



European Union
Regional Policy



RegioStars Awards 2009



Creativity
and Innovation
European Year 2009

Presentation of the finalists

Brussels, 16th February 2009



Foreword

Innovation and the application of innovative practices enable Europe's businesses to stay ahead in a globalised economic environment. This message is more relevant than ever. Innovating regions and the good practice they generate and share are key to improving Europe's competitiveness, to increasing growth and promoting jobs.

It is in this context that we organise RegioStars, DG Regional Policy's annual awards for innovative projects supported through EU Cohesion Policy. These awards aim to identify and publicise the good regional innovative projects, across different categories, in order to promote the exchange of good practices across Europe.

RegioStars 2009 has seen applications from many project promoters and regions from 18 EU Member States and third country partners in Interreg programmes. This year's award categories were; "Research, Technological Development and Innovation", "Adaptation to or mitigation of climate change" and "Radio or television spot or programme that highlights the contribution of Cohesion Policy". 20 applications in the two categories linked to policy themes were short listed as finalists by the Jury and this booklet contains summary descriptions of these projects. These can also be accessed on the Inforegio website (<http://ec.europa.eu/inforegio>).

RegioStars is part of the Regions for Economic Change initiative, which has amongst its objectives the sharing of good practice. Indeed it is essential that we work together, share our experiences and learn from them. RegioStars is a perfect example of how regions, no matter what their size or location, can learn from each other. You will find projects in many different domains, of different scales and with very different partners.

This publication would not have been made possible without the participation of the national and regional managing authorities, the project managers and the RegioStars 2009 Jury under the Chairmanship of Mr Job Cohen, Mayor of Amsterdam. I would like to thank the Jurors – Ms Anita Bhalla, Mr Clément Cohen, Ms Lourdes Cruz, Prof Knut Koschatsky, Ms Urzula Machlarz, and Ms Vanja Rangus – for making available their expertise and time and for assessing and judging this year's award winners.

I hope that you will find the projects described in this publication a valuable source of inspiration for your future innovative projects.

A handwritten signature in black ink, which appears to read "Dirk Ahner". The signature is fluid and cursive.

Dirk Ahner
Director General
DG Regional Policy



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CATEGORY 1:

Research, Technological Development and Innovation

The ROADEX Network



Region: Northern Periphery Regions (Sweden, Finland, Norway, Scotland, Iceland and Greenland)

Programme type: INTERREG IIIB Programme

Duration of project: 01/01/2006 – 31/12/2007

Funding: €778 334 in total, of which € 488 333 in European funding

Reliable roads are vital to rural areas since they give access to community facilities and provide vital links for the local economy. The ROADEX network has developed through several phases using innovative approaches to improve technical knowledge on how to construct and maintain rural roads, focusing on the northern area's specificities: harsh climates, long winters, poor ground conditions, difficult terrain, sparse populations, and long distances to markets. The project provides a good example of how innovation can lead to measurable improvements in what might have been considered an area of low innovation potential.

ROADEX III follows on from a pilot project (1998-2001) and a research and innovation project (2002-05). The aim of this third stage was to exploit the knowledge previously collected on low-volume roads in order to exploit this more widely on local route networks. Consequently 60% of the budget was spent on dissemination activities, with over 1 000 engineers and managers introduced to the new ROADEX technologies courtesy of the development of a website (www.roadex.org), the production of practical guides in six languages, the staging of seminars for technical staff and decision-makers, and the design of the first e-learning training package that specifically addressed the maintenance of rural roads in harsh climates and poor ground conditions.

The ROADEX network not only focussed on innovations related to road engineering issues, but also addressed socio-economic, health and environmental issues. This has resulted in a comprehensive range of new technologies and practices that specifically address the particular needs of northern rural roads and their users. Furthermore, ROADEX III has also been innovative in presenting its findings in new ways to maximise both dissemination and learning through dynamic state-of-the-art productions (the e-learning package has already been adopted by academic institutions internationally for use in undergraduate and post-graduate studies).

All ROADEX partners take responsibility for the management of roads in their areas, either locally, regionally or nationally; the external organisations involved are all either universities or engineering and technology centres.

By adopting ROADEX techniques, partners have seen direct, quantifiable benefits in improved road survey systems, drainage analyses, risk assessment, examination of health issues and socio-economic considerations. This will facilitate the harmonisation of road practices and standards across the partner countries. Lastly, the existing network has committed itself to continued collaboration on a further project that may focus on the physical implementation of the new ROADEX technologies.

LAHTI CLEANTECH CLUSTER



Region: PÄIJÄT-HÄME, Finland

Programme type: European Regional Development Fund, Fifth Framework Programme

Duration of project: 2004–07

Funding: €3.5 million in total, of which €1.5 million in European funding

The Cleantech Cluster encourages innovation and investment in environmental technologies, particularly recycling, energy efficiency, water management and soil decontamination technologies, by bringing together different stakeholders to 'Connect & Develop', including small and large enterprises, education organisations and regional and local authorities.

Lahti is the fifth largest urban region in Finland, but its research activities have lagged behind other regions. In 2004, Lahti chose to focus on developing environmental technologies and the Lahti Cleantech Cluster was launched. Today Lahti boasts the leading environmental technology centre in Finland and increasingly attracts clean-tech companies.

Globalisation and competitiveness are the core pillars of the Lahti Cleantech Cluster. The cluster aims to bridge the gap between small domestic pilot projects and rapidly growing global markets for environmental technology solutions. To succeed, environmental technology companies need strategies that will allow them to compete in a global market. Companies must focus and develop their core businesses through new approaches and networking.

The central challenge for the Lahti Region is the ability of the innovation system to connect and apply various sources of knowledge and expertise to practical work. The Cleantech Cluster helps companies to connect with the best expertise, both private and public, and adapt good ideas to regional and community level.

The Lahti Cleantech Cluster is very strongly business-oriented and market-led. Altogether, the cluster has 120 clean-tech companies, of which around 50 are active, allowing it to stay small, focused and innovative. The cluster operates in groups and branch groups, which are led by businesses and co-ordinated by the Lahti Science and Business Park (LSBP). Enterprise-centred projects aim at developing business operations, increasing jobs, and creating new business activities. Financial resources, including funding under Cohesion Policy, have been secured until at least 2013.

