

Creation of Innovation Clusters in Greece

The General Secretariat for Research and Technology of Greece has implemented an Action entitled "Creation of Innovation Clusters - A Greek Product, A Single Market: The Planet" it was launched in 2011, based on good experiences with previous cluster programs, e.g. supporting the mi-Cluster / Corallia. The program is co-funded by ERDF Convergence regions and was negotiated and approved by the European Commission DG Competition based on the regulations for innovation clusters in the community framework for state aid for R&D&I (regarding cluster facilitation) and the De-Minimis regulation. Scope of the Action is to support the establishment, in Greece, of innovation clusters in thematic areas/ economic activity sectors, with existing or potential competitive advantage for the country, in order to develop innovative products and services and to achieve economies of scale and scope through specialization in production and close cooperation between the cluster members.

Innovative clusters are described as "groups of independent enterprises/businesses operating in a particular sector and geographic area in order to encourage innovation through strong interactions, common use of resources and sharing knowledge and expertise in order to effectively contribute to technology transfer, networking and dissemination of information among businesses/members of the cluster.

Firms in the cluster can also use innovative technologies, innovative production processes (process level), functional, organizational innovation (system level), etc. Clusters eligible under this Action are knowledge-based, include research/academic organizations and undertake high added-value innovative activities with strong global market orientation.

Key enabler of these innovative clusters is a cluster facilitator that will help develop the necessary synergies, will facilitate expertise transfer to companies - members of the cluster on issues critical for the development and support of the international visibility and networking, and for the penetration of its products in the international market.

The implementation of the Action follows two steps:

1. In a first step emerging innovation clusters in Greece have been depicted, in the framework of a call for expressions of interest. Under this call, existing networks were asked to provide summary information about the emerging cluster (membership, scope and strategy, response to clustering needs), as well as the mapping of the relevant thematic area/ economic sector. The 23 submitted proposals were evaluated by a Panel of international experts, according to a set of specific criteria. Following the results of the evaluation, the best 9 proposals were selected to proceed to step 2.

2. In the second step, successful applicants have been invited to submit a business plan of the cluster activities, as well as proposals for financial support of the cluster members (business firms and facilitator) for the first two-year pilot operation phase of the cluster.

During the first phase of this call, existing networks of companies, research and academic institutions under the representation and coordination of a cluster facilitator are asked to submit proposals that will include all necessary information to form a coherent picture of the potential development of innovative clusters in thematic areas that suggest competitive advantage for the country.

In particular, submitted proposals should have included:

1. Mapping of the theme / sector in which the cluster intends to operate and is under evaluation,
2. Identification of the components of the emerging cluster,
3. Identification of the specific business needs which will be satisfied with the creation of the cluster,
4. The proposed cluster facilitator
5. A pre-business plan outlining the development strategy of the cluster.

The proposal concerns all areas and sectors of the economy which appear to have competitive advantage in order to identify the ones that can develop into innovative clusters. Focus will be given to development priorities of the country, which, as announced by the Government are:

1. Material and Chemicals
2. Agro biotechnology and Alimentation
3. Computing, Communications and Knowledge intensification services
4. Biomedical and Health Care Sector
5. Environment and Energy

Proposals were examined as regards to the following criteria:

- Composition and maturity of the network (quantitative and qualitative data associated with the critical mass of actors that make up the network, and the dynamic to develop into an innovative cluster)
- Documentation of the needs that led to the creation of innovative cluster
- Adequacy and reliability of the sector/industry mapping

- Thematic and geographical focus
- Degree of innovation of the emerging cluster
- Adequacy of the cluster facilitator
- Development strategy of the emerging cluster in relation to the market dynamics, expected benefit to the national economy, expected competitive advantage, and penetration of international markets. Predicted amount of involvement and prediction of private capital that will be attracted. Appropriateness of the pro-business project with a focus on the documentation of the facilitator's viability, after the end of public funding.

