

## The European Union Strategy for the Danube Region – Framework for Promoting Clusters

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### Abstract

*Clusters play an important role in fostering competitiveness, innovation and creation of jobs in our country, in general, and in the Romanian Danube region, in particular. These partnerships of the „triple helix” type can support regions in stimulating innovation, by facilitating cooperation between the academia, the business environment and the local administration. Clusters could be used both in the development phase, as well as in the implementation of smart specialization strategies, contributing to identifying the strengths of an economic sector in the region, and determining the priorities in making correct political decisions. Today clusters reflect the cross-sectorial nature of the value chains and innovation systems. The paper presents some concerns regarding the evolution of clusters promotion in Romania as part of Danube Region, based on experienced gained by author during the projects conducted in the framework of South-East Europe and Transnational Danube Programmes.*

**Key words:** industrial clusters, competitiveness, cohesion policy.

**J.E.L. classification:** R11

### 1. Introduction

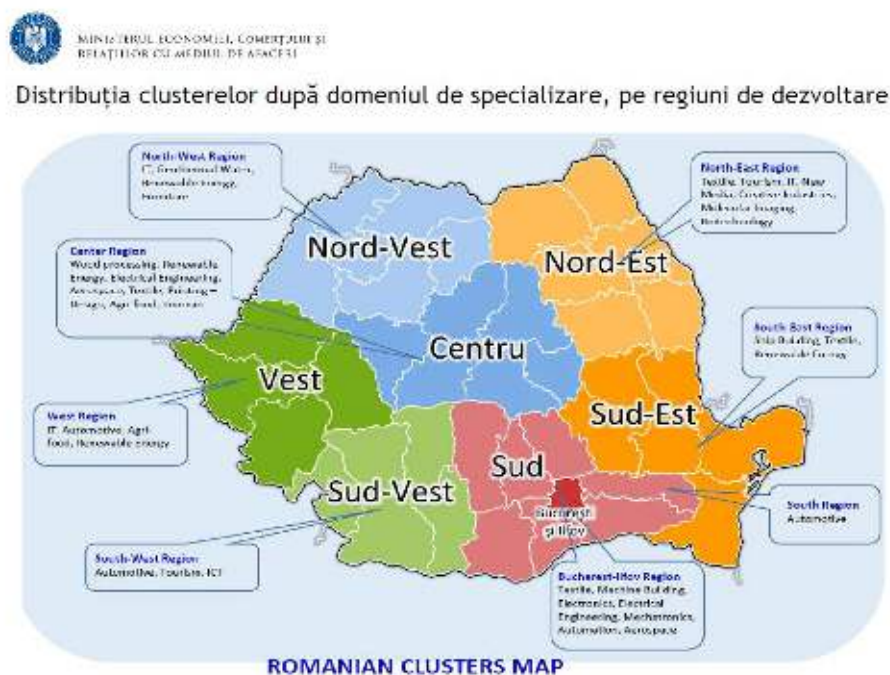
The current challenge for all the Member States of the European Union is to manage and change the rhythm of economic competitiveness, to have a common approach in order to develop an industrial eco-system that should be competitive at a global level. It is necessary to provide coherence to European policies for supporting development and industrial relaunch.

Clusters play an important role in fostering competitiveness, innovation and creation of jobs also in Danube Region, in general, and in our country in particular (Păuna, 2013). These partnerships of the „triple helix” type can support regions in stimulating innovation, by facilitating cooperation between the academia, the business environment and the local administration.

### 2. Innovation - the engine of the cluster

Innovation is mainly influenced by four factors: the general conditions, like the macro-economic environment, the fiscal system and access to funding, the scientific and technical institutions, the mechanisms for the transfer of information and competences between various stakeholders in the innovation system and innovative SME-s. These four factors relate to some specific fields of political interventions. The Government should take measures to overcome the potential barriers in each of the four domains in order to decide on the priorities to be set. The correlations among stakeholders (Porter, 1998) are very important for the system of innovation. Modern policies pursuing to implement a business eco-system favorable to innovation and entrepreneurship, where new winners might come up, which could support the development of new industrial value chains, as well as in emerging industries. Modern policies pursue a systemic approach, combining various policies, programmes and instruments. The traditional policy was mainly channeled towards research and development, whereas the current innovation policy is focusing on technological eco-systems and clusters.

Figure no. 1. Distribution of clusters based on their specialization field at regional level



Source: <http://economie.gov.ro/images/domenii/clustere.pdf>

Cooperation and internationalization of Romanian clusters by means of the networks cover a wide range of activities which have an influence on the Romanian Danube region in the following way: access to knowledge, to new markets, to key infrastructures, new opportunities of cooperation etc. The exchange of good practices between the cluster networks which have been created in various economic sectors contribute to identifying some specific aspects for the region and to finding viable solutions to challenges. Transnational cooperation is much more difficult than cooperation at a national level.