The Lahti Cleantech Cluster has also developed strong partnerships with environmental technology clusters and science parks, Higher Education institutions, venture capital organisations, the Finnish Trade Organisation, and the Ministry of Employment and the Economy. The Lahti Cleantech Cluster is actively supported by national cluster programmes and the Finnish Government.

The Lahti Science and Business Park (LSBP) has become the leading environmental technology centre in Finland. Between 2005 and 2007, some 20 clean-tech companies and organisations relocated to the region. The business development and relocation services of LSBP have attracted investment worth more than €30 million and some 170 new jobs to the region.

CENAERO (Recherches): Centre d'excellence en recherche aéronautique en Région wallonne (Centre of Excellence in Aeronautical Research)



Region: HAINAUT Province – Walloon Region

Programme type: Phasing out Objective 1, 2000–06, Hainaut

Duration of project: 01/04/2002 – 30/06/2008

Funding: €8 250 000 in total, of which €4 125 000 in EU funding

Cenaero is an applied research centre located in the Aeropole of Charleroi (Belgium) providing sophisticated services and technological solutions to industries in the aeronautical and related sectors.

The Centre was created in 2002 as an important stepping stone in Wallonia's economic development strategy. By the end of the 1990s the regional administration had developed a 'Walloon Aeronautical Plan' to support the potential of the region in this sector. This presented relevant assets on which to build, for example: the existence of a declining, but strong traditional metallurgical sector with a network of specialised subcontractors; the concentration of important aircraft industries in the Hainaut area; a sales turnover estimated at €750m for some 6 000 people; and the presence of important universities and qualified human resources.

The Plan highlighted the need for gathering the best scientific and technological skills, and the Cenaero centre was developed thanks to the partnership between three universities (Université de Liège, Université Catholique de Louvain, Université Libre de Bruxelles), a research centre (Von Karman Institute) and EWA (the association of Walloon companies in the aeronautical sector). The local Charleroi area development agency (IGRETEC) also became a member of the centre in order fully to integrate its growth within the regional innovation strategy of the local administrations.

Cenaero's global mission is to support Walloon aeronautical companies in their innovation efforts by providing them with focused expertise in numerical simulation and modelling methods. The original strategy aimed to make the centre specialised in niche markets boasting highly innovative and sophisticated applications and involving different scientific fields and industrial know-how.

Since then, the Centre has increased its activities both through research projects at European level and direct service activities for companies. In addition, Cenaero promotes doctoral studies to train junior personnel and stimulate the constant upgrading of senior scientists. This approach, based on permanent dialogue with universities and industries (both present on the Executive and the Scientific Boards), gives Cenaero a guarantee to remain at the cutting edge of scientific research and to stay in tune with industrial needs for innovation.

After six years of existence Cenaero is now recognised all over Europe for its competences and performances. With a team of more than 50 highly qualified engineers and PhDs and the biggest High Performance Computing (HPC) centre of the region, Cenaero has become a reference for numerical simulation, in particular for aerospace applications, but also other sectors as well. The centre is currently a partner in 22 projects financed by the 6th and 7th Framework Programmes (acting as project manager for two of these). Contracts and partnership agreements were also signed with international groups such as SAFRAN, AIRBUS, ALSTOM, RENAULT and many others.

In terms of impact, it is already possible to say that Cenaero has led to the creation of more than 100 jobs with high value added for the region, while the amount of public funding has been trimmed significantly to around 55 to 60% today. The Centre is now entering its second phase of development and aims to consolidate its position at European level while at the same time diversifying its market opportunities. By 2015 some 140 additional jobs should be created as well as two start-up companies. The full self-financing of the structure should also be achieved.

In conclusion, as part of the regional innovation strategy Cenaero has clearly contributed and will continue playing an important role in the economic development of the Hainaut area and, more generally, in the competitiveness of the Walloon region.

ISFOC

A Channel of La Mancha Towards the Future



Region: Castilla la Mancha (ES)

Programme type: OP Castilla la Mancha

Duration of project: 12/2005 – present

Funding: €26.9 million in total, of which €5.6 million in European funding

The starting point for this project was a Research & Development plan for Concentration Solar Photovoltaic Energy (CPV) promoted by the regional Ministry of Education and Science of Castilla la Mancha and the Universidad Politécnica de Madrid. As a result, a new, regionally owned, R&D Institute was created: the Institute for Concentration Photovoltaic Systems (ISFOC). In a short period of time ISFOC has become a reference project for the commercial use of CPV, helping companies and universities to adapt their supply to technological demand.

Castilla La Mancha is the leading region of Spain in terms of solar photovoltaic energy and aims to reach 100% energy consumption from renewable sources by 2012.

The main advantages of this alternative source of energy are as follows:

- environmentally friendly;
- self-sufficient, reducing energy reliance on foreign suppliers;
- very suitable for electrification in rural parts of developing countries;
- creates employment: the photovoltaic sector is one of the most important employment sectors related to renewable energies.

The objective of ISFOC is to be the main vehicle for the development of concentration photovoltaic (CPV) technologies in order to generate key knowledge in this field by means of installing and exploiting grid-connected pilot concentration photovoltaic plants and to train a group of experts able to promote a high level of research in this field. In addition to this, ISFOC will act as a magnet to attract foreign investments to the regions and will be an incentive for the local photovoltaic auxiliary industry.

During 2008 ISFOC installed CPV systems for companies from Spain, the USA and Germany. The suppliers of these plants were selected by ISFOC through two international calls for tender, the second of which received ERDF joint funding.

The Institute employs 18 persons and is managed by a Board of Directors with representatives from different sectors: members from the Regional and Spanish Government, the City Council of Puertollano, the University of Castilla La Mancha and the Universidad Politécnica de Madrid. A scientific international committee, or 'SIC', composed of academics at the highest international level, reports on the management of the Institute from a scientific point of view.

ISFOC is using mixed funding, on the one hand through regulated subsidies from regional, national and EU administrations, and on the other hand through contracts with private companies, by taking part in national and European R&D projects, and by means of connecting CPV plants to the grid in order to generate electricity and sell it to public utilities.

Since its foundation, ISFOC has maintained contacts with universities in order to identify the lines of research from which concrete development projects could prosper. The core idea is for the different universities to take part in the basic research activities with ISFOC and the companies wishing to test its technology, and for ISFOC to share with them investments in development projects. This collaboration will facilitate technology transfer.

