



European Union
European Regional Development Fund



Final Peer Review Report

Western Greece



SMART Europe
Final, In-Depth Assessment Report
Western Greece

Summary

The Smart Europe peer review in Western Greece was focused on the role of the region in supporting research development and innovation in its territory and bridging the gap between the private and the public in the field. Peers found that the region's research institutions, its international networks, young talents and inspiring role models were strong assets that could help the region take advantage of opportunities like the recent political decentralisation, the opportunities arising from the crisis and the new EU-funding period. They recommended therefore to focus on the operational level, increase cooperation between the different stakeholders and foster an entrepreneurial spirit in the region.

Section 0: Introduction

(a) Short introduction to the SMART Europe Project

SMART Europe is based on the concept that smart and targeted regional policies and interventions can be designed to boost the employment directly in the regional innovation-based sectors.

With this aim, a consortium of 13 partners, representing 11 EU regions, will exchange policies and instruments for identifying and supporting the main regional economic actors that can generate job opportunities in the innovation based sectors of their economy.

SMART Europe will support decision makers to improve their strategies with the aim of incorporating the creation of employment as an additional key feature of their activities.

(b) Short introduction to the Peer Review methodology

SMART Europe Peer Review Methodology helps regions to improve their policies in boosting employment in the sector of their “innovation anchor”.

The SMART Europe Peer Review Methodology is an adaptation of the peer review methodology of the Assembly of European Regions (AER), developed directly to use it during the SMART Europe project, when assessing different regions' innovation anchors. The methodology standardises the relevant aspects that need to be measured, in order to enable experts with different background, to assess the regional situation in an objective way. By this, they will be able to give appropriate recommendations on the field of innovation-based job creation in the host region. The other important advantage of peer reviews is the selection of experts, who are practitioners in the field of the assessment, which means that the recommendations given by them after the review will be practical and realistic.

Section 1: Overview

(a) Short description of the Host Region, general overview, economic profile.

Geography & Demography – The administrative region of Western Greece is a coastal area in the West of Greece with access to the Ionian Sea. Geographically, it is 11,350 km² large and it hosts a population of around 742,000 inhabitants in 2012. Its biggest city is its capital Patras with around 187,000 inhabitants in 2009.

General Economic Figures – Western Greece is the second poorest region of Greece, the region of Ipeiros being at the bottom. Western Greece's regional income per capita was an average of 15 100 EUR against 19 095 EUR at national level. In its economic structure, the primary sector (agriculture and fishery) plays a significant role where Western Greece produces around 54 percent of its regional GDP. 91,4 percent of employees in the region work for SMEs, 8,5per cent are employed by the public sector and only a marginal 0,01 percent work for big companies. The regional unemployment rate from 2007 to 2011 was between 8,7 and 19,6 percent. Since 2009 this rate is below the national rate.

Technology & Innovation – Western Greece is strong in technology & innovation, enjoying the presence of several public and private institutions. It comprises 4 universities, 7 research centres, 2 incubators and 2 clusters. Most importantly, the Innovation & Technology Office (ITTO) of the University of Patras (UP) fosters the transfer of technologies from the public to the private sector. More institutions contribute to an attractive infrastructure designed to support innovation, notably the Institute of Chemical Engineering & High Temperature Chemical Processes, the Patras Science Park and Patras Innohub (part of the Corallia cluster initiative), and the Achaia Chamber of Commerce and Industry. A cluster in microelectronics receives private investment despite a challenging overall economic setting.

Tourism – Tourism is one of Western Greece's specialisation. Among Petras' main tourist attractions are both historical monuments as well as infrastructural sites. The most famous are the Saint Andrew's Church Patras, the Patras Castle, the Archeological museum, the Rio Antirio Bridge, the Ancient Odeum, the Municipal Theater Apollon, the Achaia Clauss Wine Factory, and the Riga Fereou pedestrian area.

Problems – As weakness, Western Greece suffers from a lack of investment capital, which has hindered job creation in the past. Slow bureaucratic procedures and institutional capacity gaps impede on its regional innovation system, which is considered as rather weak. SMEs in particular have been victims of the crisis. It has been difficult to build up sustainable businesses in the region that could channel international cooperation.

Measures – Western Greece is establishing a regional innovation system, based on more and smarter investment, the dissemination of new technologies and promotion of entrepreneurship. Structural funds have been used in a centralised, national way, but there have been yet insufficient resources provided to boost regional innovation policy.

Moreover, the state aid character of investment has been a point of discussion. A 13,4 percent of Greece's RTDI funding is dedicated to Western Greece.

(b) Description of Peer Review focus (why it was chosen, specific questions and expected outputs of the Host Region)

Hypothesis

In SMART Europe, the Peer Review process kicks off through the establishment by the host region of its main innovation drivers: in Western Greece, it focused on « Establishing financial support for the creation and growth of Greek New Technology Firms (GNTBF's) in the Region of Western Greece ». The overall objective was to create jobs and to drive technology innovation forward, mostly through support for private SMEs. This focus was chosen both because of the overall economic framework generated by the financial crisis, as well as the region's specific economic structure.

Greece received an economic blow by the financial crisis. The overall economic conditions are currently not favourable to investment and require concerted action to improve the relevant conditions. Therefore, the region suffers from lack of investment, as donors prove hesitant to provide capital. In this context, enhancing the support for access to and use of capital is crucial to Western Greece.

Western Greece's regional economy hosts a cluster in microelectronics, which receives large scale private investment. Furthermore, strong research activity by the regional university and research institute deliver innovation. Overall, there is a good infrastructure for new business and a strong entrepreneurial culture. In this context, it is vital to strengthen the private sector, in the form of SMEs, relevant for the field of technology and innovation.

Questions

The region asked peers to give them advice on how to **design and develop regional policies**, in order to **boost RTDI entrepreneurial activities**. More specifically, **the gap between the public and private sector needs to be bridged** with respect to **project deliveries** and the undertaking of **common initiatives**.

Section 2: Regional Strategy

(a) Key Findings

➤ *Job creation appearing in strategy*

The Smart Specialisation Strategy is well formulated and concentrates on the strengths of the region, addressing job creation as well. The definition of the strategy does not however take sufficient advantage of the potential of the youth potential in the region. The Region of Western Greece is faced by a series of challenges described both in the SWOT-analysis of the peer team and in the RIS3 Regional Assessment of Western Greece. These problems have led to high unemployment rates, especially among young people.

➤ *Innovation appearing in strategy*

The Smart specialisation strategy is focused on innovation but is based on a narrow definition of innovation, innovation indeed happens everywhere. Innovation is rather weak in the Region of Western Greece due to low overall investments in R&D and few innovation applications in the private sector. A positive aspect is the fact that the University of Patras, despite the lack of means for research, holds up a high standard of scientific education and research and that a number of research institutes are situated near the university and Patras Science Park. This creates an ecosystem with high potential.

