Regional Roadmap: Allon_I3 Project

Alentejo, Portugal

August 6th, 2024

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1. Project Background

Overview

The 'Alliance on interregional innovation investments' project is initiated by the Regional Innovation Centre 'Ambitious Gabrovo' (RIC_AG), Bulgaria, in partnership with two other less developed regions (Italy, Portugal), two regions in transition (Greece, Cyprus), and a more developed one (Denmark), along with an associated partner from Norway. Along these lines, the Allon_I3 project seeks to enhance interregional cooperation and innovation by exploring and supporting innovation ecosystems across various European regions.

Project Objectives

The Allon_I3 project centers around three main goals: improving regional connectivity, strengthening existing value chains creating new ones, and enhancing regions' readiness for investment.

Allon_I3 aims to enhance connectivity of the less developed regions with the others by creating preconditions for a vibrant interregional cooperation and investments along value chains in the target S3 domain of the project. This is to be enabled by experimenting new approaches, delivering solutions, exchanging good practices examples. This would lay the ground for future shaping of an interregional innovation investment ecosystem creating benefits to all three regional groups involved in the Allon_I3 project and beyond. This spells out in 5 regional roadmaps that outline a set of particular activities, timelines, key drivers and expected outcomes.

2. Vision and objectives of Regional Roadmap

A regional roadmap is a strategic plan that outlines the steps and actions required for a region to achieve specific developmental goals or address particular challenges. It provides a structured approach to guide the region through various phases of development, ensuring coordinated efforts among stakeholders and effective use of resources.

A regional roadmap provides a structured plan outlining the steps and milestones for a region to achieve specific goals, particularly in the context of development projects like the Allon_I3

initiative. Regional roadmaps will empower the regions and the Q-helix stakeholders with partnership agreements and business cases to evolve and mature in the project follow-up stage. Along these lines, 5 regional roadmaps that outline a set of particular activities, timelines, key drivers and expected outcomes (roadmaps for 3 less developed regions and 2 for the two regions in transition).

The Allon_I3 initiative encompasses a variety of European regions, each with distinct qualities that contribute to economic enhancement, technological advancement, and the advancement of sustainable methods. The 5 regional roadmaps will present an analysis from the 3 less developed regions (Gabrovo, Alentejo, Sicily) and the 2 regions in transition (Athens, Nicosia) participating in the project.

3. Current State Analysis

Strengths and Weaknesses
Assessment of the region's current capabilities and resources in ICT/Digitalization and Clean Technologies.

The Alentejo Region, located in the south of Portugal, bordered to the north by the Tagus River, to the south by the Algarve Region, to the west by the Atlantic Ocean and to the east by the Guadiana River and the border with Spain (Extremadura and Andalusia Provinces), is the largest region in the country. Comprising four NUT III - Alto Alentejo (Portalegre District); Alentejo Central (Évora District); Baixo Alentejo (Beja District); and Alentejo Litoral (Alcácer do Sal, Grândola, Santiago do Cacém, Sines and Odemira Counties) - it covers a diverse landscape that ranges from the wild beaches and rugged coastlines of the Atlantic coastline to the extensive plains of the interior. This region covers a total area of 31,551 square kilometers (33% of the mainland). However, it is still a region that is considered underdeveloped from a technological point of view, since most of its companies are in the agricultural sector and small in size. Today, however, the region has remarkable conditions for the growth and affirmation of a range of activities that support other economic activities, such as logistics and Information and Communication Technologies (ICT).

The Alentejo also has excellent communication structures, with fiber optic network with quality and coverage, which boost ICT-related activities, and is also a location with excellent potential for nearshoring this type of activity due to the availability of space for the installation of large infrastructures. The mooring of submarine cables in Sines has boosted the development of this

area of activity, and it is planned to host telecommunications submarine cable mooring stations and the installation of large data centers, in line with the EU-Atlantic Data Gateway platform for Europe's digital economy. The region's characteristics have already led to the installation of large companies such as Capgemini Decsis, CEIIA, KPMJ, Aernnova, among others.

