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Insular Regions 2015

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Purpose

The path to the knowledge development model recommended by the EU is based on the progress of two main change parameters leading to a properly functioning knowledge society: research and innovation activities together with participation and clustering activities. Building on this framework the IN.TRACK foresight project aimed at formulating knowledge-based regional policies, ensuring the support of local actors and stakeholders through regional consensus, and raising awareness with regards to policy, industry and society as a whole.

Insular Regions in a ‘Knowledge Society’

Pursuing the Lisbon goals and the creation of a European Research Area has specific implications referring to the role of the regions. Their increasing role is noted in EC policy documents in initiating efforts to support the transition of the Union to a knowledge-based economy and in becoming dynamic players in developing and structuring the ERA.

The insular regions of the European Union often lag behind the average performance of the EU’s regions as far as knowledge and innovation performance is concerned. The knowledge economy represents both a new opportunity to be seized by the insular regions and a threat in terms of risk of a widening gap with respect to the more developed regions in Europe. Thus, a first challenge that insular regions are facing is the development of a coherent strategy for building and sustaining a knowledge-based economy and society building in their regional distinctiveness.

A New Approach to Regional Policies

A new approach to regional policies appears, which defines the competitive advantages of regions in terms of localised learning, the construction of networks of association and institutional spread. Regional policies must favour the creation of a *framework for interaction* in which companies, organisations and public agencies are able to explore joint solutions to problems shared in common, a framework in which, once dialogue has been established, attitudes that are more receptive to the interchange of information and interactive learning are generated. In this new context of regional policy, there are two main important institutional innovations regions should aim at: **the devolution of powers** from a national to a regional level; and **the delegation of certain tasks** of promotion and stimulation to intermediate organisations of a private and/or public nature.

The IN.TRACK project aims at developing regional policies for the four collaborating European regions - Canary Islands, Crete, Madeira and Sicily - aspiring the above theories, addressing the consequent challenges and following the policy guidelines in pursuing the Lisbon goals and the creation of the ERA. An extension of the blueprint to other European Islands



- Balearic Islands, Azores, Sardinia, Corse, Highlands & Islands - is also envisaged for trans-national transfer of the model developed.

Pursuing the Lisbon Goals and the ERA through Regional Development and Cooperation

IN.TRACK has four main objectives:

- To evaluate the central role of knowledge in four less advanced European regions characterised by being an island through technology audits, strategic gap analysis and regional foresight,
- To diagnose the four regions' state-of-the-art in innovation and technology policies and launch an awareness process enhancing the build-up of the "regions of knowledge" concept through four participatory and consensus-

based workshops adopting the European Awareness Scenario Workshop (EASW) methodology,

- To ensure active participation of key cross-regional socio-economic stakeholders in order to generate a shared vision amongst the four targeted regions in terms of peripheral/insular knowledge-based development and policy options and lay the ground for new regional policies and plans of action focused on the Regions of Knowledge concept,
- To develop an inter-regional network, sharing a cooperative model and enhancing the exchange of learning and experiences through the development of shared and cooperative plans of action leading to self-sustaining blueprints, specifically addressing insular Regions' challenges in building knowledge-based development and innovative policy approaches.

Four Islands Facing Common Challenges

IN.TRACK adopts a three level strategy applied to the individual level (single island), multi-regional level (four islands under study) and multi-regional level (inclusion of other European islands). Participants involved key regional stakeholders such universities, research organisations, local authorities, trade unions, chambers of commerce, business associations and society associations.

Regional status in terms of knowledge-based development

- As a first step the situations of each region under study was examined according to specific indication. In particular information on the regional economy (macro-economic data and trends), the industry fabric, and regional policy measures was gathered along with a series of specific indicators aimed at assessing the importance and significance of the knowledge-base underlying economic performance. The indicators were grouped under the following headings: information and communication technologies (ICT), intellectual capital, education, labour force, research and development, innovation within regional firms. The results show that despite the existence of structural gaps with respect to the mainland, the insular regions are catching-up and this is shown by the latest figures available.

In addition, a SWOT analysis was performed in each region in order to evaluate the regional context in which the development of the knowledge-based economy is shaped and planned.

Strengths - Research infrastructure, highly skilled personnel and attractive quality of life - The "strengths" side of the SWOT matrix reveals that Canaries, Sicily and Crete have a sound "R&D knowledge base" characterized by modern infrastructures, numerous research centers and institutes and dynamic universities. Furthermore, Sicily and Crete show close cooperation between universities and research centers and in Sicily also between research centres and companies. However,

it is worth noting that this strength is not fully exploited since the gap between research and industry exists and is widening. Research and technological development is rarely translated into innovative solutions to be adopted by businesses. As far as the skills and the level of educational attainment of the human resources is concerned, the Canaries, Crete and Sicily count on a pool of highly qualified personnel. This strength needs to be "handled with extreme care" in order to be able to retain the qualified personnel and avoid the threat of brain drain.