Networks whose proposals will be judged worthy, based on examination of the above, and depending on available funds, will be invited to submit full business plans (structured according to this model which will be available to stakeholders) to be funded, after evaluation, for the implementation of the pilot phase of the operation, for two years, of innovative clusters.

Eligible for funding are independent companies that are legal entities of any kind and size. In case of non-independent companies participating in a supported cluster, only one of them is eligible for funding. The program supports clusters that include innovative newly established enterprises (start-ups), SMEs and large enterprises, research/academic institutions and other supportive organizations of the public and private sector (technological bodies, technology and know-how transfer organizations, financial institutions and venture capital investors, etc.) showing geographic concentration and thematic expertise, connected in an added value chain (vertical or horizontal), based on knowledge and innovation and enhancing the presence of Greek businesses in international markets. The members of the supported clusters should cultivate strong interactions between them, so the know-how and expertise exchange, the technology transfer, the network development, the dissemination activities and the common use of infrastructure and facilities encourage innovation and create important preconditions leveraging competitive advantage on an international level.

Furthermore the development of the necessary infrastructure of the cluster facilitator is funded, along with its operating expenses according to the business plan. The amount of public expenditure in this case ranges from 15 to 100 %, depending on the nature of the facilitator (public or private), the type of expenditure and the region in which he will be installed in accordance with the EU Framework for funding on Research, Development and Innovation.

Characteristics that innovative clusters that will participate in the Action should develop

Innovation clusters are consisted of a group of interconnected companies which exhibit several of the following characteristics:

- Are knowledge based and include research products

- Develop innovative products/services with high added value (which increase the turnover and / or profit rates on use of royalties)
- Use innovative technologies , innovative production processes (process level), functional, organizational innovation (system level),
- Safeguard their intellectual property with patents or other relevant industrial property and generally exploit the knowledge generated
- Exhibit competitive advantage in an international level, high exports and penetration on regional , European and global markets
- They have opportunities to achieve economies of scale and scope and exhibit features of value chain with common suppliers or customers
- Include small businesses, start-ups, spin-offs and spin-outs, which are leading in their respective fields, but also successful companies of any size , recognized internationally
- Include companies that are involved and develop innovative laboratory and industrial prototypes
- Exhibit a geographically focused core , without excluding the participation and collaboration with institutions geographically distant,
- Have entered into strategic alliances with universities, research centers, facilitators of technology and skills transfer, etc.
- Aim at attracting venture capital or other private investment (e.g. business angels, etc.)
- They have already focused towards networking in an attempt to upgrade procedures and production chains
- Aim at cooperation with international groups, leaders in the field of clusters
- Clearly recognize the opportunities to participate in international markets

Cluster facilitator characteristics

The facilitator supports and promotes innovative clusters and has a catalytic role in the launch, development, administration, networking and promotion.

In particular, the cluster facilitator:

- Has very good knowledge of the cluster and national/international environment, has a wide network of contacts , previous cooperation with enterprises , knowledge of industrial section, experience with project management
- Is neutral (has no interest in any undertaking or consortium) and acts with integrity and reliability
- Is responsible for the promotion of cluster development activities, while ensuring that initiatives are constantly upgraded

- Provides no scientific expertise, but acts as a "facilitator" for entrepreneurship in this sector, suggesting opportunities and procedures and providing all the necessary information and guidance to potential users,
- Facilitates technical, legal support and educates companies in the industry, on innovative activities topics such as patenting, exploitation, research results, development of prototypes, etc.
- Coordinates necessary actions to develop partnerships and exchange of knowledge, promotes networking between research institutions and businesses and supports , if necessary, the development of common infrastructure ,
- Promotes the international exposure and networking of the cluster (participation in joint reports, connection with relevant international clusters, internet site, electronic and print publications, etc.)
- Supports companies to access national funding or EU programs and to raise capital.
- Motivates partners to develop policy of cooperation in order to highlight the benefit of cooperation, contributes to competitiveness of the participants (e.g., common suppliers with lower purchase cost, higher market share as a company - member of the cluster, etc.).
- Is staffed by personnel with knowledge and experience in administration

There were eight proposals, on the online platform that was installed for this purpose that were submitted and evaluated.