ISFOC is starting two key projects in 2009. Firstly, "New Applications for CPVs": A Fast Way to Improve Reliability and Technology Progress" (NACIR); a collaborative project focussed on cooperation with Mediterranean Partner Countries. Secondly, a project to be implemented in the UAE in association with the Masdar Initiative, located in Abu Dhabi it will be one of the world's largest sustainable projects building a demonstration city, with 50 000 residences, from scratch with a zero carbon footprint powered entirely by renewable energy.

West Midlands Technology Network



Region: West Midlands, UK

Programme type: ERDF – Objective 2

Duration of project: January 2003 – December 2008

Funding: £21 197 316 in total, of which £9 992 604 in European funding

In 2002, seven universities and a college in the West Midlands formed the West Midlands Technology Network (WMTN) to facilitate collaboration between their centres of expertise in new product design, product development and associated business processes. They embarked on a collaborative project with the aim to make university expertise more accessible to companies and to use that expertise in a practical way to make a strategic difference to the region's productivity by increasing the competitiveness of regional companies.

The WMTN has focused on working with small and medium-sized enterprises (SMEs) within manufacturing engineering. The WMTN supports individual company needs by exploiting, wherever possible, the expertise within individual partner institutions on a collaborative basis. Each beneficiary receives an individual solution to the issues it faces when it meets the WMTN, based on the collaborative experience of partners and other beneficiaries. The methodology adopted is one of 'working with', rather than working on behalf of a business.

The project's key objectives were:

- o To provide new product introduction support to SMEs, by providing access to expertise and stimulating SMEs to invest further in R&D;
- o To deliver business interventions to improve the competitiveness and productivity of more than 1 000 regional SMEs in disadvantaged areas through improved use and management of processes associated with new product introduction;
- o To create new employment opportunities in areas of new product introduction processes;
- o To encourage new business and company start-ups.

In 2001 the West Midlands Economic Strategy and associated Innovation, Research & Development Strategies highlighted a need for universities to increase engagement in economic development and for companies to become more innovative and introduce new products and processes to improve their competitiveness and modernise the region. These priorities were developed from work commissioned by a West Midlands Rover Task Force established at the time to help alleviate the effects of a shrinking automotive (and traditional industrial) sector. The WMTN recognised that to help a region facing over-reliance by SMEs on large automotive firms, universities and colleges had to devise mitigation strategies and adopt a role of encouraging innovation, enterprise and education on the ground (Lisbon Agenda).

The scale of collaboration by ten centres of excellence working with SMEs, mutual understanding and the focus on practical company results are what make the WMTN innovative for the West Midlands region. The WMTN considers that global changes bring new opportunities with rewards for innovative and enterprising businesses that can realise the full talent and potential of people. The Network draws together the best new product innovation centres from partners to provide a first step on an 'escalator' of university support to companies. In this way it facilitates further contact via graduate placement programmes, Knowledge transfer partnerships and R&D projects as part of a focused package of high quality support available to vulnerable parts of the West Midlands.

A fundamental operating principle has been a philosophy of working together, getting universities and colleges to take a role in modernising the region's business. The WMTN believes it is not enough to react to emerging needs of business and provide skills; instead, it is more important to influence and advance as partners with businesses.

The WMTN has fostered new ways of working with business partners for universities working alongside, rather than for, businesses, which in turn encourages extended activity such as graduate placements, knowledge transfer partnerships, research & development, and continuing professional and personal development. HE interest is in developing capacity or business capability. A business only really benefits if it also gains knowledge to apply to ongoing issues as they arise. In 2008 this capability issue was seen as one of the most pressing for SMEs (Innovation Nation White Paper 2008). WMTN is able to facilitate this, courtesy of collaboration with business beyond traditional learning approaches and blue sky research.

The WMTN has also brought about greater academic engagement with the region that influences undergraduate and graduate academic programmes and recognition of the benefits of engaging with business for universities and colleges. A major impact has been the stimulation of innovation, enterprise and entrepreneurial ideas, not only in business but in academia to mirror business benefits.

REGENERGY

Network of Pioneering Communities and Regions Working on Innovative Heat Energy Solutions



Region: Berlin-Brandenburg, Germany (lead partner)

Programme type: INTERREG IIIC

Duration of project: April 2005 – September 2007

Funding: €1 234 078 in total, including €830 942 from the ERDF

In REGENERGY, local and regional partners worked on innovative organisational, regulatory, policy and financing solutions in the area of heating and cooling. It contributed to more secure, environmentally sound and affordable local heat energy provision, supporting regional economic development and social cohesion.

The main objectives of REGENERGY were:

- the creation of a network of European regions that are innovators in the field of (district) heating and cooling;
- the dissemination of good practice policies and financing instruments as well as the promotion of their replication in other regions;
- the identification of innovative municipal test-cases and model policies aimed at the sustainable restructuring of the heating sector.

The 18 partners from 11 countries worked together in a range of seminars, workshops and study visits to inspect innovative energy facilities in the partner regions.

REGENERGY provided and disseminated examples of an innovative use of EU Structural Funds in the partner regions. One key innovative objective has been to link the (heat) energy dimension to the regional development dimension and illustrate the potential synergies. Respective good practices have been compiled by the partners and policy guidance has also been developed.

There has been a high level of identification of all the partners with the project.

The main target groups of REGENERGY included regional and municipal policy makers and planners, regional and municipal energy utilities and enterprises, regional development authorities and agencies as well as potential multipliers such as municipal/regional associations.

Among a broad range of results, the REGENERGY partners developed the following project outputs in particular:

- one set of general policy guidelines and five regional policy guidelines;
- eight good practice policy case studies;
- seven good practice financing case studies;
- five financing proposals for 'typical' heating projects;
- three pre-feasibility studies.

A good example from this project is the jointly developed web based guide for municipal and regional decision makers (www.reg-energy.org). It enables regional and municipal policy-makers to a) search for relevant good practice examples covering innovative policy measures and financing solutions for sustainable heating and cooling projects and b) to develop suitable approaches to implement sustainable heating and cooling projects and measure in their regions and communities. The guide takes into account different potential interest profiles of regional and municipal policy makers.