STRENGTHS:

- Projection of regional productions with good levels of commercial competitiveness and quality (traditional and agri-food products);
- Entrepreneurs with a strong desire to expand their business and evolve technologically;
- High road accessibility to the Lisbon Metropolitan Area and Spain;
- Existence of small and medium-sized companies with their own funds;
- The climate in the region is attractive, especially in terms of tourism;
- Implementation of integrated digital projects under the Évora Digital District;
- Water is an essential element in the Alentejo, due to its presence in rivers, dams, aquifers or springs, facilitating agriculture, but at the same time it has potential for both tourism and the production of hydroelectric power;
- The existence of a network of digital skills training bodies at different levels of the education and vocational training system, served by the RCDE - Rede Comunitária do Distrito de Évora (Évora District Community Network), which is a fiber optic (FO) electronic communications network infrastructure;
- The very significant presence, in terms of territorial area, of the multifunctional agro-sylvo-pastoral system of the montado, with enormous potential to counteract accelerated processes of soil desertification, loss of biodiversity and demographic abandonment;
- Alentejo has a diverse natural and cultural heritage, with unique coastal landscapes, picturesque villages and an important cultural history. It is currently being promoted as a sustainable tourist destination, attracting national and international visitors.
- Partnerships between technology companies and public and private organizations.

WEAKENESSES:

- Low population density;
- Demographic ageing;
- Weakness of the sub-regional business fabric and low propensity for innovation and internationalization;
- Sharp loss of population in recent decades;

- The renewal of the business fabric, particularly in the upper echelons, is one of the biggest challenges for the adoption and realization of an innovation ecosystem;
- Low-tech business fabric;
- Poor coordination between research centers and the needs of the region and companies;
- Producers' perception of agricultural activity from a multifunctional perspective is weak;
- Lack of public and private investment;
- Lengthy and bureaucratic processes for submitting applications for national and European projects;
- Weak employment structure and sub-regional production structures, which are unable to absorb the labor available for work;
- Salaries well below average;
- Little support for entrepreneurs in small and medium-sized businesses to increase their workforce;
- Weak culture of co-operation among most local actors.

Opportunities and Threats

External factors that could impact the region's development.

OPPORTUNITIES:
- Development of the primary sector, through the valorization of primary production and traditional agriculture;
- Creation and development of competitive business practices, centered on the valorization of endogenous products and market orientation;
- The region has a very favorable road network for development, with a very relevant presence within the European Transport Network, being longitudinally and transversely crossed by important road axes (A2 Lisbon-Algarve and A6 (Lisbon-Madrid);
- Qualification of human resources and economic activities through the development of training activities geared towards entrepreneurship and skills retraining;
- Strategic cross-border positioning that strengthens accessibility and relations with the outside world;
- Economic opportunities generated by the Alqueva Multipurpose Development;
- Incentive and financing programs for companies in the region;
- Strengthening business capacity through qualification, digitalization and internationalization processes, in addition to direct support for companies, which help to

improve competitiveness, flexibility and responsiveness in the global market, using intangible investments in areas such as: digitalization, new organizational and management models, production qualification (certification, design, etc.), training, among others;

- Regional potential in the field of tourism development, consolidating the progressive affirmation of this sector in the regional economy and employment;

- Favorable conditions for the development of renewable/alternative energy projects.

THREATS:

- Desertification phenomenon with a tendency to increase;

- The area is less attractive to live and work in, making it difficult to diversify the business fabric and attract new players;

- Shortage of young, qualified labor;

- Difficulties in retaining the young population, due to the lack of job opportunities and the attractiveness/dynamism of some urban centers;

- Lack of concrete measures to encourage the population to settle/return to the region;

- Little interest in technological development due to the associated costs;

- Insufficient research associated with some of the region's most economically significant products;

- High contextual costs for business access to innovation and technological development.

The business fabric of the Alentejo region, although characterized by a predominance of micro and SMEs, has a significant productive dynamic based on diversification, with emphasis on agriculture, agroindustry activities and the exploitation of geological and mineral resources, among others. Mostly made up of low-skilled companies, this region's business fabric has been slowly consolidating skills and establishing innovative economic activity over the last decade.

The capacity of regional companies to innovate is fundamental to increasing the competitiveness of the economy, which does not depend exclusively on the integration of Information and Communication Technologies. It is necessary to have a capacity for innovation and to adopt new approaches that allow us to be competitive, to attract young people, to achieve work-life balance, quality of life and the well-being of people at work, because this is an asset and a decisive strategy for attracting and retaining talent.

While it is true that economic growth is driven by greater competitiveness and business productivity, this can only be achieved if this process necessarily involves the introduction of differentiation and innovation factors within companies.

These factors include, among others, the development of skills in the use of ICT as tools that can provide practical and effective solutions for the day-to-day management of your company, and the habit of "practicing innovation", thinking about differentiation and stimulating the market. If these skills are not developed in the key players in the whole process, it will be difficult to see any real growth in the competitiveness of companies.