➤ *The city of Patras in strategy*

The city of Patras presents a number of promising opportunities, which may be further developed in the smart specialisation strategy:

- The three harbours (old harbour in the city centre, marine harbour for sailors and tourists, and the new harbour for large roll-on/roll-off ships and cruise ships) are located very well for transport to other European harbours, especially to and from Italy. They have growing potential.
- There is a number of very interesting remains of the old Greek times in the neighbourhood of Patras (Olympia, Nafpactos, Delphi) and in the city of Patras. Tourism may benefit.
- Patras is a city with a students- and tourists-friendly atmosphere; it is a young city with large shopping areas, a wide range of cafés and bars, and a beautiful boulevard with a good sea view. These contribute to creating a good living environment and can attract skilled workers and companies in the region.

(b) Recommendations

- *The infrastructure of Western Greece needs investment. The improvement of the road from Patras to Athens should be given high priority.*

The harbours of Patras, businesses and tourism in the region need to be connected to the main road infrastructure of Greece. At this moment, the infrastructure is very poor, which is frustrating for businesses and entrepreneurs wanting to invest in the region. A better infrastructure would boost the economy. Better railway connection to Athens and a more developed regional airport would be an asset for the economy.

- *The regional smart specialisation strategy is a good approach for the Region of Western Greece*

With the smart specialisation strategy, the Region of Western Greece can give priority to the projects that are most needed by local people and businesses. There is a lot of frustration about the projects that were supported at national level in the past decades. The need for increased subsidiarity is obvious and the new territorial organisation should allow for higher adequacy between policies and regional needs as well as higher efficiency of regional policies. Interregional cooperation can moreover help the region strengthen their position in relationship to the central government and at international level.

- *Make a concrete and widely accepted plan for the regional development of Western Greece*

Once the expected new European funds are available for the region, it is crucial to specify objectives and define concrete operational tools and a plan to implement the strategy. It is equally important to ensure that there is enough capacity with different stakeholders for the implementation of the plan. Execution matters, logistics should therefore be valued. Results should be monitored and the plan should be improved and adjusted regularly. Use and involve young people for inspiration and ideas in defining objectives and tools to improve the region.

- *Take advantage of the European funds but don't be too dependent on them.*

Never waste a good crisis! The financial and economic crisis has severely hit most countries of the European Union, and is therefore not only a Greek challenge.

Local businesses and business initiatives must be able to benefit from the European Funds, which will be made available for the Smart Specialisation Strategy to improve their production and to support the development of new products. In order to avoid a

subsidy-driven market it may be better to use subsidies only for a limited number of high-risk (but promising) business projects. For other projects, revolving funds (sharings and loans) are advised.

- *Strengthen the SMEs in the region by cluster development*

The Region of Western Greece has few large companies and few multinationals. SMEs are the backbone of the regional economy. SMEs can be supported by organising a number of promising clusters of SMEs and connect them with researchers from the local institutes and the University of Patras who can offer very useful help and support for innovation.

- *Bridge the gap between agriculture and research*

Agricultural production can integrate innovation at different levels (crops, irrigation, logistics and distribution, storage, transformation...). There is currently a gap between the agricultural research conducted in the region and the way agriculture is actually carried out by regional farmers. This gap should be bridged in order to bring more innovation in the sector.

- *Widen the scope of action for emergence and diffusion of innovation: involve secondary schools and polytechnics*

Only a few young people can get a regular job at the moment, all others must try to make their own job by creating a business. That is a trend in many European countries. Education of young people is well organised in the Western Region. Many young people feel the need to work abroad, because jobs perspectives in the region itself are limited. When students of polytechnics and secondary schools are more involved in innovation and science, they may be able to make their own businesses with the results of inventions.

- *Develop a unique Patras model on the role of incubators and science parks*

Smart Specialisation Strategy of the region can be improved if the University of Patras, Patras Science Park and the local research institutes work together and facilitate research to get closer to the market. Maybe an innovation agency could be installed to give guidance to this development. In this innovation agency exchange of knowledge about recent research and market possibilities could take place. Maybe create a special prize for both the most innovative and best commercial initiative could be developed.

- *Ensure that there is a co-ordinated strategy to utilise optimally the developed broadband infrastructure*

Co-operation of all parties is instrumental in achieving optimal functioning of the broadband infrastructure and get a return on investment.

Good practice n°1: developing a place based innovation strategy with entrepreneurship at its core, Languedoc Roussillon (FR)

The region carries out extensive activities in the field of research and development, has an incubator that was labelled the best world incubator by the NBIA in 2007, a new tech transfert company, AxLR with 45M€ for 10 years, a regional Incubator, which saw the creation of 150 companies in 12 years and 850 jobs, was awarded the 3rd national rank for innovative companies and has the 2nd highest regional rate of companies created annually and was the 1st Region in France to use JEREMIE funds.

It is however faced with a number of problems to solve such as low private R&D, small companies with too much low tech activities, a national administration not dedicated enough to entrepreneurship and a culture of science -not innovation- in the academic sector. The analysis and mapping of the regional economy, lead to the conclusion that entrepreneurship was the common denominator. The region therefore developed a place based regional innovation strategy articulated around entrepreneurship and innovation.

Section 3: Education and Human Resources

(a) Key Findings

➤ Connection between universities and the business environment

Cuts imposed by the Government affect the Greek universities, many of which are being forced to close for lack of funds and personnel, even if they provide a high standard of research, a high number of publications and operate in a specific field of expertise like the University of Patras (which is a competitive advantage), e.g. chemistry, high tech, IT. Because of the crisis, public funds appointed to the University to conduct basic research are often devolved to cover the cost of services required to structure.

Research goes from University to companies, for example, through:

- University of Patras (over 30000 students, 24 departments)
- Hellenic Open University, providing even distance learning
- Institute of Chemical Engineering
- Computer Technology Institute
- Industrial Institute
- Patras Science park
- Patras Innohub

Students are good in natural sciences, engineering, learning sciences, medicine, sociology and these strengths are, together with experience, competence and ambition, “*the strongest weapons in order to survive in Western Greece today*” (by Alex Maniatis, Nanoradio – Samsung).

➤ *Instruments to support reconversion and lifelong learning*

The National Ministry implements reconversion and lifelong learning. It is becoming more and more strategic in the field of education to provide support for life-long learning addressed to citizens in rural areas, creation of school digital platforms and open multilingual platform.

Finding new educational pathways could be also a good alternative for farmers to be reconverted in high-level professionals or businessmen for when the economic crisis will be over. Vocational schools are not very widespread, as most students believed that the education deriving from the university is “more specific” to find a job than what they would get through vocational schools.

➤ *Job demand and supply related to the regional market*

Even if the percentage of young people who participate in educational and training courses has grown (major results of the economic crisis!), 1 out of 2 employee has a moderate level of education; those with higher education are only 29%. However, since the elections will only take place next year, at this time the strategy is unclear, so it is not possible to identify the real society and business needs, especially with regard to the training paths.

➤ *Measures to limit the out-migration of the necessary workforce of the regional territory*

Brain drain of young scientists to other Regions and Countries is one of the main critical issues to face. Yet, thanks to the priority given to the agricultural sector by the new Regional Strategic Plan, young people are moving back to Western Greece, so the Entrepreneurship culture is rising even within the young generation and it is therefore necessary to find educational tools to support the spreading of this culture, trying to capitalise knowledge and expertise in order to boost employment.