From the pilot project (pre-)feasibility studies conducted within the framework of REGENERGY, the following are currently under implementation or at the advanced planning stage:

1. Use of residual cold stemming from the re-gassing of liquefied natural gas (LNG) in the port of Barcelona, Spain
2. Reconstruction of boiler house and district heating system in Ludza district, Latvia
3. Biomass (wood) CHP demonstration plant in the Abruzzo region, Italy

REGENERGY also increased the knowledge and skills of the partners and other decision-makers, stakeholders and multipliers in the partner countries. The project contributed to sensitising communities and regions in the partner countries via targeted promotional activities and the dissemination of newsletters, guidelines and other project output. The operation laid important foundations in order to develop environmentally sound and sustainable heating systems in all partner regions.

REGENERGY paved the way for successful follow-up operations and project activities (e.g. MunEM under INTERREG IIIB/TACIS; ClearSupport under Intelligent Energy).

Finally, several REGENERGY partners recently agreed to develop a follow-up capitalisation project under the new INTERREG IV programme.

REGENERGY was aimed at promoting sustainable heating, including renewable heating and rational heat energy use, and thus contributed to reducing greenhouse gas emissions. The operation went beyond a mere environmental sustainability perspective and successfully integrated the (regional) economic and social dimension of the sustainability concept. It provided and disseminated policy guidance on how to better synchronise sustainable energy with regional business development and social policy objectives and how to make local communities more 'energy wise'.

SpacelInnovation SAAR



Region: Saarland (DE)

Programme type: ERDF OP

Duration of project: 01/10/2007 – 30/09/2008

Funding: €199 565 in total, of which €79 826 in European funding

The SpacelInnovation SAAR initiative organises the innovation process between the European space community and the non-space sector in Saarland. Highly innovative industries, SMEs and research institutes from Saarland contribute with leading-edge technologies, while innovation from non-space sectors like IT, nanotechnology, energy or automotive provide value added for the space community.

The key objective is to bring together two completely different actors: Saarland and the space sector. Approaching new stakeholders from industries, notably SMEs and research institutes, is a challenge for the 'small world' of space agencies and space industries in Europe.

This project is the first regional approach within Europe which implements spin-in from a classical 'non-space region' like Saarland into space projects and technology development on a systematic and sustainable basis. The customised approach and the integration of experts from Saarland's clusters (e.g. NanoBio, Automotive, IT, Healthcare) and from the European space sector are new.

As an example, for future long-term missions to the Moon and Mars the reliability and safety of software and hardware will be crucial. The experts from the Verisoft consortium, comprising academics and SMEs in Saarbrücken, are specialised in the security of embedded systems and the verification of complex software and hardware systems. Collaboration between research and telecom experts from space and the Verisoft consortium is already in the preparatory phase.

The Saarland region is leader of the partnership with the European Space Agency (ESA) and the German Space Agency (DLR). The latter are represented on the steering committee of SpacelInnovation SAAR and strong supporters with regard to access to the different levels of the space community.

The SpacelInnovation SAAR initiative has become a benchmark project for convergence mechanisms between space and non-space industries and SMEs in Europe.

As a result, the innovative partners from Saarland benefit from new contracts and customers, while the space sector benefits from leading-edge technologies and solutions from outside traditional supply and delivery chains.

The Committee of the Regions is already planning to set up a working group in order to involve other European regions in this convergence scenario.

Berlin Adlershof

City of Science, Technology and Media



Adlershof

Region: Berlin

Programme type: Operational Programme

Duration of project: 1991 – 2009

Funding: €562 066 202 in total, of which €87 633 822 in European funding

A new Science Park linking research and technology with innovative business and efficient services was created within the reunited city of Berlin. Today Berlin Adlershof is one of the most successful high-tech locations in Germany with 413 companies, 12 non-university research institutes and six scientific institutes.

The project started in 1991 as a joint initiative of the Berlin Senate together with the Berlin Chamber of Commerce. The basic idea was to secure the future of this former location of GDR academics, where 5 500 scientists and technicians had been working, with the challenge of retaining their knowledge and technical competence while East Berlin's industry was collapsing and qualified people were migrating to West Germany.

A key objective was to develop a Science Park structure with the following networked core players:

- Non-university research institutes
- Settlement of scientific institutes from the Humboldt University in Berlin
- Innovative companies

The following technology areas were chosen as core areas for Adlershof:

- photonics and optical technologies
- material and microsystems technology
- information and media technology
- environmental, biological and energy technologies

Adlershof is innovative in several dimensions: it combines research, technological development and industrial application with high synergetic potential and dense proximity of actors. The campus is also innovative in terms of combining learning, working and living by developing the necessary social infrastructure: medical services, kindergartens, hotels, shops, restaurants, bank services.

In close proximity to the science and technology centre is a complex of 217 companies, shops, hotels, restaurants and 380 private homes. Altogether Adlershof is a workplace for 13 500 people.

A strong partnership has built up around the project between science, industry and policy makers. A state-owned company, WISTA-Management GmbH, is developing and operating the campus.

Adlershof has fast-tracked its way through the transition from centralised socialist economy to social market economy. The impact of Berlin Adlershof is impressive, as shown by the German Institute for Economic Research (DIW) for 2006:

- Growth in turnover of campus-located companies of 14.4% compared to the previous year
- Number of jobs nearly doubled since 1996
- Significant decrease of subsidies in turnover of companies
 - 1996: 24%
 - 2006: 5%
- Adlershof companies and institutions generate an additional market demand of €592M in Berlin and close to 21000 jobs.

Proof of Concept



Region: North East of England

Programme type: North East England, Objective 2 Programme (2000-06)

Duration of project: October 2004 – December 2008

Funding: €12.5 million in total, of which €5.625 million ERDF

The North East Proof of Concept (POC) Fund is an early-stage technology investment fund based in the North East of England currently managed by NorthStar Equity Investors (NSEI), a regulated Fund Manager.

The POC Fund invests at the very earliest stages of business creation - driving the growth of science & technology SME. POC funding increases investment activity within a region by encouraging the development of prospective ideas into 'investible' businesses. Most critically, they increase the quality and quantity of 'investment ready' deals for venture capital firms and business angel investors. POC investments are made up to a value of €76 000 with a maximum of €1 13 000 for university pre-start projects. Investments are helping to catalyse innovation from the North East's science & technology base in both academia and the business community.

A key strategic objective of the region has been to foster a more entrepreneurial culture with a focus on the development and exploitation of innovation, science and technology as significant drivers of business starts and growth. Thus, the Strategy for Success (SfS), implemented in the North East of England with ERDF funding, was a policy designed to boost innovation research, with an aim of developing – based on existing strengths – leading research expertise in emerging technologies for growing markets. NStar, an early stage venture company, was created by SfS to invest in innovative technologies.