4. Strategic Priorities

Focus Areas - Economic, technological, and innovation landscapes across the participating regions

Alignment: - *Ensures priorities are consistent with broader regional or national strategies (including S3 strategy).*

ALENTEJO 2030

The European Commission has approved the Alentejo Regional Program (Alentejo 2030) for the next programming period 2021-2027. Through this Program, the Alentejo region has an overall allocation of 1,104.3 billion euros of European funds to finance investments in the region, of which 875.5 million euros are ERDF, 129.9 million euros ESF and 98.9 million euros FTJ. The Program is made up of 5 Strategic Objectives which are linked to the Priorities and Specific Objectives.

The Alentejo 2030 Program aims to promote the competitiveness of the economy, environmental sustainability and the enhancement of the territory and people in the region, within the framework of the European Union's Cohesion Policy. This program is intended to operationalize the region's development strategy and the sub-regional strategies of the Intermunicipal Communities.

The amount available in the Program will be distributed by Policy Objectives, organized by Specific Objectives. The conditions to be met by those wishing to apply are defined in the general regime for the application of Portugal 2030 European funds, in the specific regulations approved by the Portugal 2030 Interministerial Coordination Commission and in the calls for proposals.

Support:

- ✓ Companies;

- ✓ Municipalities | CIM;

- ✓ Universities and Institutes. Polytechnics;

- ✓ Entities of the Scientific and Technological System;

- ✓ Private social solidarity institutions and other social economy organizations;

- ✓ Hospitals and Local Health Units;

- ✓ Business Associations;

- ✓ Public and private organizations working in the areas of tourism, heritage and culture;

- ✓ Water supply and waste management organizations;

- ✓ Humanitarian Fire Brigade Associations;

- ✓ Unemployed people who want to create their own jobs and other disadvantaged social groups.

Strategic Objectives:

ALENTEJO + COMPETITIVE – By promoting innovative and intelligent economic transformation and ICT connectivity at regional level.

ALENTEJO + CLOSE – By promoting the sustainable and integrated development of all types of territories and local initiatives. In addition to the European Social Fund (ESF), Alentejo 2030 includes the Just Transition Fund (FTJ), aimed at mitigating socio-economic impacts in the Alentejo.

ALENTEJO + GREEN- Hypo-carbon, in transition to a zero net carbon economy, and resilient, by promoting a clean and equitable energy transition, green and blue investments, the circular economy, climate change mitigation and adaptation, risk prevention and management, and sustainable urban mobility.

ALENTEJO + CONECTED– By strengthening mobility.

ALENTEJO + SOCIAL – Through the application of the European Pillar of Social Rights.

FOCUS AREAS:

1. **Transition to a Green Economy:**
   - ▪ **Renewable Energies:** Explore and expand solar, wind, and biomass energy production, taking advantage of the region's vast potential in natural resources.

- **Sustainable Agriculture:** Promote more efficient and environmentally friendly agricultural practices, such as precision agriculture, integrated pest management, and the use of renewable energies in production.
- **Sustainable Tourism:** Develop ecological and rural tourism, valuing local culture, heritage, and gastronomy, with a focus on environmental preservation.
- **Efficient Resource Management:** Implement solutions for intelligent water and waste management, promoting the circular economy and reducing environmental impact.

2. **Digital Transformation:**
- **Digital Infrastructure:** Expand broadband coverage and access to digital technologies throughout the region, especially in rural areas, to ensure digital inclusion.
- **Digital Public Services:** Modernize and digitize public services, such as health, education, and administration, to improve efficiency and accessibility.
- **Digital Skills:** Invest in training and qualification of the population in digital skills, preparing them for the job market of the future.
- **Digital Innovation:** Support the development of startups and innovative companies in areas such as artificial intelligence, internet of things, and data analysis.

3. **Strengthening the Innovation Ecosystem:**
- **Collaboration:** Foster collaboration between companies, universities, research centers, and public entities to create an environment conducive to innovation.
- **Technology Transfer:** Promote the transfer of knowledge and technology between academia and the business sector, encouraging the creation of spin-offs and the commercialization of innovative products.
- **Financing:** Facilitate access to financing for innovation projects, especially for small and medium-sized enterprises and startups, through incentive programs and public-private partnerships.
- **Internationalization:** Support the internationalization of innovative companies in the region, opening doors to new markets and business opportunities.

Alignment:

The strategic priorities above are in line with the Alentejo's Smart Specialization Strategy (S3), which aims to promote the region's competitiveness and sustainable development through innovation and the valorization of its endogenous resources. The priorities are also aligned with

national and European strategies for digital and ecological transition, contributing to the goals of the European Green Deal and the Digital Agenda for Europe.

