Corallia Clusters Initiative: a catalyst boosting entrepreneurship, innovation and regional development in Southern Europe

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*Chief Business & Technology Officer*
DESIGNED IN GREECE
Innovation
Συναγωνίζομαστε
Διεθνώς
Δημιουργούμε
Τοπικά

Develop
Regionally
Compete
Globally
A tool for economic development

Clusters Defined:
...“geographical concentrations of interconnected independent companies and institutions in a particular field, linked by commonalities and complementarities, where enough resources and competences amass and reach a critical threshold, giving it a key position in a given economic branch or activity, with a decisive sustainable competitive advantage over other places, or even a world supremacy in that field” (M. Porter, 1998)

Clusters can:

- **improve** short-term industry attraction efforts through identification of industry gaps and definition of specific advantages
- **help** define medium-term strategies for retaining, establishing, and growing a region
- **aid** the devising of long-term strategies including research and innovation to sustain industrial growth within a region
Innovation Ecosystem
Cluster development model

Phase-0: Preparation Study/Mapping of thematic area

Phase-1: Implementation of pilot program

Phase-2: Wide scale deployment for the attainment of a viable competitive advantage and critical mass in selected thematic area

Phased development model based on Go-NoGo decisions & escalating investments

World-Class Cluster
1. Clusters Facilitator

**Nano/Microelectronics based Systems and Applications Cluster**
- Members: 130
- Initiation: 2004
-Turnover: > € 5.7 bil.
- Exports: > € 162 mil.
- Employment: > 5000

**Space Technologies and Applications Cluster**
- Members: 22
- Initiation: 2009
- Turnover: > € 100 mil.
- Exports: > € 20 mil.
- Employment: > 600

**Gaming Technologies & Creative Content Cluster**
- Members: 23
- Initiation: 2011
- Turnover: > € 1.1 bil.
- Exports: > € 900 mil.
- Employment: > 5000
Example – mi-Cluster

- mi-Cluster members: 130
- mi-Cluster revenues: 5.7 billion €
- mi-Cluster employment: 5 thousand

% growth rate [2009-2011 vs. 2006-2008] (est.)

<table>
<thead>
<tr>
<th>Category</th>
<th>Growth Rate</th>
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<tbody>
<tr>
<td>Turnover</td>
<td>145%</td>
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<tr>
<td>Employment</td>
<td>67%</td>
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<tr>
<td>Exports</td>
<td>108%</td>
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<tr>
<td>Patents</td>
<td>203%</td>
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<tr>
<td>Investments</td>
<td>369%</td>
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<tr>
<td>Joint PhD</td>
<td>1040%</td>
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</tbody>
</table>

[Figures (30 SMEs)]

Turnover: 39 -> 63m€
Employment: 318 -> 560
mi-Cluster: Worldwide Exports

- Germany, USA
- Israel, Cyprus, Sweden
- Italy, France, Spain
- Netherlands, China, Canada and more
mi-Cluster: target markets

- Mobile Comms: 4%
- Security: 8%
- Medical Applications: 11%
- Home Appliances: 8%
- Multimedia: 13%
- Telecom Infrastructure: 13%
- Defence: 7%
- Industrial Automation: 7%
- Consumer Electronics: 17%
- Computers & Office: 13%
- Automotive: 13%
- Others: 8%
mi-Cluster: NEW products

- Innovative sensor systems offering distributed intelligence (MEMSENSE)
- Next Generation Millimeter Wave Backhaul Radio (NexGenMiliWave)
- Microelectronics Components for Lab-On-Chip Instruments in Molecular Diagnostics for Genetics and Environmental Applications (Lab-On-Chip)
- PHY Silicon IPs (ANAPHY)
- Fourth Generation QoS Scheduler (4GQoSS)
- Prototype frame for multimedia reproduction (POLYKADRO)
- Next Generation Intelligent Gateway Platform for Mobile Communications (NGIG)
- Low Cost Smart Camera (SmartCam80)
- Advanced Radio Transmitter (ART)
- Radiomapping & Electromagnetic Emission (FASMARADIO)
- Next Generation EDA Tools (HEL-NG-EDA)
- Chipset for Data and Decision Fusion (SYNTHESIS)
- Microfluidics microsystems for genetic testing and molecular diagnostics (BIOSENS)
- 802.11n Wireless LAN Integrated Circuit for Portable Devices (POROS)
- Semi-Transparent Photovoltaic Panels (SOLAR WINDOWS)
- Software Programmable Transceivers for Broadband Wireless Backhaul Applications (PARNITHA)
- Vector graphics accelerator (TSi ThinkVG)
- Innovative System for Video Search (SEE-VISS)
2. Innovation Centers Operator
3. Young Entrepreneurship Accelerator
4. Pan-European Networker
Vision