A key challenge faced in delivering the SfS is that early-stage technology businesses face an 'equity gap' which restricts their ability to start up and grow. NStar and the POC Fund therefore have a crucial role to play in delivering the overall aims of SfS.

The fund investment managers are looking for three critical elements in each potential POC investment: firstly, the novelty of the idea; secondly, the market potential; and thirdly, the enthusiasm of the team. Ideal candidates are market-driven companies with an ability to expand rapidly. Concepts should be innovative and offer scope to secure intellectual property rights. The investment can be used to test an idea, protect intellectual property or research market demand. Applications are appraised as investments and decisions made on a strictly commercial basis. Only projects that demonstrate the potential to raise follow-on investment, expand rapidly into revenue and generate a new high-growth company for the region are considered.

Historically, POC Funds have existed which focused on awarding grants (largely because previous project developers thought that investing at this early stage in technology businesses was too high-risk). The POC Fund differs from this view and is innovative because it is a component part of a broader strategic regional approach, the SfS, which focuses on the commercialisation of the region's knowledge base. It also takes a commercial approach to investment, which is important because:

- It prepares investees for the rigours of later stage venture capital investment – i.e. venture capitalists will at no point in the future be awarding grants, so the investee is made more investment ready;
- A highly-skilled, credible fund management team which balances technology knowledge and investment skills. This is essential since many large-scale venture capitalists have no experience of early-stage technology risk (pre-revenue investing);
- In approaching the investment opportunity commercially, the project addresses many of the issues which would restrict later stage 'private' investors, i.e. the project is essentially 'de-risked' for follow-on investors.

In total, over the last five years nearly €125m of investment fund initiatives have been developed in the region. In the 2000-06 ERDF Programme, ERDF contributed approximately €62m of funding to these initiatives. These initiatives have been successful in addressing capital market failures for high-growth enterprises in the North East, leading to a significant uplift in transactional levels, an unprecedented inflow of investment from outside the North East into regional SMEs, and increased vibrancy in the informal (business angel) market.

From April 2008, NStar has been re-positioned as 'North East Finance Limited', a 'market-neutral' agency – in effect becoming One North East's key strategic partner in this field of investment fund development. The POC Fund will continue under the new regional ERDF 2007-13 Programme.

Lasers for Micromachining and Diagnostics



Region: Lithuania

Programme type: Single Programming Document, Lithuania, 2004-06

Duration of project: April 2005 - October 2007

Funding: €1 658 056 in total, of which €1 088 537 ERDF

This project brought together four Lithuanian laser technology and photonic enterprises for the purpose of developing top quality industrial lasers intended for particularly subtle micromachining. Four Lithuanian laser technology and photonic enterprises joined forces on the development of top-of-the-range industrial lasers intended for particularly subtle micromachining. The Lithuanian laser specialists developed more advanced, powerful and robust lasers, which are able to satisfy the needs of global micromachining and diagnostics markets.

The innovative products and technologies developed will contribute to the growth of the knowledge-based economy, competitiveness and employment in Lithuania and the EU. In this context, a small enterprise from a small country seems like a little ray of light, but potentially one as powerful as a laser impulse.

The aims of the project were to:

- Increase the competitiveness of companies, implementing the project in a rapidly developing market for laser micromachining of materials and diagnostics;
- Develop globally competitive laser systems, laser micromachining of materials and spectroscopy technologies in Lithuania;
- Encourage cooperation between Lithuanian hi-tech enterprises and scientific research institutions as well as international cooperation with authoritative laser technology enterprises and scientific research institutions.

With a view to concentrating resources and benefiting from the contribution of top level specialists, four Lithuanian laser and photonics enterprises – Ekspla, Šviesos Konversija, Optida, and Standa – cooperated on the project. The assorted companies developed specific lasers that allowed them access to the market of industrial lasers. The companies' specialists participated in leading international conferences on lasers and there was active cooperation both between the project partners and Lithuanian and foreign scientific institutions. Significant testing was carried out and prototype equipment built.

Lithuanian enterprises engaged in the production of laser technologies currently account for seven per cent of the world's scientific laser market. However in limiting themselves to the production of equipment intended for science the share would not reach more than 10 per cent. Therefore the worldwide market trends and the increasing demand for industrial laser equipment encouraged the partners to engage in the project. Two of the project's partners, UAB Ekspla and UAB Šviesos Konversija, expect that upon successful implementation of the project they will be able to provide the global market with laser sources of a new type, satisfying industrial application requirements. This will give a boost to the hi-tech sector's contribution to growth within the Lithuanian economy: it is forecast that, if adequate investment in infrastructure is made, sales in the laser industry sector by 2017 may amount to LTL 0.5 billion (€145 million).

From a wider perspective the innovative products and technologies developed will contribute to the growth of the economy, competitiveness and employment. Scientific research is performed at national and international levels, while human capital is invested in and specialist competence is deepened.

The companies cooperate in the area of innovations and successful partnership, one of the valuable outcomes from the project. Indeed, the enterprises are continuing their cooperation through the implementation of joint projects, funded under the hi-tech development programme of Lithuania's national science and studies foundation.

The most significant result of the project is the development of new technologies that allow access to the global market of industrial lasers, with the expectation that the high technologies export potential of Lithuania can grow. This will in turn encourage a higher turnover of the project participants as well as investment in human capital – specialists were provided with favourable conditions to further their knowledge and increase their competences, while 20 students from Higher Education institutions followed internships within the project enterprises, some of them staying on in permanent posts. In the course of implementation of the project all existing jobs were preserved and 10 new jobs created.

The enterprises that have participated in the project intend to develop scientific research and applied activities further as

regards laser micromachining of materials – as mentioned before, the firms Ekspla and Šviesos Konversija list this activity high on the agenda of their strategic priorities and intend to use the results of the project in further activities. The partners also intend to utilise support from the EU structural funds for implementation of new ideas, for which the results of the described project would also be used – the partners having already submitted their application for EU structural support over the period 2007–13.

Centre of Excellence 'Nanoscience and Nanotechnology' Research and Development Project on Nano-Electronic Devices for Nanotechnology



Region: Central Slovenian Region

Programme type: Objective 1, Single Programming Document

Duration of project: June 2004 – June 2007

Funding: €1 474 433 in total, of which €829 369 ERDF

In 2003, the Slovenian Government decided to support the establishment of centres of excellence combining research facilities (manpower, equipment) at different public research units (both institutes and universities) with research units in the business sector. Financial resources go to research units, but co-financing must come from the business sector for each individual project.