5. Stakeholder Engagement

Stakeholder Identification

List of key stakeholders, including government bodies, educational institutions, businesses and organizations

Regional Government Bodies:

- CCDR-A – Comissão de Coordenação e Desenvolvimento Regional do Alentejo
- Intermunicipal Communities (CIM) of Alentejo Central, Litoral, and Baixo Alentejo

Educational Institutions:

- University of Évora
- Polytechnic Institute of Beja
- Polytechnic Institute of Portalegre

Research Centers

- Center for Agricultural and Agro-Food Biotechnology of Alentejo (CEBAL)
- Center for Research in Energy and Environment (CINEA)

Businesses

- Start Campus
- Repsol
- Indorama
- Aernnova
- Mecachrome
- TE Connectivity
- Kemet
- Lauak
- Emmad
- Air Olesa
- Tekever
- Sevenair

Organizations

- EDIA – Alqueva Development and Infrastructure Company
- APS – Sines and Algarve Ports Administration
- AICEP Global Parques

Engagement plan
Strategies for involving stakeholders in the roadmap development and implementation process.

- **Workshops and Seminars** – Organize events to present strategic priorities, discuss challenges and opportunities, and collect feedback from stakeholders;
- **Working Groups –** Form working groups with representatives of different stakeholders to discuss specific topics and develop joint solutions;
- **Communication Plan –** to establish effective and transparent communication with all stakeholders, ensuring they are informed;
- **Online Platforms –** Create online platforms to facilitate communication and collaboration among stakeholders, allowing for information sharing and networking;
- **Public Consultations –** Conduct public consultations to involve the community and obtain input on policies and projects to be implemented.

6. Key proposed initiatives and actions

Lists the major initiatives and projects that need to be undertaken to achieve the objectives. This could include construction projects, policy changes, investment in technology, or community programs.

Alentejo has been implementing various initiatives and actions aimed at balanced and sustainable development, particularly significant considering the region's Smart Specialization priorities, which seek to foster innovation, sustainability and territorial cohesion. Some relevant initiatives are presented below:

- **Encouraging sustainable practices:** Sustainable development practices are crucial to preserving natural resources and mitigating environmental degradation. Implementing renewable energy projects, promoting green agriculture and adopting green building standards can contribute to both economic growth and environmental sustainability.
- **Fostering Innovation and Technology:** Projects that stimulate the digitalization of small and medium-sized enterprises (SMEs) in the region have been encouraged, including support for training in digital skills and the implementation of technological solutions.

- **Fostering collaboration and partnerships:** Collaboration between government entities, private sector stakeholders, civil society organizations and local communities is vital for effective regional development. Establishing multi-stakeholder partnerships can facilitate knowledge sharing, resource mobilization and coordinated action towards common goals.

- **Using digital technologies:** Adopting digital technologies can accelerate regional development by improving efficiency, increasing productivity and expanding market access. Investing in digital infrastructure, promoting digital literacy and fostering the growth of digital start-ups can position regions for success in the digital economy.

- **Promoting entrepreneurship and innovation:** Encouraging entrepreneurship and promoting innovation stimulates economic growth in the region. Supporting start-ups, offering incentives for research and development and creating incubators and innovation centers can attract talent and investment, boosting regional development.

- **Training and Capacity Building Programs:** Various initiatives have been set up to train the local population in various areas, such as tourism, agriculture, technology and entrepreneurship, promoting continuous training.

7. Collaboration and Partnerships – Good practices

Cross-Regional Collaboration: Describe strategies for forming partnerships with other regions. Ex. Specific agreements
Mention good practices

- **Stakeholder mapping**: Identify organizations, companies, universities in other regions that have similar interests or objectives to the Allon_l3 project.

- **Complementarity Analysis:** Assess how regional characteristics (such as natural resources, know-how, infrastructure) can complement each other.

- **Communication Channel:** Use social networks and digital platforms to connect people and institutions from different regions and facilitate ongoing dialogue in order to ensure transparency and align expectations;

- **Events and Workshops:** Organize conferences, fairs and seminars that bring together representatives from different regions for debates, presentations and the exchange of ideas.

- **Regular Communication and Coordination:** Establish effective communication channels and regular meetings between stakeholders from different regions to ensure coordination and progress on collaborative projects.

- **Transparency and Trust:** Foster a culture of transparency and trust between partners, sharing information openly and respecting the contributions of each region.
- **Flexibility and Adaptability:** Be prepared to adapt to changing circumstances and adjust collaboration strategies as needed to ensure the success of partnerships.
- **Measurement and Evaluation:** Establish clear indicators and mechanisms to measure the impact of cross-regional collaboration and evaluate the effectiveness of partnerships.