Raise the Excellence of Clusters and Cluster Organisations in South-East Europe

Objectives

The main objective is to promote cluster management professionalism in SEE by applying advanced training and benchmarking tools developed under the European Cluster Excellence Initiative (ECEI). SEENECO brings together a number of key national institutions from SEE countries, having the official mandate to develop and implement cluster programmes, and that undertake and focus their efforts on the following action lines:

- Transfer of knowledge, material and methodologies developed by ECEI (on cluster management, benchmarking, etc) to the SEENECO partnership.
- Development of sustainable training structures that can replicate and localise the material and transfer the knowledge further in SEE cluster organisations and clusters.
- Contribute to the development of a European portfolio of “excellent” cluster organisations.
- Support the international cluster cooperation by offering SEE cluster organisations the opportunity to network at European and international level, both through the European Cluster Collaboration Platform and through direct interaction between cluster managers in SEE and experienced peers in other CIP countries.
Vision
Develop new strategies to maximize regional innovation potential that will point South East Europe towards more strategic cross-border and trans-regional cooperation

Objectives
Short term
• provide an in-depth assessment of the regional cluster policies, based on consideration of past actions, visions of the future and analysis of current contexts
• develop and test of new policies and initiatives in specific priority areas to allow for proof of new cluster policies for SE Europe

Long term
• improve the framework conditions supporting cluster development in SE Europe by delivering a Joint Policy Plan and Initiative based on common policy learning and evidence from pilot actions
• set up an online, web-based collaborative learning platform that will support result-oriented transnational good practice exchange, cooperative learning, policy transfer among stakeholders and policy makers engaged in cluster promotion and funding initiatives

The consortium consists of 25 partners covering 11 different SEE programme countries (Austria, Bulgaria, Greece, Hungary, Italy, Romania, Slovenia, Slovakia, Albania, Croatia, Serbia)
what really made a difference…

- Based on **international good practices**;
- Deployed a clear **bottom-up, customized, phased and holistic approach**;
- Put strong **emphasis on innovation and exports’ orientation**;
- Focused on **talent & people** and **niche market orientation**;
- Insisted in a **strong and sustainable cluster facilitator**;
- Set a **long-term strategy** that outperform short-term gains;
- Determined long-term goals and **integrated control gates with metrics**;
- Deployed a **plan-do-check-act management method** for the control and continuous improvement;
- Accepted no more than **zero-tolerance to nepotism, corruption, discrimination**;
-Designed the program with eligibility of actions based on **needs of sectors instead of limitations of funding frameworks**;
- Invested in **good publicity** reaching out worldwide.
[Moving forward]
Proposals

Corallia’s made a proposal to the National Government addressing the key issues related to **Entrepreneurship and Business**, covering 10 areas of interest, such as:

- Extroversion
- Entrepreneurship and Innovation
- Taxation
- Public and private Funding
- Excellence
- Infrastructures

Participated in the field study all over Greece and contributed in a comprehensive report **RIS3 National Assessment - Greece: Clusters and Cluster Policy**.
# Potential for Development of Clusters in Greek Regions

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<tr>
<th>Region</th>
<th>Sector</th>
<th>Attica</th>
<th>Central Macedonia</th>
<th>Central Greece</th>
<th>East Macedonia, Thrace</th>
<th>West Macedonia</th>
<th>Peloponnesus</th>
<th>West Greece</th>
<th>Epirus</th>
<th>Thessaly</th>
<th>South Aegean</th>
<th>North Aegean</th>
<th>Crete</th>
<th>Ionian Islands</th>
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<tbody>
<tr>
<td></td>
<td>Agricultural products, forestry</td>
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<td>Farming and animal husbandry, aquaculture</td>
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<td>Stone quarries, construction materials</td>
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<td>Energy, renewables, mining, production, distribution</td>
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<td>Green Tech, Water, Sewage, Waste Management</td>
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<td>Food and beverages</td>
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<td>Chemical products, plastics, advanced materials</td>
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<td>Value-added products (metal, wood, leather, paper, textile, etc)</td>
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<td>Satellite technologies, aerospace, security</td>
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<td>Creative Industries, Media, Entertainment</td>
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<td>Biotech, Pharmaceuticals, Medical Devices</td>
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<td>Tourism and hospitality</td>
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<td>Transportation and logistics, maritime</td>
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<td>Financial and insurance services</td>
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<td>Health services</td>
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Conclusions

- Imminent introduction of unitary patent and development of unified patent litigation.
- Support a single market for venture capital funds and business angel networks with professional standards and co-investment funds to invest in regional business opportunities.
- Consider incentives for the development of transnational and trans-regional clusters.
- Facilitate cross-clustering and the identification of innovation opportunities at the interface between different sectors (e.g. ICT and agriculture).
- Develop industrial zones, science parks, incubators and business innovation centres to offer professional added-value services to tenants.
- Promote EU nearsourcing and the establishment of design centers in South Europe.
Corallia Clusters Initiative is hosted at the Research Center "Athena", under the auspices of the General Secretariat for Research and Technology of the Hellenic Ministry of Education and Religious Affairs, Culture and Sports.

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