Several studies have highlighted insufficient cooperation between the relatively strong public R&D base and the business sector as an obstacle to more dynamic restructuring of the Slovenian economy and thus higher economic growth. The creation of the Centre of Excellence in Nanoscience and Nanotechnology (CE Na&Nt) provided an opportunity to bring together research institutions in this area and private companies, integrating the business sector early in the definition of specific research projects.

A particularly innovative element of the centre of excellence is the sharing of research equipment with the business community. Most of the high-tech equipment for research in nanoscience and nanotechnology is extremely expensive and only the development of such a centre made it possible for the researchers and industry to obtain access to this type of equipment. This has opened possibilities for new and more advanced basic and applied research, development and testing activities. Also, the institutions involved were able to participate in international research projects.

The research activities carried out in the CE Na&Nt are by definition interdisciplinary, since they bring together physics, chemistry and electronics. This by itself is also a novelty for Slovenia, where public financing of basic and applied research is usually divided according to the scientific fields, with little cross-disciplinary or interdisciplinary research finding sufficient financial support.

As of April 2007, there were six research institutes and research units within universities cooperating with the centre and as many as 26 small and large enterprises involved. The centre is carrying out six major research projects, which are coordinated by representatives from the research institutions. Business partners in the projects are both funding providers and potential end-users. In some cases, the researchers from business R&D units also participate in research. The members of the centre of excellence receive priority treatment too for financial support from the national authorities through other R&D programmes (from the Slovenian Agency for Science, for example, in the case of applied research projects).

Located in close proximity to the Jozef Stefan International Postgraduate School, the CE Na&Nt is also beneficial for post-graduate students and young researchers, who can access the sophisticated equipment for their research and participate in the on-going research activities of the centre. This strongly contributes to the achievement of another objective of Slovenian R&D policy: attracting more people into science, in particular the area of technical sciences.

Overall, the establishment of the CE Na&Nt has been a positive development in the Slovenian R&D system from many points of view: the ability to share the modern testing equipment has increased the motivation on behalf of the partners from industry, who in the past often viewed cooperation with research institutes as more of a burden than a benefit. Moreover, such joint operations increase innovation linkages, contribute to raising skills among researchers from industry, provide grounds for participation in research for postgraduate students and young researchers, and in general stimulate the mobility of people from public research units to the business sector and vice versa. All four impacts provide major indirect benefits and stimulate innovation.

It is expected that the Slovenian authorities will continue to support the centres of excellence in the National Development Programme for the period 2007-13 under the Operational Programme for Strengthening Regional Development Potentials. The continuation of public support at this stage of development and existence of the Centre of Excellence in Nanoscience and Nanotechnology is important, especially for additional investments in infrastructure. It can be expected that the Centre of Excellence will, by the end of this period, be strong enough to compete for research funding independently.

Integrated Location Development Science Park Potsdam - Golm



Region: Brandenburg

*Programme type: Operational Programmes - Objective 1
Brandenburg*

Duration of project: 1997 – 2007

*Funding: €146.6 million in total, of which €74.3 million in European
funding*

Since the mid-nineties the Science Park at Golm in the outskirts of Potsdam has developed into the largest and most important science and research centre in Brandenburg. Originally the site of Potsdam University, Golm now also hosts three institutes of the Max Planck Society for the Advancement of Science and two institutes of the Fraunhofer Gesellschaft, as well as an innovation and incubation centre, GO:IN as well as many innovative enterprises.

The project objectives were to:

- create an integrated science and business park;
- aggregate research capacities to achieve a critical mass of research and cooperation between these institutions;
- initiate spin-offs from the university and research institutes;
- support know-how and technology transfer from the research institutes to local and regional enterprises.

The village of Golm with 2 000 inhabitants was the site of a university run by the former Ministry of State Security during the GDR era. Starting in 1993 the old buildings were renovated and modernised and the development of the science park began. While the first investments were financed by national sources a second and third construction phase was funded by ERDF. In the last ten years 80 million euro were invested with a 50 % ERDF cofinancing.

In 1999 the Max Planck Institutes for Gravitational Physics, Colloids and Interfaces and Molecular Plant Physiology opened their doors. With investments of more than €75m from national funds, Golm marked the biggest investment in the history of the Max Planck Society.

In 2000 the Fraunhofer Institute for Applied Polymer Research (IAP) moved into new facilities in Golm and in 2006 the building of the Fraunhofer Institute for Biomedical Engineering (IBMT) was completed. Both institutes were co-financed with ERDF funds.

The different institutes have a complementary research focus. This offers multiple cooperation opportunities that are widely used between the institutes and researchers, e.g. jointly appointed professorships, numerous research projects and postgraduates from the university working in the extra-faculty institutes.

The extensive research potential offers optimal conditions for new product developments and services and new enterprises. Consequently many start-up companies arose from the research institutes and the university. In order to support technology transfer and to foster networking between science and the economy, the city of Potsdam created GO:IN, the Golm Innovation Centre, co-financed by the ERDF.

GO:IN opened in 2007 and offers 4 000 m² of office space, laboratories and storage. It provides ideal starting conditions for new entrepreneurs with services like conference rooms, joint marketing and a coaching service. By the summer of 2008, 75% of available space was booked and 17 enterprises were housed within GO:IN.

The strategic decision to concentrate specific research institutes and important Potsdam University faculties within the Science Park at Golm made it possible to establish within a decade a research cluster which is recognised at international level. More than 1 300 scientists are working at the science park and the different university institutes boast 6 600 students.

Ashfield Skills Centre



Region: East Midlands, UK

Programme type: ERDF (Objective 2, 2000–06)

Duration of project: March 2003 – December 2008

Funding: £6 million in total, of which €2.5 million ERDF

The Ashfield Skills Centre is a £6 million project which delivered five discreet, but philosophically linked, learning environments over the course of four years. It is part of the already existing Ashfield School. The whole project delivers high-quality vocational courses to meet the skills shortages identified by local employers. It is making a central and significant contribution to delivering regional priorities and addressing the Coalfields Regeneration Trust Themes. It also addresses business crime in partnership with the Nottinghamshire Business Crime Initiative.

