities) and each RCN **should**, based on following an **Entrepreneurial Discovery Process**:

- ✓ **Re/state (based on an updating/reconfirming process through EDP mechanism)** the smart specialization directions identified at regional level
- ✓ **Set** the smart specialization directions in those regions without a strategy, based on analysis and validation through EDPs mechanism.

RCN role was to give recommendations on the location, economic sectors and activities that could benefit from ERDF support, based on EDP validation. The most important element introduced in this context and common to all regions was the EDP.

In this context, the following steps were taken, under the supervision and in collaboration with an international expert provided by DG Regio services:

- MA ROP drafted the Methodology for the elaboration of the Regional Note Concept (January - June 2016), which was submitted to RDAs on June 28, 2016;
- RDAs drafted the Concept Note and validated the smart specialization areas identified at regional level within the Regional Innovation Councils / Consortia (July 2016 - April 2017);
- In parallel with the process of Regional Concept Notes elaboration, MA ROP drafted the methodology for the Letters of Intent. The results of the in letters of intent were highlighted in the Regional Concept Note, and the prioritization of the projects to be funded under ROP was based on these results (process completed between March and April 2017).

Also, in 2016 MA ROP initiated **discussions with the Competition Council** in order to identify the most appropriate state aid schemes for the implementation of Priority Axis 1. In order to check whether there are more favorable solutions for the final beneficiaries of state aid co-financing than those proposed in the specific guidelines developed for the implementation of this priority axis, EC offered to support the MA by contracting an international expert on state aid issues (May - August 2017).

Following this exercise of analysis together with the contracted expert, RDAs and Competition Council representatives, MA ROP concluded that the initial classification of eligible activities by types of state aid identified at the level of the proposed guidelines remained the only feasible option for timely implementation of this priority axis. Consequently, the specific guidelines and State aid schemes for operations under this priority axis have been developed and launched. It must be highlighted the concern expressed in various occasions by potential final beneficiaries regarding the big cofinancing rates (as state aid rules require) they had to ensure in order to be able to design and implement a project under PA1.

Given that the steps outlined above were mandatory in order to prepare an optimal framework for the implementation of this priority axis and that each one of them required a period of time that had been added to the original timetable, delays in implementation of this priority axis resulted.

As concerns the specificity of PA 1 ROP, interventions focus on innovation needs identified by the demand side, in a market driven approach, in complementarity with OP Competitiveness that is also financing TO1 activities, from the supply perspective, focusing on research based activities.

Under Specific Objective - *Increasing innovation in businesses by supporting innovation and technology transfer offices in areas of smart specialization*, it was decided that ROP would finance:

- ✓ TTOs (creation and development, including both infrastructure and endowment, but also specific services),
- ✓ Science and technological parks (creation and development, including both infrastructure and endowment, but also specific services) and

- ✓ SMEs to implement a research & innovation result in partnership/collaboration with TTOs,
- ✓ Integrated projects resulted from Lagging Behind Regions Initiative implementation

Calls of proposal launched:

- 1.1.A - technological transfer infrastructure (TTO)
- 1.1.B - scientific and technological parks
- 1.1. C - SME in partnership with TTO

Following evaluating and contracting projects under the launched calls, it was revealed that the final beneficiaries of these investments translated innovation mainly as new technology acquisition and in a very limited proportion as the transfer of a research result activity as a new product or service or process into the market. This interpretation of the innovation fell outside the eligibility scope of ROP, many projects being rejected because they did not meet ROP specificity. Moreover, there was another investment priority in the ROP under which financing was already granted for innovation seen as acquisition of technology.

The aspect mentioned above, together with state aid limitations lead to a relatively small number of projects accepted to be financed under PA1, not enough to cover the budget allocation. Consequently, calls for 1.1.A and 1.1.C were launched based on consultations with RDAs and Competition Council in order to simplify as much as possible the process. For 1.1.B there was no interested expressed concerning a possible re-launching of the call.

Lagging Behind Regions Initiative

In this context and in parallel, DG Regio provided within Lagging Behind Regions Initiative, through Joint Research Center, specialized assistance to 2 regions to develop RIS3 in the NW and update it in the NE.

The aim of the " **Lagging behind regions**" initiative was to identify bottlenecks that hinder growth in less developed regions and to provide assistance to maximize the impact of regional investment and increase competitiveness.

It was envisaged a bottom-up process, extensive consultation with regional actors involved in priority areas of activity (where the region benefits from competitive and / or comparative advantages).

For the pilot regions North-West and North-East, support was provided for:

- Entrepreneurial discovery processes - to identify smart and competitive sectors
- Education, training, skills - to create links between research and business and labour market

- Administrative capacity - to develop national - regional coordination, but also trainings on innovation specificity for potential beneficiaries or other relevant stakeholders in the eco-system.