From this perspective, the European Union Strategy on the Danube Region – EUSDR, the political initiative of Romania and Austria (promoted in June 2008 with the European Commission) by means of the priority axis no.8 (EUSDR, PA 8, 2014), provided support for the competitiveness of enterprises, including by developing clusters, this axis being the responsibility of Croatia and the German land of Baden Württemberg – which is a benchmark in the promotion of clusters, both in Germany and in the European Union.

In Romania, the Ministry of Education and Scientific Research is dealing with education, science, technology, research, development, innovation and funding of innovative clusters, whereas the Ministry of Economy, Commerce and Liaison with the Business Environment is responsible for the development fields of the SME-s, for the competitiveness and industrial policies, as well as for the direct foreign investment and foreign trade. There are numerous bodies responsible for the wide scope application of the innovation policy: universities, research-development institutes, scientific and technological parks, technological transfer centers etc.

The national efforts for supporting clusters also benefit from the transnational cooperation programmes, as instruments of funding the EU Strategies.

The Romanian clusters were partners in successful European projects (some underway), which have created the prerequisites for implementing the EU Strategy on the Danube Region:

- Adriatic Danubian Clustering-ADC ([www.adcproject.eu](http://www.adcproject.eu)) (The Transnational Programme of South-East Europe 2007-2013), with the purpose of improving knowledge on the potential of cross-border cooperation and to give greater visibility to SME-s in the region, to participate in the networks created in the four sectors (logistics, mechatronics, agri-food and modern housing) and to promote the Danube-Adriatic area, as part of an integrated production system meant to attract

international investors (The Institute for Economic Prognosis of the Romanian Academy – a partner in the project);

- ClusteriX – Clusters for European innovation ([www.clusterix.info](http://www.clusterix.info), <http://www.interregeurope.eu/clusterix2/>) co-financed by the European Fund for Regional Development (in programmes like: Interreg IV C and Interreg Europe, respectively) with the purpose of allowing the regional authorities to identify, analyze and explore the potential for future strategic development of clusters, by means of exchange of good practices among nine partners of eight different EU countries, and to contribute to increasing the competitiveness of regional players by improving cluster policies and implementing smart specialization policies;

- SEENECO- The South-East European Network of the Excellence Cluster Organizations,
- CLUSTARS: Excellence in cluster management (<http://www.clustars.eu/>),
- CLUS3 “Cluster Excellence”, projects co-financed by the Competitiveness and Innovation Programme (CIP) ([www.cluster-excellence.eu](http://www.cluster-excellence.eu)) with the purpose of promoting cluster management excellence, by designing a set of training of trainers instruments, a benchmarking instrument and a set of indicators for measuring management performance and creating a platform of collaboration for clusters;

- ClusterPoliSEE – Smarter cluster policies for South-East Europe, declared by the European Commission (<http://www.clusterpolisee.eu/ro>) – Flagship project of the EU Strategy for the Danube Region ([www.clusterpolisee.eu](http://www.clusterpolisee.eu)) financed by the South-East European Transnational Programme with the purpose of increasing the competitiveness of the European regions and the innovation potential, by re-channelling cluster policies and using smart specialization strategies. In this pilot activity supported by the Institute for Economic Prognosis of the Romanian Academy a catalogue for promoting sectorial networks was created (automotive, logistics; ITC; energy, environment technology; mechatronics, electrotechnics, plastics, metal processing; agro-food, tourism, farming machinery; creative and cultural industries, and textiles; construction, green houses, wood and furniture; high tech, health, medical sciences) in the South East region of Europe, as part of the global value chains and a platform of collaboration was set up in the field of cluster policies;

- DanuBioValNet - Cross-clustering partnership for boosting eco-innovation by developing a joint bio-based value-added network for the Danube Region (<http://www.interreg-danube.eu/approved-projects/danubiovalnet>), as part of the programme Intereeg Danube Transnational Programme, 2016-2019.

The smart specialization strategies help regions to concentrate their resources on some key priorities (for instance, the regions in the Romanian Danube area – smart cities and high tech clusters, the agro-food sector, renewable energy, furniture, textile-creative, tourism, health, and logistics, maritime). Clusters could be used by these regions as platforms (Constantin & All, 2011) that gather and mobilize the local players in order to elaborate and implement successfully the smart specialization strategies, to attract innovative enterprises and create jobs at a local and regional level.