➤ *Gender opportunities policy regarding employment*

The rate of regional female unemployment in the Region is 57,5 percent. The strong demand for specific skills and the lack of a multidisciplinary approach do not attract so effectively women, keeping them away from the profiles required by companies.

In addition, governmental funds for women entrepreneurs are not so frequent.

(b) Recommendations

Adopt proven models of bottom up entrepreneurial activities

The direction is to work on human resources within the companies in order to share company's mission and be proactive, encouraging a model of shared leadership.

Promote competition for students

Young students need to be proactive and add their spirit to what they receive from the University, trying to go closer to the industry, instead of choosing an academic career. Improve the pro-active attitude by promoting competition between students and by looking at failures as an opportunity to emphasize the idea, not the results.

Expand the problem solving programme that exists in University and explore co-creation support tools

The importance of combining technical expertise with practical spirit, focusing on the ability to design alternatives, would ensure a more proactive approach to face possible errors/problems. In this sense a co-creative environment could inspire brainstorming and good practices sharing.

This recommendation could be put into practice by taking inspiration from the good practice “Demola of New Factory” (Tampere Region), where multidisciplinary teams of university students, in collaboration with companies, produce demonstrations of new products, services and social practices, and gain the ownership of IPR that makes entrepreneurship possible. The objective of Demola is to boost a multidisciplinary, agile innovation culture and encourage entrepreneurship in the Tampere Region. University students from three regional universities can develop product and service demo concepts together with companies and create new solutions to real-life problems.

Integrate students from polytechnics

The competitive strength of a country is focused on the ability to attract human capital and innovative companies and the capacity to generate new ideas, new knowledge and new technologies. The number and strength of the innovation hubs in a country will decide its luck or decline. The countries with a high percentage of workers with a higher education will become the new centres for the production of ideas, knowledge and value and will be the winning ones. Therefore, it is important for the companies to invest in research and innovation as a new element of competitiveness of the economic system, contributing to the educational process of training young talents for the industry and nation. The university itself must facilitate the awareness of the opportunities that the University offers to local companies (territory) to the companies and the institutions

acting on the territory, as means of dissemination of scientific knowledge (technology) and qualified human resources (talents).

For the companies benefiting of the possibility to integrate university students within their own organization for a period of the year offers the opportunity to integrate and develop innovative projects.

Thanks to the possibility to receive support in the definition of an industrial research project and the possibility to avail themselves of the university research laboratories, the company will be able to develop specific research and exploit the know-how to build a lasting competitive advantage, based on the innovation of product, process and organization (e. g. Tentura Castro).

- *Get out of the University, support cross-sector contamination with events and common projects for students*

Valuable initiatives supporting innovation and entrepreneurship: university initiatives encourage students to finish their studies within an enterprise ("practical entrepreneurship"), set up a career office and alumni network, to promote their research and find new funding.

To support companies in the development of innovative projects, it could be useful to implement initiatives aimed at creating opportunities for direct matchmaking between research and business. In particular, this offers the opportunity for individual entrepreneurs and company managers to approach specific groups of researchers with whom to build collaborative projects.

For example, the methodology successfully implemented by the Province of Bologna, Aster and CNA for this type of initiative is a new dissemination method, effective and direct, overtaking the formalisms that can hinder the dialogue among the leaders of the two sides, research and business.

Taking advantage of the points of view of both sides, the exchange of experiences feeds on continuous stimuli and thus enriches itself. The opinions generate a virtuous circle bringing into question the points of view and guiding towards the research of problems solutions.

- *Foster the entrepreneurial spirit via acceptance of failure, summer schools, projects in curricula*

Foster entrepreneurial projects according to an "idea" for instance and not to the "final results", trying to think to failure/crisis as an opportunity, not as "dead meat". Increasing educational tools to integrate the curricula (example of the problem solving experience in a company that was included in the curriculum at the IT department) could help in boosting the entrepreneurial spirit.

■ *Incentives for researchers to become entrepreneurs (chemical engineering centre)*

The strong orientation towards technical disciplines prepares students to be ready for the business environment, but the lack of education “in teaching” entrepreneurial culture and of risk taking, does not allow students to be self-sufficient for their own business. Furthermore, the attention to the ICT and high-tech sectors has many positive effects due to the cross-sector strength: high-paid jobs and many jobs opportunities in different sectors.

■ *Further use of ICT-based solutions for education*

The Region of Western Greece should claim optical fibre to be ruled by the region, in order to further promote digital services, digital structures and networking. E-learning solutions, for example, especially aimed at the rural areas of the region, could help education become more and more approachable. Distance learning and projects like “digital school platforms” and “virtual language learning” (CTI) could also help in tackling the digital divide. It is also necessary to realize special educational programmes for teachers allowing them to be updated on new technologies in order to integrate them into the study pathways.

Good practice n°2: EJE/EME Project education in school, Murcia (ES)

This good practice is mentioned in the best practice guidebook of the YES –Youth Entrepreneurship Strategies- INTERREG IVC project in which the Assembly of European Regions took part.

Promoting entrepreneurship in primary and secondary education with a strong interregional dimension and emphasis on skills development.

The projects provide a methodology based on practical hands-on experience where students have the opportunity to display a wide array of social, personal and business skills. This helps students to develop a more entrepreneurial approach to life, learning the basics of business start-up, and gaining a deeper understanding of European citizenship.

The EJE project offers secondary-level students (15-18 years old) the chance to develop, in a real context, skills and attitudes, such as own-initiative, decision-making, creativity and teamwork. At the same time they become familiar with basic concepts regarding the creation and management of businesses and companies. Additionally, students have the chance to learn about and come into contact with institutions, entities and companies in their local areas. The EME project offers primary-level students (9-13 years old) the opportunity to develop collaboration, coordination, overcoming conflict and problem-solving skills. These skills will be fulfilled by developing and acquiring behaviour patterns in work-oriented relationships, identification and understanding of project

implementation and business creation.

Throughout the courses students will start-up a company by designing a corporate image, as well as seeking sources of funding, negotiating, delivering and receiving orders, analyse results and closing the company.

Contact person: Inmaculada Moreno Inmaculada.moreno2@carm.es

Good practice n°3: inclusive promotion of entrepreneurship, Wallonia (BE)

Wallonia (through its Economic Stimulation Agency) has developed a whole range of programs in order to promote and foster entrepreneurship among children, from kindergarten to high-school and beyond. When these programs have been thought out, the **gender aspect has been thoroughly mainstreamed**. Every year, around 15 000 young people (of which 50% are girls) are targeted by these programs, as well as numerous teachers. **Awareness-raising agents have started in 2009 to visit schools and meet up with teachers and classes. They provide them with a variety of educational tools, such as:**

- a guide to entrepreneurial learning that develops a methodology incorporating the Spirit of Enterprise in class;
- an educational guide describing how to set up a business;
- a comic-book for younger students – called “**Antoine and Laura set up their own business**”;
- over 21 classroom activities (role plays, try-outs on a small scale, etc...) for which the Economic Stimulation Agency teams up with accredited operators (such as “**jentreprends@school**”, “**Cap’ten**”, “**école et entreprise**”, “**club des étudiants entrepreneurs**”,...).