The thematic priorities of these 8 networks are:

2 in the field of Information Technology and Communications Services and Services of Intensive Knowledge

3 in the Energy / Environment

1 in Health / Biomedical

2 in Materials and Chemicals

These networks, which emerged from the previous phase [facilitators/promoters and participating companies] were invited by way of notice to submit complete 5-year business plans for the creation and development of innovation clusters, their structure, business model, strategy, viability, etc. They were also invited to submit in particular financial plans of the participating organizations for the first two years of their business plan (pilot phase).

It should be noted at this point that this notice was addressed only to the qualified organizations [facilitators/promoters-i.e. the organizations themselves-and organizations participating in these networks-at least a large number of them]. Nevertheless, the notice

remains open to any of the above mentioned networks who wish to expand their members' list [with the participation of Universities (AEI) or Higher Technical Educational Institutes (TEI), research centers, companies]. Participation of new members in the qualified network, boosting their activities, their role in the cluster, etc. should all be part of the business plan and the overall proposal to be submitted for evaluation by the GSRT.

Following evaluation of the applications submitted and announcement of the results, the GSRT provided funding during the pilot phase to those clusters with the best chance to succeed.

In particular, during the pilot phase, the GSRT, on the one hand, provided funding to the facilitator in order to coordinate and provide the services needed for businesses, to develop common infrastructure facilities, if required, and to cover overhead charges proven to be beneficial to the cluster, and on the other hand to companies in order to support innovative activities, such as development of prototypes, training, participation in joint exhibitions, promotion of products, as well as their potential relocation to common infrastructure facilities.

Eligible activities and costs for the companies participating in the action:

1. Consulting services for the restructuring and modernization of the company
2. Innovation consulting and support services: including consulting services on management issues, transfer of technology, entering new markets and use of new marketing techniques, as well as advice on the purchase, protection of and trade in intellectual property rights, use of standards and licensing agreements
3. Patenting of industrial property rights (the aid intensity is fixed at a threshold of 25%, and therefore it does not exceed the aid corresponding to the research activity which has led to the protected by industrial property product, as defined in Art. 31 (3 & 4) of Regulation 800)
4. Participation in exhibitions
5. Vocational training (general and specific)
6. Landscaping, acquisition of equipment, software
7. Relocation/co-location to common infrastructure facilities (if required) (it must not exceed 40% of the public expenditure as set out in the aid plan for each company)
8. Experimental development (development of prototype)/demo
9. Supporting new and existing innovative micro-enterprises for the development of prototypes.

The proposals were evaluated by a committee of international experts. The members of the Committee were renowned scientists with expertise and experience in innovative clusters and innovation in general, technology transfer and entrepreneurship based on knowledge. The Commission assessed the proposals in accordance with the procedures and criteria specified in the notice and drafted the table of the proposals with high grading / ranking.

In particular, the proposals were evaluated in three successive stages, the final score and ranking in descending order shows the marks they received during the first stage (evaluation of business plans).

According to the results of the assessment by the Committee 4 innovative clusters are to be funded with a maximum of total public expenditure 18.396.773 EUR in the following thematic priorities:

2 in the field of Information Technology and Communications Services and Services of Intensive Knowledge

1 in Energy / Environment

1 in Health / Biomedical

The facilitator is funded for the coordination and provision of necessary services to enterprises, the development of common infrastructure, if needed, and to cover the operational costs in favor of the cluster. Also funded are approximately 15 companies in each cluster network supporting innovative activities such as prototyping, training, participation in joint exhibitions, display products and the eventual relocation to shared infrastructure.