A key factor characterizing the four islands economy is the major role of the service sector, especially tourism. The life style and quality of life in these islands can attract skilled personnel from abroad, creating a virtuous circle and a large pool of capable and competent individuals, which is one of the key factors for the successful development of the knowledge-based economy.

An additional strength characterizing Sicily, Madeira and the Canary Islands is their autonomous status, which implies independence in regional policy formulation, availability of funds, strong sense of belonging and cultural pride of the population, and strong bargaining political power.

Weaknesses: Distance, structure of local economies, research-market needs links, lack of funds - All four regions, except for Sicily, face a strong structural weakness as they are far away from the main European markets. In addition, the business tissue is fragile. It is predominantly made-up of small dimension companies (micro-firms and SMEs), often family owned, operating in traditional low productivity sectors and frequently disconnected from the R&D public system. The lack of competitive capacity of the regional economies is due also to the limited capacity of mobilization and attraction of funds as an alternative to the EU funding and to the absence of financial instruments and mechanisms as alternative to the bank credit.

Opportunities: Regions' strategic positions, ICTs, funding and biodiversity - Despite distance from the mainland, all regions are geographically located in strategic positions, favouring the interconnection with other countries. This is perceived as an important opportunity not only for the access to new markets but also in terms of potential links and cooperation abroad.

Besides, all regions are developing and taking advantage of services associated with telecommunication and information technologies. The opportunities that ICT offers to the insular regions are two-fold: On the one hand, the emergence of new businesses, products and services and, on the other hand, the application of ICT to the "traditional" sectors like agriculture and tourism. Structural funds help foster research and innovation. Moreover, transferring the technology and the knowledge produced in the research centres to the agriculture and tourism sectors would further contribute to their reinforcement and revitalisation, thus increasing their competitiveness. The biodiversity of the regions is an asset that may attract many researchers from all over the world and increase the wide range of technological options in the islands. This is especially true for Madeira and the Canary Islands, which show a consider-

able policy orientation towards the exploitation of the environment and the tropical traditional products.

Threats: Brain drain, sector competition as well as environmental damages - Apart from the difficulties to finance innovation - especially for Canary Islands, Madeira and Sicily - brain drain is also a factor of serious concern for the regions - specially stressed by Sicily. The regions should not only devote all efforts to avoid brain drain, but also put in motion the necessary mechanisms - reverse brain drain policies - to attract qualified personnel.

The increasing competition in the tourism sector from neighbouring countries is a common threat amongst the four insular regions. Additionally, all the regions have mentioned environmental damages deriving from over-exploitation as a major risk to be taken into account. Increasing competition in agricultural products from low labour cost countries has also been detected over the past years. For this reason it is very important to revitalise the agricultural sector and compete on the basis of quality and variety of supply rather than price, utilising ICTs and through the transfer of knowledge and technology.

Scenarios for a Knowledge-based Economy in the Four Regions

The analysis of the current situation in the four regions according to the knowledge-based economy, created a series of possible scenarios for the year 2015.

The **CANARY ISLANDS** will focus on the implementation of an electronic based **integrated neuralgic centre of information and advanced services for SMEs**, connecting offer with demand and generating synergies of added value and economies of scale. Furthermore, **mixed public-private technological centres of excellence** will be established in the region. The policy instruments will optimise the available local legislation opportunities and will be based on the optimisation of **fiscal benefits** and the concentration of highly qualified **service support infrastructure and risk capital for start-ups**. The region will become a **factory of knowledge and design**, diversifying its economy from tourism, avoiding its current dependence, and becoming the main supplier of technology to Cape Verde, Africa and America.

CRETE's vision is based on the enhanced delivery of **high quality and differentiated products** and services in the agriculture, tourism and services sectors integrating the **knowledge** produced in the research centres of the island. The vision is centred on **attracting talents** from the Mediterranean countries, the Middle East, China and India as well as on fostering a **new cultural paradigm based on awareness, consciousness and tolerance**. Finally, the vision sees Crete to have an electronic based system for services and business life that will reduce bureaucracy.

MADEIRA's vision is based on "*Madeira as an Island of nature and a Continent of Innovation with highly skilled human resources*". The vision is built on the two important features: nature and innovation. The region wants to **match the opportunities** offered by the **domestic richness in terms of nature** and the **reinforcement of the educational and scientific achievement**. Another important feature of Madeira's vision is the **increase of the global level of innovation** for enabling the region to present new and value-added products. A strategic plan based on education and continuous training should be further developed in order to produce **highly skilled human capital**.