All in all these activities help to foster entrepreneurial attitudes among young people of both sexes and focus on teaching action in action (using role plays, etc...)”.

Contact person: Stéphane Cools s.cools@wbi.be

Section 4: Innovative Environment

(a) Key Findings

In order to accelerate **the transition from a traditional economy to a sustainable innovative economy**, all key-players in the field would benefit from training in entrepreneurial capabilities to be outreaching, and seek and see opportunities outside the field in which they generally evolve. In any case it is important to not replace a top-down rigid public structure by a new one, after all: “change is the new stability”.

- *Identification of the innovation anchor*

The University of Patras (UP) can be identified as a key innovation anchor institution of Western Greece. Founded in 1964, the university has developed into a multidisciplinary knowledge creation powerhouse of the region, currently hosting 24 departments and around 30 000 students. The University of Patras (UP) is the third largest in Greece. It was originally purely focused on technology. Since 10 years, it also has departments for humanities and a school of Business Administration. In terms of research excellence UP is rather well positioned in the national and European university rankings. It owns patents, has excellent international connections and has in particular a co-operation with the Catholic University of Leuven (Belgium) on the topic of entrepreneurship and business development.

The major academic strengths of the University of Patras lie in the domains of science and engineering, where it has the longest history of research and education. Especially strong areas of the University seem to be

- Bio-medicine and Bio-engineering
- Environment and Sustainable Development
- Information and Communications Technology
- New Materials and Constructions.

In addition to its scientific excellence, the UP has developed interesting models to enrich the interaction with surrounding society and business life. The most mature and successful of these initiatives seem to be the university research networks. These networks are operating since 2009 with an objective to intensify cooperation with industry, private and public organisations. A total of 37 Intra-University Research Networks have been established and almost all of them are very active. 16 of the networks are coming from the Engineering School, 10 from School of Medicine and 9 from School of Natural Sciences.

UP has been particularly successful in applying and utilising different kinds of EU funding in its operations. At the moment, EU funding equals with national budget funding at the level of 14 Million Euros. On the other hand private funding for research plays only a minor part in total funding (3 Mill €), which represents some weakness in university-business relations, despite the various initiatives in the field.

We can conclude that in addition to UP the institutional and personal network of innovation anchors creates the foundation of the regional innovation system.

➤ *Role of intermediary organisations in fostering innovation in the territory*

Patras has a well well-developed network of intermediary organisations providing facilities, business creation and incubation services, and clustering and networking opportunities for companies, entrepreneurs, researchers and other talent. The most active of them are the specialized research institutions, Patras Science Park and Patras

Innohub (part of the Corallia cluster initiative). All the players have a good market approval for their services. They also demonstrated a good degree of professional experience and innovative mindset.

The network of intermediaries has developed over time in several phases and it reflects the variation of policy priorities and organisational strategies. Currently, the roles, responsibilities and related resources of different players seem to be a bit fuzzy and under discussion and restructuring. No region-wide coherent view of the business development flow or the innovation service chain, integrating the activities on different players, was presented. The different players seem to have their own strategic objectives and priorities with no identifiable mechanism of coordination and integration in place at the moment.

There is no clear evidence, how the various intermediaries have been able to add value, in addition to the physical operational environment, to the entrepreneurial and business development process of spin-offs and start-ups. Also, no evidence was presented about the total investment in intermediaries, services and clusters and the value that they have been able to provide for regional innovation ecosystem.

➤ *Existence of innovative/spin-off companies that generate jobs*

The region has been able to create a number of very interesting examples of spin-offs, start-ups and attracts foreign investment. Although the number of start-ups and people employed by them is still limited, the cases represent the potential how the scientific and high-tech capabilities of the region may be capitalised.

➤ *Knowledge providers network with companies*

▪ *University of Patras (UP)*

There is a technology transfer office and an innovation promotion office at UP (ITTO). So far the operations and outcomes of these offices are rather limited due to the small amount of personnel and other resources. There also seems to be some overlapping activities between the various innovation promotion offices. It is a positive signal that the UP is planning to restructure those in the near future.

UP collaborates intensively with other R&D organisations of the region. Close collaboration is demonstrated e.g. by the extensive sharing of human resources. The collaboration has also positively contributed in several spin-offs utilising the results and know-how created in joint projects.

▪ *Computer technology Institute (CTI)*

A non-profit organisation, located closely to UP because of the skilful people there, originally focused on research. Forced to make a transition in 2011. Since then they create, produce and disseminate study books and became 'market leader' in this area in Greece. Being forced to steer away from / expand their core business, probably made CTI act entrepreneurial and receptive to innovation,

viewing the world through a 'market opportunities' lens (follow the money). CTI explicitly tries to connect to the local economy through e.g. Interreg projects, invest e.g. in good relations with Patras Science Park. In the framework of a Mediterranean partnership, Technopolis, the CTI has a virtual office for start-up support. The intention is to continue activities after the project ends, and turn it into an e-service. This office helps people to submit proposals for calls, offers database access, organises seminars, and B2B meetings for the business partners, a 60 ECTS, (free of charge for SMEs, partly digital, "petit entrepreneurs' programme for participants from all Mediterranean partners, with real entrepreneurs as teachers.

It is noted that CTI developed entrepreneurship activities and secured purely European project-funding for its activities. None of the companies visited mentioned the services CTI offered. Cooperation with European partners may be a pre-condition for acquiring funding. However, CTI runs the risk of losing its research focus because of a too strong focus on 'following the money', although with the best intentions in mind.

➤ *Data management*

There seems to be a whole lot of data available about the region. The question is to what extent these data are produced for national planning or to serve the needs at regional and municipal levels. E.g. Monitoring by IMA will have to take place through KPI but choosing (and agreeing between partners) the right KPI's is a challenge.

➤ *Innovation culture*

The culture is permeated by risk averseness. Fear of failure hinders both start-ups (and possible suppliers, and potential staff) and investors, to get involved with the higher risk category of start-up businesses. Risk avoidance makes investors want to have too much 'control' via a big share in companies for instance, which start-up entrepreneurs – understandably – do not want. At the same time, it was said that today "it's no longer a crime to be entrepreneur."

Instead, the region is proud of its direct investments from multinationals, which come to this region because of its research potential and lower costs (e.g. salaries!) rather than Athens. Being a FDI company has a disadvantage that was mentioned by one of the companies: their headquarters determine and execute the marketing strategy. Another (no FDI) company mentioned doing its sales from a US subsidiary. This was explained as a necessity because of unfavourable VAT tax arrangements for its products. This implies the company has less or no means to increase visibility in the region.

In addition: sometimes not having your own marketing and sales organisation is a problem for calls requirements. These companies have an additional need for networking events.

Synergies between the University, the Region and Clusters

Synergies exist between a number of companies and the innovation system, however the fit between the specialisation of the university, the region and the cluster is not always obvious.