The Ashfield Skills Centre consists of eight vocational units equipped to industry standard specification and mimicking an industrial or commercial context. Course content and delivery are provided by industrial and commercial training providers in Textiles, Business, Child Care, Health & Beauty and ICT. Three stand-alone industrial units deliver 'hard' vocational courses, including construction, plumbing, automotive, electrical, catering and hospitality courses supplied by industrial training providers.

Some of the key objectives of the project have been to provide education, training and leisure facilities for both the school and the community (14-19 year olds, other local secondary schools, the local adult community) by providing a choice of training relevant to the local work market, thereby improving employability in the area. The project also works with employers, individuals and partners to identify current and future skills needs and to work, proactively, to ensure these needs are met. It also aims to raise the aspirations of the people of the area, as individuals and parents as well as employers and employees and members of the community.

The strategic context of the project has been to create innovative and real vocational experiences in the Ashfield Skills Centre for students at Ashfield School and the wider community. This includes classrooms for traditional lessons, laboratories for new ICT Technician and Network training, Web design as a CISCO Academy and workshops for more practical skills-based courses. These workshops include a construction workshop, an engineering workshop, a vehicle maintenance workshop, a hospitality and catering academy, a business unit, a Health and Social Care unit, a Training Nursery, an ICT training room (CISCO) and a Hair and Beauty workshop.

The ASC also offers after school classes for students who are disaffected and in danger of exclusion which address their offending behaviour, its consequences, and provides basic and social skills in a sports setting. The project offers office accommodation to the various services that have an input to the school extra curricular activities including the police liaison officer, school nurse, education welfare officer, CONNEXIONS and Primary Care Trust.

This project is viewed as innovative as it is a state-funded secondary school that has researched the skills gaps within the area and region and targeted these as priorities for training. It has done this by working in partnership with industry and commerce to design, develop and deliver training to the students, those from other schools and the wider community, both locally and regionally. The project has created an innovative skills centre which contains state of the art, real life working environments. This has been recognised by the Specialist Schools and Academies Trust who have used the centre as an exemplar of future creative learning environments.

This is the beginning of a long-term project which it is expected will last for years to come. The management is such that it is flexible to the needs of the area and the skills centre is adaptable to the changing demands of the local and regional economy. The team work closely with all local and regional stakeholders to ensure that the project is fit for purpose.

LOFAR, Northern Components



Region: The Northern Netherlands Provinces

Programme type: Objective 2 Programme for Northern Netherlands, 2000–06

Duration of project: July 2004 – September 2008

Funding: €29 268 000 in total, of which €10 843 921 ERDF

The LOFAR project is aimed at developing and constructing a sensor network for the collection and processing of real-time streaming data in support of a very sensitive radio telescope for an array of geophysical sensors and in the field of precision agriculture.

Early ideas for the project stem from designs by ASTRON in the Northern Netherlands for the development of the Square Kilometre Array (SKA), a global project to build an extremely sensitive radio telescope from 2015. LOFAR will pioneer much of the technology that will be needed for the SKA. In contrast with traditional radio telescopes, which rely on heavy and expensive steel dishes, LOFAR makes use of large numbers of relatively inexpensive antennas to collect signals from the sky. Innovative and dedicated ICT hardware has been developed to reduce and manage the huge amounts of data streaming from the antennas (roughly 10 Tbit/s).

It was quickly realised that the infrastructure needed to house a distributed radio telescope would provide opportunities in other areas as well. This has led to the inclusion of two other disciplines in the project. Geophones and infrasound sensors will be used for geophysical studies. Dedicated sensors will also be included to monitor the climate in crops and the movements of animals for precision agriculture. Further sensors and/or applications may follow.

Over the past few years, international interest in LOFAR has increased greatly. Consortia have been set up in Germany, the UK, France, Sweden and Poland to build local LOFAR stations, which will all be connected via a dedicated fibre network, sending their signals to the same supercomputer in Groningen. LOFAR will soon be a European sensor network which has been developed in, and will be controlled from, the Northern Netherlands.

The key objectives as stated at the start of the project were:

1. Expansion of LOFAR for geophysical and seismic research aimed at a better understanding of the ground structure and ground development in the Northern Netherlands and the establishment in the market of geo-sensor networks as a product.
2. Expansion of LOFAR for precision agriculture aimed at increasing agricultural efficiency in the Northern Netherlands through the accurate measurement of ground characteristics and wind data and the establishment in the market of agricultural sensor networks as a product.
3. Research and development of advanced ICT to be able to make optimum use of LOFAR as a distributed sensor network by multiple users from various disciplines (Science and Operations Centres).
4. The optimum use of the possibility of Groningen to obtain an advanced streaming super computer so that the maximum returns can be achieved from the LOFAR sensor network.
5. Development of LOFAR antennas and stimulation of the regional production industry for the improvement of infrastructure and business processes for LOFAR's roll-out.

LOFAR will deliver a generic sensor network for the acquisition and processing of real-time streaming data once it is finished in the second half of 2009. Largely built on the requirements set by astronomers for a radio telescope, this will yield a capability that can accommodate many other applications. Geophysics and precision agriculture have been developed as part of the LOFAR programme, but others have already been identified. As soon as funding can be found, these new applications can also be connected to the infrastructure.

The collaboration between disciplines that do not normally come into contact, has led to one further innovative new development. The passive seismic technique that is at the heart of the geophysical application shows striking similarities with the way in which radio astronomers form images from an interferometer array. A post-doc scientist has recently started to explore how information and experience can be shared between the two communities.

Upon completion of the Sensor Network, LOFAR will enter its operational phase. Agreements with partners already involved in the project will be signed shortly, guaranteeing long term availability. ASTRON will be responsible for the running costs of LOFAR as a radio telescope, and other consortium members will take on a similar task for other applications. Additional sources of funding, partly with private capital, are being investigated for extension of the sensor network as well as its continued operation.

The LOFAR consortium consists of a mix of universities, research institutes and 12 small-to-medium sized private companies. These partners have all collaborated closely on the R&D of techniques developed as part of the project. All partners have invested in the project (in most cases 50% of their costs).

In collaboration with local industry, one of the sensors of the LOFAR project, an antenna operating at frequencies between 115 and 240 MHz has been developed. LOFAR has stimulated local businesses to invest in technology development. This has resulted in 12 collaboration agreements with companies that were active in the R&D phase of the project. These investments have led to an increase of the level of expertise and competitiveness of these companies.