Following all the support activities provided, the Entrepreneurial Discovery Process (EDP), materialized in a portfolio of project ideas for NE and NW regions. The project portfolio construction was a transparent process with key actors in the quadruple helix system, in a bottom-up approach, with projects generated in entrepreneurial discovery workshops, starting from needs;

The projects resulted were integrated projects or had a multidisciplinary approach to market research results and had such a novelty character that they were not eligible under any financing source/programme/initiative in Romania at that moment.

As a result, the ROP was modified by introducing the Specific Objective 1.2: *Increasing innovation in companies by supporting the multisectoral approaches resulting from the implementation of the "Less developed regions" initiative in Romania* and specific budget was allocated in order to finance these projects.

In this case, beneficiaries of financing are still TTOs, STPs, private entities, including their partnerships and quadruple helix components (public authorities / institutions, business, academia and research, NGOs) from urban and rural areas.

Also, it was decided that, if following smart specialization principles, projects of this type will be further identified and developed by other eligible development regions, they can be funded through this priority axis.

Subsequently, the EC expanded the Lagging Behind Regions Initiative in Romania, as follows:

✓ **JRC:**

- a. Continuing support for the NE / NW regions (call launched, projects in contracting process)
- b. Starting the support for 5 intermediate regions in order to refine RIS 3 (SE - call launched, SW, W, Center, South Muntenia)
- c. Starting support for the development of RIS3 in the BI (capital) area

✓ **World Bank** to design and implement, together with MAROP:

- d. Research Valorization Programme (call for NE/NW regions in preparation)
- e. Structured Research Contract (under preparation by WB)
- f. Proof of concept (call for 8 regions ready to be launched)

Evaluation of priority axis 1

In August 2019, it was completed the final report issued by an independent team of evaluators contracted by the Ministry of Development in 2018. Among the main conclusions presented in this report, that is public, are:

- ✓ ROP 2014-2020 has made a visible contribution to addressing smart specialization;
- ✓ The institutional structures developed under ROP to support smart specialization process at regional level are perceived as functional;

However, there is plenty of room for improvement and the need to strengthen the administrative capacity still exists at the level of all components of the eco-system newly created.

An important conclusion appears regarding the need for an approach over a multiple programming cycle upon the correlation between these characteristics and the current state of the innovation sector in Romania. Consequently, this axis and the investment priorities must find their maximum continuity and peak load in the implementation under the 2021-2027 programming cycle.

The situation at regional level is multi-faceted and the experimentation is a *sine qua non condition* for the demonstrative effect both the applicative research sector and TT entities, and the economic, business sector need in the learning process as regards the promotion of innovation through the technology transfer. For this programming period, besides capacity building, the focus was to offer some demo results to the critical mass of promoters which are expected to join the pioneers of this funding cycle.

Preparing the PA1 implementation, getting results with demonstration effect and involvement become essential to raise awareness, increase knowledge, level out the understanding of the correct approaches and, last but not least, to stir emulation in the market and achieve the necessary 'momentum' for an accelerated, effective and efficient implementation. The actors involved and decision makers at national level, as well as the regional stakeholders, are in fact pioneers of a new territory in the process of investigation.

MA ROP had to initiate and prepare a **unique process of entrepreneurial discovery**, at regional level, to **create the optimal premises necessary** to ensure a qualitative project portfolio, to be subsequently funded, both through AP1 and through the future policy objective 1 of the 2021-2027 programming period.

Besides **creating and strengthening institutional capacity**, through ROP it was also initiated a **culture of dialogue, collaboration and partnership** among innovation stakeholders that was almost lacking before, as a new way of thinking **together** about how to identify and how to develop the best projects for the community. People who had not met before rallied to outline a project idea that they thought was of common interest and feasible.

The steps outlined were mandatory in order to prepare an optimal framework for ROP implementation. Even if all these created delays in implementation, since each one of them required a period of time that had been added to the original timetable, PA 1 ROP played an essential role in the creation and coagulation of the quadruple partnership structures and in the management of entrepreneurial discovery processes.

Therefore, ROP contributed to the change of vision by a much more active involvement of the main stakeholders in the programming process at the regional level. It may be concluded that it helped potential beneficiaries of funding to work in a more structured way for the generation and structuring of the project ideas.

PA 1 ROP refers to investment priorities in exclusively novelty areas for the research and entrepreneurial environment in Romania. Moreover, in order to implement it, support to regional innovation eco-systems - that were in incipient forms - was provided throughout the whole policy cycle in order to determine their evolution, to make them work and be in correlation with a national innovation system governed centrally.

It was also initiated the process of designing and testing a new model of governance, better linking the national and the regional levels, and working together to offer better solutions for interrelated problems, for market and societal developments.

Growing and consolidating the above listed achievements will increase the chances to achieve / get closer to the ultimate goal of territorial economic transformation.

For the programming period 2021 - 2027, with smart specialization being placed at the core of the cohesion policy, a lot of aspects are raised in order to consolidate the innovation status as a new driver of growth to economy:

- create broad awareness and better skills and competences in managing RIS3
- build strong leadership, manage resistance to change,
- enhance the sustainability of the regional institutional innovation system

All the work and progress that has been done is only the beginning of a longer -term process that needs and will continue in the coming years.