There are three innovation clusters in the Western Greece Region: Nano/Microelectronics since 20 years, ICT, and space technology. Apart from Microelectronics, superficially there is no fit with the Western Greece regional image. The number of companies involved is unclear.

(b) Recommendations

Enhance public-private co-operation

Universities have been recognised as motors for (radical) Innovation, and as such for the creation of start-ups and jobs (refs). Scientific research provides a basis for innovation through spin-offs. However, in Greece, like in many countries starting your own company was -and in some still is- not the traditional follow-up to a university study. Having a sound career at a multinational or in a government position has been the most wanted route after finishing a university education, apart from pursuing a career as a scientist at university. University students themselves need to be aware of the option of becoming an entrepreneur. Of equal importance is that the environment needs to be sensitised also in favour of entrepreneurial careers.

The Regional Authority and IMA are advised to explicitly acknowledge the special role of the University of Patras and the Technology Institutes as drivers in the regional development process. They are included in the RIS3 Regional Assessment on Western Greece as stakeholders, equal to the public, private and intermediary organisations. It is promising that in the report (3.3) is explicitly stated that they ask to be involved and ask for an explicit partnership to reinforce their role. It is positive that stakeholders acknowledge “a need for development scenarios based on innovation and skills [...] and the creation of strong technological advantages.” This materialises also via entrepreneurs setting up spin-offs that rapidly need university trained staff to increase capacity for technology absorption through well-trained staff.

Support and develop knowledge providers

It is recommended that the Regional authorities offer financial support to both the university and the companies (with input from interested students) to develop, realise and maintain additional, specialised training programs. This will also help to establish connections at different levels between the UP and companies.

CTI

It is recommended that CTI interacts with its counterpart at UP and focuses on developing the e-support system. It is close to its (original) core expertise. It should also try to obtain a position in the power play / inertia concerning broadband connections for the region.

➤ *Intermediary Parties*

In general: investigate how a better fit between public and private levels can be arranged.

To start with, organise and formalise a good working structure between the key-players (in terms of influence on the money streams) RA and IMA (Chamber of Commerce, PSP...).

At the meeting of stakeholders on August 29 2102, the foundations for the new realities were laid, it says in the RIS 3 report. Hopefully this meeting has since been followed up by regular and organized institutional contacts between the stakeholders. Cooperation requires first and foremost knowing of each other, getting to know each other and building trust. This is a necessary but not sufficient condition to set in motion a culture change towards sectoral and cross-sectoral cooperation rather than competition. This needs to be organised and fostered for a long time, over and over again. Be aware that having a good ICT infrastructure will help to be visible and exchange information, but in itself will not bring about interaction and cooperation.

➤ *Data Management*

It could be a recommendation to start a joint project (knowledge providers, intermediaries, businesses) for further analysing the data available, to fit the needs of target groups at regional and municipal levels and broadly share these analyses (and not so much continuing to 'produce' more data.)

➤ *Innovation Culture*

Rather than risking the loss of an entire generation of highly educated youth – the window of opportunity for building a career is not open forever – risk investing in their riskier endeavours: starting up new business.

There are tax incentives for appointing youth and for starting innovative companies. Partly use this to work on the image and 'branding' of entrepreneurship as a career option. One of the companies demonstrated a multiplier effect of going bankrupt, in that it resulted in 7 new start-ups by staff members that had lost their jobs, who had grown substantially since. This offers a new perspective on 'failure'. (Or, as Greek mythology has it, the Phoenix is reborn from its own ashes again and again). Spread this story and work on the image of 'failed' entrepreneurs' to become heroes.

Rather than running the risk of “a quick loss” of FDI investments in times of economic distress, actively make use of brain gain from the Greek diaspora. Track potential and/or successful entrepreneurs and businessmen abroad, who have a link to the region, and offer incentives for their return. If they bring or found companies to the region, at least they will feel some pressure to stay on when times get rough.

Tax-regimes, requirements for calls for proposals, etc. for start-ups and innovative companies are not a ‘small version’ of the corporate predecessors. They have a logic of their own that should be understood by the issuing organisations.

■ *Cluster development*

Allocate sub-budgets to the parties cooperating in the three clusters. Presuming that the parties in the cluster have (or seek) the expert knowledge of the technologies at stake, innovation processes and financing of innovation, and have influence.

■ *Develop youth and female Entrepreneurship & Innovation*

Collect data on the presence of female talent and consider special attention for female entrepreneurship. There must be plenty of capacity slack in buildings (near the city centre of Patras, in the old harbour are a number of old empty buildings) and laid-off people. Use overcapacity in buildings, add a few facilities (central coffee machine!) to stimulate the creation of ‘hotspots’ for people to get together and experiment. These places offer a great opportunity to create a place for young jobless people. If the buildings are somewhat improved and desks with internet (WiFi) are installed, young people can be given an opportunity to organise their own businesses and learn from each other and inspire one another - a creative breeding place for new businesses.

Good practice n°4: The ASTER High Technology Network, Bologna (IT)

ASTER is the consortium among the Emilia-Romagna Regional Government, the six Universities, the National Research Centres located in the region - the National Research Council (CNR) and the Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA) - the Regional Union of Chambers of Commerce and the regional Entrepreneurial Associations. The consortium was established with the aim to sustain, coordinate and valorise research and technology transfer throughout the territory.

The High Technology Network represents a tested practice that, after more than 5 years of on the field application, obtained high-level results in Emilia-Romagna. The strategy is implemented through the setting up of Technopoles and Thematic Platforms.

Technopoles are infrastructures dedicated to host and promote activities, services and facilities for industrial research, experimental development and technology transfer.

The laboratories and research centers of the Technopoles are organized in the following *Thematic Platforms*:

- Agrofood Platform
- Mechanic and Materials Platform
- Building and Construction Platform
- ICT and Design Platform
- Environment, Sustainable Development and Energy Platform
- Life and Health Sciences Platform

The main objective is to reduce the gap between demand and supply of research, simplifying connections and relationships and supporting collaborations. ASTER supports the system of research centres, companies and laboratories with a potential to develop collaborations and relationships, offering together with the Business Associations, a full range of joint services with high added value.

From an operative point of view, there is one Steering Committee per Thematic Platform, which meets every 3 months. The members of the SC are Companies (large companies and SMEs) Representatives and Researchers/Professors. They meet to present and discuss the respective needs and to find common solutions, following a win-win approach. ASTER is in charge of the coordination and of the connection between the expressed exigencies and the regional policies.

The thematic platforms are an effective way of mapping the Research competencies existing in the regional contest; an easy way to make the patrimony of knowledge available to the economic and productive system. For this reason, an online *Catalogue of the Regional Public Research* was published and is constantly updated (http://www.aster.it/tiki-index.php?page=Catalogo_en).