### **3. A possible programme for clusters and networks of SME-s in Romania as part of Danube Region**

On the basis of the economic realities in the Romanian Danube Region and the favorable conditions created by the European transnational programmes of collaboration among the Danubian countries, as well as following the analyses and the documents of position designed by the Association of Clusters in Romania CLUSTERO (Coșniță D., Leucuța C., 2016), on the basis of the recommendations included in the most recent European document – Baden Agenda (September 2016), as well as on the experience of the mentioned projects, in which the author took part, we propose that a Program of support with national and European funds be set up to increase the competitiveness of clusters and SME-s in the Danube region in the period 2016-2020, whose specific objective should be: to finance management entities of clusters/competitiveness poles:

- from state budget funds by means of:

The National Programme for Increasing Competitiveness of Clusters (proposal) which is about to be drafted and implemented by the Ministry of Economy, Commerce and Liaison with the Business Environment and

The National Programme of Research, Development and Innovation III (NPRDI III) - a de minimis matrix for innovative clusters

- from structural funds in the Competitiveness Operational Programme 2014–2020, The Regional Operational Programme 2014 2020 and the Operational Programme on Human Capital 2014 -2020.

The proposal - supported by CLUSTERO – comes in the context in which the programming documents and the financing guidelines (already published) cover the necessary financing potential for clusters in Romania, by means of the Competitiveness Programme 2014 – 2020 (Priority Axes: AP1 and AP2).

Funding the Management Entities of clusters in Romania by means of the National Programme for Increasing Cluster Competitiveness (proposal) according to a de minimis matrix will allow them to structure more effectively their activity, first identifying the location, and then covering the current expenses for creating an efficient networking in the European eco-system of clusters, by financially supporting activities beneficial for the development of clusters: training, marketing, etc.

Funding the management entities of clusters/competitiveness poles from national and European funds should be corroborated with the implementation of the recommendations of the Baden Agenda for Danubian countries in the Romanian Danube Region, as follows:

- Connecting the SME-s with the research institutes and integrate them in the networks set up via the European Institute for Technology and Innovation - EIT, in the sectors dedicated to climate changes (EIT Climate), digitalization (EIT Digital), food and agriculture industry (EIT FOOD), health (EIT Health), renewable energy (EIT InnoEnergy), and efficient exploitation of raw materials (EIT Raw Materials), coordinated by the respective Excellence Centers (Knowledge Innovation Communities - KICs) (<https://eit.europa.eu/>);
- Integrated approach of economic activities, including social responsibilities;
- Increasing cross-border cooperation in the field of research (by means of the EUREKA programme);
- Cooperation in the fields of smart specialization along the Danube;
- Creation of an adequate framework for entrepreneurs and Business Angels;
- Strengthening cooperation among the chambers of commerce;
- Improving the public governance capacity in support for enterprises and cooperation among them.

Clusters should be encouraged to develop without any constraints in the Romanian Danube Region, which could thus become the most attractive market in Europe. In this respect, the cluster strategy in the Romanian Danube Region should focus on the following:

- Drawing up and updating an atlas of clusters in the region, by using the model of the German land of Baden-Württemberg in order to get to know which are the potential partners in the clustering initiatives, and to provide transparency to cluster support (the first edition of the atlas will include the current 45 clusters)
- Internationalization of clusters following the setting up of meta-clusters and platforms of discussions in order to generate projects in the network, and promoting Romanian clusters on international markets; collaboration of clusters in the Romanian Danube region in domains of smart specialization: bio-economy, eco-design, green industries, social innovation in a regional context by creating a Regional Index for Social Innovation; digital industries; creative industries, mobility technologies; industries of experiences (tourism, arts etc), logistics services etc.
- Promotion of excellence clusters in the sense of obtaining results in increasing the efficiency of the SMEs activities in the clusters, following the improvement of the cluster management (professionalization of the cluster management to the benefit of SME-s in the clusters)
- Correlation with smart specialization strategies in the Danube Macro region and approach on 3 levels: the cluster policy level (better policies; more adequate implementation of RIS3, new instruments for policy implementation, better schemes for cluster support); the cluster management level (higher professionalism, better services, new services, a more powerful role/position, higher

acceptance) and the company level (road mapping/foresight, a more profound training for future challenges, higher efficiency in business and transnational cooperation).

#### 4. Conclusions

The lack of funding from national funds for the development of clusters, and for the excellence cluster management, internationalization, investment in research, innovation, as well as not adjusting the applicant's guide to the calls open in Operational Programmes to the economic realities in Romania will conduct to a reduced efficiency of material, financial and human investments.

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