Specific Examples of Potential Collaborations:

- **Alentejo and Attica:** Joint development of smart agriculture solutions, combining Alentejo's agricultural expertise with Attica's technological prowess.
- **Alentejo and Sicily:** Collaboration on sustainable tourism initiatives, leveraging both regions' natural beauty, cultural heritage, and culinary traditions.
- **Alentejo and Gabrovo:** Partnership on the development of agricultural machinery and equipment, combining Gabrovo's manufacturing expertise with Alentejo's agricultural needs.
- **Alentejo and Nicosia:** Joint research projects on renewable energy solutions, leveraging Nicosia's research capabilities and Alentejo's resources in solar and wind energy.
- **Alentejo and Nordjylland:** Knowledge exchange and collaboration on wind energy projects, learning from Nordjylland's experience in this field.

8. Timeline and milestones

Timeline:

- **Short-term (1-2 years):** Initial assessments, stakeholder engagement, launch of pilot projects
    - **Milestone 1:** Conduct a comprehensive assessment of Alentejo's innovation ecosystem, identifying strengths, weaknesses, opportunities, and threats.
    - **Milestone 2:** Engage with key stakeholders across government, industry, academia, and civil society to build consensus and support for the strategic priorities.
    - Milestone 3: Launch pilot projects in key focus areas, such as renewable energy, sustainable agriculture, and digital transformation, to test and validate innovative solutions.
- **Medium-term (3-5 years):** Expansion of initiatives, scaling successful projects, strengthening partnerships

- **Milestone 4:** Expand successful pilot projects and initiatives to a larger scale, ensuring their sustainability and impact.
- **Milestone 5:** Scale up promising innovations and solutions identified during the pilot phase, fostering their adoption and diffusion across the region.
- **Milestone 6:** Strengthen partnerships and collaboration with other regions, sharing best practices and knowledge, and participating in joint projects and initiatives.
- **Long-term (5+ years):** Sustained growth, continuous innovation, achievement of vision and objectives
  - **Milestone 7:** Achieve sustained growth and development of Alentejo's innovation ecosystem, fostering a culture of innovation and entrepreneurship.
  - **Milestone 8:** Promote continuous innovation and knowledge creation, supporting research and development activities, and attracting talent to the region.
  - **Milestone 9:** Achieve the vision and objectives of the Allon_I3 project, transforming Alentejo into a model region for sustainable development, digital transformation, and green economy.

9. Expected Outcomes

Short-term (1-2 years):

- **Increased Awareness:** Raise awareness among stakeholders about the importance of innovation and collaboration for regional development.
- **Enhanced Collaboration:** Foster initial collaboration between stakeholders through workshops, seminars, and pilot projects.
- **Strengthening Business Interconnection:** Establishing networks between companies to exchange ideas, challenges and experiences, supporting policies that make contracting more agile, as well as simplifying the process of setting up companies and reducing bureaucracy to access funds or support;
- **Initial Project Results:** Generate tangible results from pilot projects, demonstrating the feasibility and potential impact of innovative solutions in key focus areas.
- **Capacity Building:** Strengthen the capacity of local stakeholders to develop and implement innovative projects through training and knowledge exchange.

Medium-term (3-5 years):

- **Scalable Solutions:** Develop and implement scalable solutions in renewable energy, sustainable agriculture, digital transformation, and other priority areas.
- **Economic Growth:** Contribute to the region's economic growth by creating new jobs, attracting investment, and improving the competitiveness of local businesses.
- **Environmental Sustainability:** Reduce the region's environmental footprint through the adoption of sustainable practices in agriculture, energy, and tourism.
- **Social Impact:** Improve the quality of life for Alentejo residents through better access to digital services, education, healthcare, and cultural opportunities.
- **Stronger Partnerships:** Establish strong and lasting partnerships with other regions, fostering a culture of collaboration and knowledge exchange.

Long-term (5+ years):

- **Thriving Innovation Ecosystem:** Establish a vibrant and self-sustaining innovation ecosystem that attracts talent, investment, and fosters continuous innovation.
- **Leading Region:** Position Alentejo as a leading region in Europe in terms of sustainable development, digital transformation, and green economy.
- **Improved Quality of Life:** Enhance the overall quality of life for Alentejo residents through sustainable economic growth, environmental protection, and social development.
- **Global Recognition:** Gain international recognition for Alentejo's achievements in innovation, sustainability, and regional development.
- **Legacy:** Leave a lasting legacy of collaboration, innovation, and sustainable development for future generations in Alentejo.

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