Section 5: Partnerships

(a) Key Findings

There is a range of innovation stakeholders both public and private. Unfortunately the observation is that the interaction between the stakeholders is not always organised in the best possible way and the different stakeholders of the innovation ecosystem tend to cooperate little together. At international level partnership exist and are very impressive. The current financial crisis and the incurred cuts in state funding obliged different stakeholders to look after EU funds, and compete between themselves for EU financing possibilities, instead of cooperation. High reliance on EU funds leads to a fragmentation and distract the organisations from their core competence and from cooperation with other stakeholders within the region.

➤ *Regional Government*

From 1 January 2011, in accordance with the Kallikratis plan (Law 3852/2010), the administrative system of Greece was drastically changed. One of the outcomes of the reform of the administrative system is that the Western Greece region Administration' (not appointed by the Greece government as previous, but elected every 5 years) powers and authority were redefined and extended. The Regional Authority is in charge of budget allocation within the region and creation of Smart specialisation strategy. For that purpose Regional Authority held several meetings with stakeholders, to collect their opinions about new strategy. The peer observation team saw there was indeed a collaboration between the Regional Authorities and innovation stakeholders. During the peer review all of the interviewers mentioned about their partnership with Regional Authorities.

The Intermediary Management Authority (IMA) presides over 3 regions: Ionia, Peloponnesian and Western Greece, which include 12 counties, 52 municipalities, 1,5 Mio people, 14 percent of the national population (on 22 percent of space), and have no common identity, Ionia: tourism, Peloponnesian: food, agriculture, Western Greece: Microelectronics, chemical & pharmaceutical. (Nevertheless co-operation between 3 regions is sometimes a condition to participate in calls for proposals.)

Traditionally, IMA verifies legal requirements, and issues permits and licenses, etc. They are now to monitor innovation and give approval on e.g. innovation vouchers. For the new planning period 2014 2020 they have a budget of 3,5 Mio

The Intermediary Management Authority is the level that feeds national plans with the input from regions and municipalities. Their organisational chart shows a highly hierarchical organisation of 1350 people in over 100 departments. This body consists of appointed representatives. Presumably, only a small part of the staff will be responsible for the innovation expenditures.

Along with Peloponnese and the Ionian Islands regions, the Western Greece is supervised by the Decentralised Administration of the Peloponnese, Western Greece and the Ionian Islands based at Patras. The Decentralised Administration runs by a government-appointed general secretary, assisted by an advisory council drawn from the regional governors and the representatives of the municipalities. Despite that Regional Administration of Western Greece and the Decentralised Administration of the Peloponnese, Western Greece and the Ionian Islands should act in close cooperation with each other it seems that there is lack of communication. The Decentralised Administration implement Central Governmental policies, but as peer review discover, due to the bureaucratic reasons those policies are not very effective.

➤ *Public and private organisations*

The University of Patras is playing a very important role in the innovation activity in the Western Greece region. The Innovation & Technology Transfer Office (ITTO) of the UP is responsible for the transfer of technologies from Campus to the commercial sector. In cooperation with the Patras Chamber of Commerce, the University of Patras and its Technology Transfer Office organised a knowledge transfer exhibition “Patras Innovation Quest 2012” on 8th -9th of December in Patras. Its main scope was to bring closer the Academia, Research and Technology Organisations with the Regional Authorities and Business Sector in order to boost the cooperation in the fields of Technology Transfer, Research and Development Cooperative Project. This is the perfect example of cooperation between the different stakeholders within the region.

The UP has built a strong partnership of the academic staff members with Universities and Research Institutions worldwide through research, cooperation and bilateral agreements, as well as participation in International Educational Organisations, Networks and University Associations. Despite the existence of the Innovation & Technology Transfer Office, the peer review did not reveal strong linkages with business sector. The UP has a great amount of publications in the agricultural sector, but unfortunately it seems that these publications are far from the real needs of business. It is very important to establish links between research results and industry. It is possible to do through the identification of the requirements of the industry from one hand, and dissemination of technological services and research results from the other hand.

The Institute of Chemical Engineering & High Temperature Chemical Processes (ICE-HT) has close cooperation with the UP. Research associates include collaborating faculty members from several departments of the UP, post-doctoral fellows and post-graduate research assistants. R&D activities concentrated in ICE-HT on three thematic:

- Nanotechnology/New materials
- Energy/Environment
- Biosciences/Biotechnology

ICE-HT has cooperation with industrial companies in EU and other countries. With the initiative of researchers of ICE-HT, four spin-off companies have been created that aim at the effective utilisation of results of long-term research and development in nanotechnology.

Patras Science Park and Patras Innohub (part of the Corallia cluster initiative) are intermediary organisations providing business support services. At the moment there is not clear division of tasks between the Patras Science Park and Patras Innohub. It seems that two organisations instead of complementing each other compete against each other. It would be beneficial for both of the above mentioned organisations to have a clear strategy and clear division of tasks.

Achaia Chamber of Commerce and Industry (ACCI) closely cooperate with regional authorities as well as with innovation stakeholders - research institutions, Patras Science Park and Patras Innohub. Achaia Chamber of Commerce and Industry provides support

for companies to enter to the foreign market (Tentoura case), contact with governments, civil society, local media and organizing trade shows and events. As good initiative of matchmaking events it is possible to mention evening meetings (once a month) between SMEs and universities, organised by ACCI. Unfortunately there is very small cooperation with representatives of secondary education.

(b) Recommendations

Recognise technology enterprises as important players for innovation

The peer reviewers had the impression that the regional authorities did not sufficiently value the technological sector in Western Greece. Technology can create income faster than other sectors. Recognition and valuation of technology enterprises as important players for innovation is crucial.

Enhance visibility, exploiting the full potential of the web, including speed of dissemination and access

The Regional Government could develop a web portal for providing information to the stakeholders (citizens) about access to the full range of innovation processes, network of intermediary organizations providing facilities, business creation and incubation services, as well as research results from different fields in the region. Fast access to research results, can drive innovation, and support the development of a strong knowledge-based economy. Small and medium sized businesses and entrepreneurs can also benefit from improved access to the latest research developments to speed up commercialisation and innovation.

Ask successful entrepreneurs with charisma to tell their story and act as advisors for students

The regional success stories are very inspiring and they demonstrate in a realistic way how global high-tech businesses are often created in the contemporary global environment. The young generation needs examples of success in private business. In the future, especially the charismatic entrepreneurs and leaders of these businesses can act as strong role models for other, especially young, entrepreneurs and talent. For the region, these persons with global linkages and networks are strong assets to be further utilised.

During the peer review interviewees mentioned, that young persons preferred to work in big companies instead of starting their own business, due to the fear of failure. Successful stories told by charismatic and successful businessman may influence the young generation to organize their own business. The owner of CBL (Chemical and

Biopharmaceutical Laboratories in Patras) company, or the owner of the Tentoura Company could for instance be examples of good mentors for students.

- *Rebranding of the region*

To bring closer different economy driven forces of the region (R&D organisations, Universities, SMEs, private entrepreneurs, enterprises, etc.) rebranding is needed. At the moment the Western Greece region is recognised as agricultural region. To underline that in region exists technological sector some innovative approach to the local cultural and historical traditions is needed. “InnOlympia” for instance a non-used name.