SICILY's vision is based on the goal of **exploiting knowledge** in order to become a more **competitive and dynamic region**. As outcomes of R&D investment will increase together with the number of new companies and "centres of excellence", investment in education will be enhanced both in quantity and quality and the **technical cooperation among companies, universities and local institutions will be strengthened**.

A Shared Vision for the Four Regions

The regional scenarios were then used as a reference to develop a shared vision in terms of knowledge-based development. This collective vision includes four main points, which are considered to be central for the vision of an insular region: The **diversification** of the economic activities in new areas and especially towards the direction of the information society; the **diffusion** of the innovation culture to the whole of the society; the **development of the social capital** of the regions; the focus on the **high quality of life** that the regions may offer.

Regional Development Based on Competitive Advantage and Social Participation

The common issues identified in the four regions are related to their structural conditions: biodiversity, geo-strategic position, isolation from main markets and environmental vulnerability. The fact of being members of the European Union allows a major availability of structural funds to build infrastructures for R&D, telecommunications and transport, which have increased the potential competitiveness of the regions analysed.

However, the persistence of low performance indicators related to the limited investment in R&D, the low number of qualified patents applied, the low number of spin-offs and start-ups, together with the adhesion of the new members of the European Union that will lead to a reduction in these funds, implies that a key challenge for the regions lies in the development of their differentiated capabilities in order to be able to compete in the global market.

In order to ensure a sustainable knowledge-based development, insular regions should focus on measures that guarantee continuous growth to overcome the **structural drawbacks** caused by the characteristics of being an insular region and that can be summarised in two approaches: the reinforcement of links between the private and the public sector to ensure the formation of a **cohesive local development system** capable to plan long-term commitments and goals and the promotion of a **cosmopolitan culture** within the region, fostering **international networking** and attraction of human/professional and financial resources.

Action Plans

An action plan for the implementation of the aspired scenario was then formulated for each region. These reports will allow policy makers to better identify and/or adjust the regions' strategic priorities and to make sound strategic decisions in the areas that are most critical for the creation of a knowledge-based economy i.e. institutions, education, information and innovation systems, development of key strategic sectors, technology development, legal framework and human resources development.

A precondition for this development is the establishment of a local research and innovation strategy mobilising all available resources and actors for operating subsequently in inter-regional networks. The innovative component is presented nevertheless in all action plans crossing them like a thread.

However, the action plans cover only one dimension of the framework of a knowledge-based economy. A second dimension, especially stressed by the stakeholders of Crete, deals with the **participation and awareness of the public in order to enjoy the benefits from these activities in the way of life**. The purpose of all these activities is the wealth of the citizens, yet, **if the results do not get disseminated, they will not be successful in the long-term**. The demonstration of effective approaches to innovation - by involving citizens and industry in the debate on technological choices - is a key issue.

Regarding governmental aspects, multi-level governance of associational and stakeholder interests has to be initialised in order to achieve a strong policy support for innovators, an enhanced budget for research, a policy leadership led by the regions' visions and a global positioning of local assets. Universities, research institutes as well as professional consultancies have to be involved in the structural improvement process so as to establish a knowledge-based infrastructure.

Pursuing the shared vision

The collective vision is the foreground for the development of a pilot action that is implemented by the four insular regions during the period January 2006-June 2007. The pilot action foresees the creation of an inter-regional network, its core made up of the four IN.TRACK partners. The purpose is to seek opportunities for further collaboration mainly by submitting proposals under the 7th Framework Programme. Several proposals were submitted out of which one was successful under the Regions of Knowledge programme. The network of the four core partners is expanded depending on the needs of each call for proposals.

IN.TRACK partners have expressed their willingness to transform this initiative into a successful and longstanding experience based on interregional cooperation and networking among insular regions and participatory consensus-based approaches in policy formulation.

Sources and References

Documents available at <http://www.intrack.org>

About the EFMN: Policy Professionals dealing with RTD, Innovation and Economic Development increasingly recognize a need to base decisions on broadly based participative processes of deliberation and consultation with stakeholders. One of the most important tools they apply is FORESIGHT. The EFMN or European Foresight Monitoring Network supports policy professionals by monitoring and analyzing Foresight activities in the European Union, its neighbours and the world. The EFMN helps those involved in policy development to stay up to date on current practice in Foresight. It helps them to tap into a network of know-how and experience on issues related to the day to day design, management and execution of Foresight and Foresight related processes.