- *Organize matchmaking events*

1. *Between students and SMEs*

During the peer review, some companies mentioned that it is hard for them to find a worker, due to the fact that students after University need at least half a year education inside of the company to be able to work in their environment. Representative of another international company mentioned that University was not contacting them regarding internship of students. Of course it is hard for the University to follow the development of the innovative environment, so it would be beneficial for Universities and for the companies to have “information days” aimed at informing students about their job opportunities or about the opportunities presented for training in high technology companies.

2. *Between researchers and SMEs, public*

It is important to encourage and support a dialogue between researchers and the public, so that the development of research activities and policies can reflect more effectively the changing needs of a more informed society.

3. *Between students and Alumni*

Student Alumni association could be created to enhance the student experience by providing opportunities that strengthen their lifelong loyalty to Western Greece region, educate students and prepare them for their future career. Network of alumni volunteers could be involved in organization of different events for the students. Alumni may act as mentors on campus, provide entrepreneurial advice, share hobbies and interests, and become employers for internships and externships across the country.

4. *Cross-sectoral meetings*

Experts from different sectors could find some common interest. For example nanotechnology could be applied in agricultural sector or in medicine. Representatives of SME could pose some questions, problems and researchers could help them to solve the problems by applying an innovative approach to the problems.

Organise an open innovation platform for students and company (see good practice description)

Good practice n°5: Demola, Open Innovation Concept platform (FI)

Demola is a functional and internationally recognised open innovation platform for students and companies. At Demola, University students develop product and service demo concepts together with companies and create new solutions to real-life problems. Demola provides an inspiring atmosphere of creative co-creation and new learning opportunities for students and professionals of different universities and organizations. The immaterial rights of the results stay with the multidisciplinary student teams. Companies can then purchase the rights or license the products or services from them. Demola also creates new spin-off companies around the innovations.

During the first three years of activity over 200 services and product prototypes were co-created by 1000+ talented students and 93% of the results were claimed for business use.

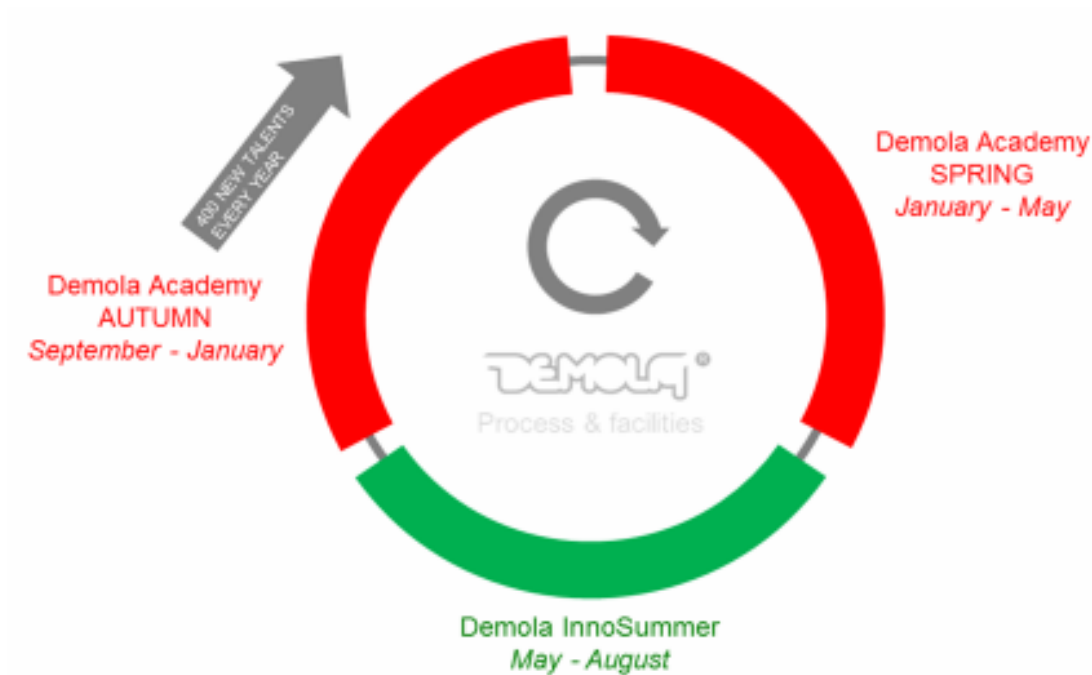
They work on projects in the area of technology, services, digital media and games, social innovations and business concepts with local impact and global market potential. Companies bring their project ideas for student teams to cultivate. Demola offers the teams the tools and the teams design the solutions collaboratively. Results are transformed into real products and services to be part of the companies' operations or become the starting point for new companies.

Demola combines fresh ideas of students with real-life needs and concrete support from project partners

Demola focuses on creative action not on producing papers!

Participants turn needs, ideas and know-how into demos of products and services, they create new jobs and businesses

Demola reaches students all year around



Demola in Mid Sweden

The Mid Sweden University will implement a Demola platform in 2013. The IT-support from Demola in Finland will be licensed. Three Swedish Universities will start within this year and will work with projects (business cases) from companies in their region and teams of students from their master programs (engineering, design, economics etc.). This will strengthen their cooperation with regional companies and train students in business development with real business cases.

<http://tampere.demola.fi/about>

<http://demola.net/>

Contact person: Mr. Ville Kairamo (<mailto:ville.kairamo@hermia.fi>)

Good practice n°6: VentureLab business development programme, Flevoland (NL)

VentureLab supports both start-ups and established companies in turning their ambitions for growth into reality. It doesn't matter whether the company is still in the initial stages or whether the business has been around for decades. Support is offered at individual level to executives, managers and business developers or on a team basis to a specific group or department within the organisation. Even foreign companies can apply.

Venturelab business development programme:

- Participants receive intensive coaching and support from a personal coach, supplemented by expert coaching
- Knowledge exchange, training and support in strategy, finance, marketing and sales, technology and organization
- Personal development and team development
- Access to diverse networks and business relations, including potential partners, customers and financiers
- Flexible work spaces, meeting rooms, access to research databases

Section 6: Sustainability of the jobs created by the innovative sectors

(a) Key Findings

The peer review team observed that support to start-ups and companies was often organised on an ad-hoc basis, which may nurture the fear of failure instead of promoting entrepreneurial values. More generally the regional strategy seems to be based on a narrow definition of innovation, the whole strategy would be more sustainable if it were more inclusive. Territorial cohesion is instrumental to being able to disseminate innovation across the different economic sectors and ensure the long-term development of innovation-based jobs in the region. There is still margin for improvement in terms of accessibility and attractiveness of the region; this means that the potential of the region for attracting skills and investments is not yet fully developed.

(b) Recommendations

■ *Foster the entrepreneurial spirit*

With the wealth of talents present in the region and the huge potential of the innovation ecosystem, fostering the entrepreneurial spirit in the region will improve the anchoring of innovation in the territory. This should be done from an early stage and in an inclusive way. Attitudes and skills leading to self-employment need to be fostered within the education system and throughout lifelong learning. These include creativity, responsibility, risk-taking, problem-solving, team-working. Moreover education curricula should integrate project education and entrepreneurship programmes in order to help students grasp which are the required skills and competences to become an entrepreneur. Technical and vocational education should be valued, especially given the technology-based innovation anchor of the region. Teachers should be trained both during their initial training and during their professional development in order to be able to provide adequate entrepreneurship education.

➤ *Develop support structures and regular funding for start-ups and companies throughout their development*

In order to create a general climate, which supports entrepreneurs and encourages risk taking, the region should offer its entrepreneurs and potential entrepreneurs comprehensive support. For the moment support is generally organised on an ad-hoc basis. Efforts should therefore be taken to help entrepreneurs and potential entrepreneurs:

- **in the conceptual phase**, define their innovative idea and turn it into a business idea, and provide opportunities for consulting.
- **In the development phase**, entrepreneurs need to have access to scholarships, funding, consultancy, coaching, support to internationalisation and export. This is where venture capital and Business Angels are needed. The region should therefore provide incentives for investors to support start ups.
- **In the commercialisation and growth stage** a wide range of stakeholders should be able to support start-ups and banks need to be involved in these partnerships. In the current climate where it is extremely hard to get loans from banks the region should also explore the possibilities offered by revolving funds.

In the context of Patras, personal networking with private capital holders seems to be the main approach to improve funding opportunities. In this situation, the national, and even more importantly the international sources of capital are crucial. The University of Patras has educated a lot of talented and successful business people who are currently in good national or global position, mainly in European countries and in the US. The utilisation and strengthening of these linkages and networks will provide huge opportunities to increase funding possibilities.

Private and public stakeholders need to cooperate in the different stages. A framework should exist to coordinate support actions without creating extra bureaucracy.

➤ *Diversify funding for innovation*

-The peer review team found that several entities from the innovation ecosystem conducted a high proportion of their research and development in the framework of projects, either at local, national or European level, leading to high dependence and a risk of low level of innovation produced because of the timeframe of projects located in different organisations. Indeed, although these projects are fruitful and generate a wealth of innovative ideas, processes and products, it is very risky to rely too highly on EU funds for research as the main asset of the region lies in the technological sector, where products are deemed to evolve very quickly. From the accessibility, user experience and quality of service perspectives this is probably not an optimal situation and can lead to a fragmented and ad hoc service offering at the regional level. Project-based operations are also rather limited in scale and time and thus they often have

challenges in creating the critical mass required for a cultural change. This also presents a risk for the jobs created in this context, which may not be sustainable.

-Crowdfunding is not only valuable as a potential new means of finance for scientists and (small) businesses. Its importance is also that it forces scientists to be able to think about their work in terms of potential customer benefits and potential threats to its public acceptance and to present their work to the public “at large”.

➤ Improve the attractiveness of the region

As has been mentioned above, the region enjoys a particularly friendly atmosphere, great natural and cultural surrounding and is home to remarkable talents. In order to improve the attractiveness of the region transport (rail, road, air), digital and social (care services, leisure activities) infrastructure is vital. The region should further build on the results and successes achieved in the context of European projects, to address the digital divide in rural areas and increase territorial cohesion and contamination of innovation. The region should also further take advantage of the potential of its young population and include them more actively in the definition and implementation of the smart specialisation strategy.

➤ Use networking and modernisation to make agriculture sustainable

The agricultural sector was boosted by the economic crisis as job prospects deteriorated in most sectors. In order to take advantage of this pool of skilled and often young workers, who arrived in this sector due to external factors, the region should provide a framework, organise places and events where farmers, farmers’ organisations, traders can meet and bring about new possibilities for innovation and modernisation in the sector. Regular contacts with research institutions is also essential to bridging the gap between research and economic activity in the sector.

➤ Propose a debate on the definition of sustainability

The perception of sustainability and the expectations of stakeholders with regards to the role of the region in this respect may vary. Therefore it would be good to organise a public debate with the different stakeholders in order to ensure the criteria for measuring and monitoring sustainability are based on a regional consensus. This would also improve the participation of citizens in the regional development strategy and the economy as a whole.

Good practice n°7: Innovation Vouchers, Flevoland (NL)

The Innovation Vouchers are part of the program “Chances for Flevoland”. This program was developed in order to support, stimulate and boost innovation in SME’s. This program is funded by the European Program for Regional Development and the province

of Flevoland. During the program period (2008 – 2013) there was budget for around 220 different vouchers.

Innovation Vouchers are developed to support and to stimulate technology transfer and to share information. The Innovation Vouchers are provided by Syntens, an Innovation Agency. The Innovation Vouchers make it easier for entrepreneurs to accelerate innovation by contributing in the costs of hiring external experts. Innovation Vouchers contribute to pay for the costs an entrepreneur has to make in hiring experts, for example from an university, an applied research centre or any other highly trained expert.

Innovation Vouchers are divided in three types, as described below:

Type	Value (€)	Contribution by the entrepreneur
Bronze	1.000	0
Silver	2.500	€ 500 + 4 hours labor time
Gold	7.500	€ 3750 + 16 hours labor time

Innovation Vouchers can only be provided after consulting Syntens. During this consultation the new ideas of the entrepreneur are carefully explored. Based on the conclusions of this consultation, Syntens can decide that an external expert is needed to help the entrepreneur in the further development of his idea. After consultation of the external expert a short evaluation form has to be filled in by the entrepreneur. Syntens is offering assistance and also supports in the further development of the idea into a business model.

The Innovation Vouchers were a successful instrument for many entrepreneurs in Flevoland because of the easy access and relatively low bureaucracy. For any further information you're kindly advised to get in contact with Syntens, M. Huisman, Senior Innovation Officer (marcel.huisman@syntens.nl)

Section 7: Conclusions

The region of Western Greece has a high innovation potential with good research institutions and a few extremely innovative companies. The recent decentralisation together with the new European Union funding period opens a wealth of opportunities for the region, especially as it has engaged actively in the process of establishing a smart specialisation strategy. The economic crisis severely hit the region and the country as a whole, and caused tremendous harm to the economic tissue and social cohesion.

However, from an innovation perspective it also brought the necessity and the opportunity for new solutions.

The main challenge for the region is to support the **active cooperation of the different stakeholders** of the innovation ecosystem. The different stakeholders need to find their own value proposition in the ecosystem and be able to co-compete in order to be able to foster innovation and more importantly innovation-based jobs in the region in a competitive, inclusive and sustainable way.

Now that the strategy has been defined it is essential for the region to **focus on the operational level**. Legitimacy and recognition at regional level will depend on how effectively the strategy is actually implemented on the field and what criteria are chosen to monitor success. Therefore particular attention should be given on who implements what and how.

Finally it is up to the regional authority together with the regional stakeholders to **use the crisis as an opportunity** to bring about change, a new culture and new ways to collaborate.

To summarise, the Western Greece Region should specify objectives and define concrete and operational tools to implement the smart specialisation strategy and position itself as an innovator at national and international level. To be able to generate more and more effective innovation on the territory the triple helix needs to be formalised and reinforced and a culture for entrepreneurship should be fostered.