One of the small companies has developed a (system) health management scheme which will be used to monitor the state of a complex sensor network which should continue to operate even if small failures occur. The collaboration with regional high-tech companies has already been highlighted above, as has the partnership with IBM in the optimisation of its Blue-Genie supercomputers for use as part of a streaming data facility.

Corallia – Establishment and Development of the Hellenic Technology Clusters Initiative



Region: Attica (GR)

Programme type: OP Competitiveness

Duration of project: 01/05/2006 – 30/11/2008

Funding: €8.483m, of which €3.289m in European funding

The Hellenic Technology Clusters Initiative – Corallia (HTCI-Corallia) focuses on the development and support of state-of-the-art, industry-driven innovation clusters, and acts as a hub for all innovation actors, including industry, academia, research, venture capital, business angels and other investors.

The key objectives of the project were to provide support and incentives in order to help expand the cluster members' activities, attract foreign and local investment to the cluster, establish strong human networks, address policy measures to resolve deadlocks in innovation and R&D, and promote technology and know-how diffusion among cluster members.

The HTCI–Corallia is the first of its kind, well-organised, systematic, strategic national cluster policy in Greece. It has pushed forward several novelties and highly innovative elements at national level, including:

- A fresh 'bottom up' process in designing and implementing the clustering programmes: all stakeholders are engaged through a public consultation process and help to shape the programme attributes prior to its launch;
- Incentives to achieve a 'hyper-concentration' of industrial cluster members in dedicated 'Innovation Centres';
- Measures to promote intellectual property rights through an 'IPR Helpdesk' mechanism designed to support SMEs in the process of patent filing;
- Strategic partnership among multiple thematic sectors, including sectors of national and regional importance, in order to encourage technology and application spill-overs and multiply the clustering effect.
- Cooperation on a large scale between industry and academical research organisations

Corallia is hosted by the Athena Research Centre and carries out the strategy on Innovation & Competitiveness overseen by the Hellenic Ministry of Development. Currently the cluster composition includes more than 40 industrial members teaming up with more than 20 university departments and research institutes, all focusing on the technology area of microelectronics.

The project has demonstrated tangible results through the establishment and operation of the 'mi-Cluster' in Microelectronics and Embedded Systems, including a notable increase in annual turnover, exports, patent submissions and new jobs.

The "mi-cluster", the first ever cluster established within the framework of the project, is in the area of Microelectronics & Embedded Systems, and today includes more than 50 industrial members and over 25 university departments and research institutes, all active in this field.

Up to date, the establishment and operation of the "mi-Cluster" has yielded tangible results including:

- Company-members have shown increase in their annual turnover, exports, employment, and patent submissions;
- The sharing of common premises by the mi-Cluster company-members has resulted in substantial benefits, strengthening the production value-chain of the ecosystem, while increasing cooperation between companies and promotion of joint research efforts;
- Positive publicity, with over 200 articles and special reviews in the local and international Press, while the communications program which was designed and implemented for the period January – December 07 granted the European Excellence Award;
- There is active cooperation with other centers of excellence and cluster initiatives in Europe and beyond (e.g. the Fondation Sophia-Antipolis and other).

In addition, the establishment of the Microelectronics Innovation Centre (μIC) in Maroussi, the heart of the hi-tech district in Athens, offers common facilities and services to all cluster-members and acts as a reference and meeting point for all "mi-Cluster" members from all over Greece.

ESTIIC: Fostering Competitiveness through Innovation and the Information Society



Region: Principado de Asturias (lead partner)

Programme type: INTERREG IIC South

Duration of project: July 2005 – June 2008

Funding: €4 607 675.84 in total, of which €3 159 537.38 ERDF

The aim of ESTIIC 'Fostering Competitiveness through Innovation and the Information Society', an interregional project, has not only been to improve regional cooperation in specific technological areas, but to harness the knowledge obtained through collaborative projects for use in the future.

The ESTIIC project is a three-year Regional Framework Operation within the INTERREG IIC initiative. Four regions took part in the project: Asturias (lead partner) and Cantabria from Spain, Nordrhein-Westfalen from Germany, and the Southern & Eastern region of Ireland. The project set up a cooperation framework fostering a series of initiatives developed by regional agents in the fields of innovation and information society.

The overall objective of INTERREG IIC was to improve the effectiveness of policies and instruments for regional development and cohesion. The ESTIIC regional partners have chosen two fields for collaboration – technological innovation and information society – each considered a key policy area for regional development. Each area had clearly identified objectives.

The first task carried out by the partnership was to devise the methodology suited to the four regions' joint priorities. The strategy was focused on negotiating a list of topics for a Call for Proposals in order to assure that the subprojects would meet the ESTIIC objectives. Two working groups, on technology-driven innovation and the information society, carried out in-depth studies in each region so as to provide a general review of the situation and the needs in both areas. On the basis of these studies, a final list of topics was identified and approved by the Steering Committee. Under 'technological innovation', support has been provided to strengthen the expertise and capabilities of SMEs by bringing them closer to the most up-to-date range of scientific and technological know-how available and by allowing for the development of new instruments and opportunities to implement public policies. Under 'information society', support has been provided to design regional-level strategies to provide opportunities for SMEs.

The eight approved subprojects covered different levels of intensity in their cooperation; the combination of different approaches was very useful and effective in order to meet the ESTIIC objectives. As an example, RFID technology, under the topic implementing cross-sectional technologies, was implemented through pilot experimentations, such as the development of a prototype to track and trace foods like Cabrales cheese using Radio Frequency Identification (RFID) tags, and through dissemination activities such as seminars, guidelines and demonstrations, enabling RFID technologies in the SMEs of the four regions. In the same way, referring to activities to promote broadband applications there were pilot experimentations, such as the design of a sensor which does not need physical contact with the patient in order to monitor and measure the quality of sleep at home, and dissemination activities for the use of spatial information in business processes.

During the final phase of ESTIIC the regional partners discussed and approved the development of additional activities linked to the topics tackled by subprojects, such as five regional studies, two workshops for SMEs, five international conferences and two study visits, thus ensuring the achievement of the initial objectives in each region. Three capitalisation activities were approved by the INTERREG IIC South Monitoring Committee to reinforce the dissemination of ESTIIC results: a think tank and a conference in Brussels helped us to draft the European ICT Manifesto for the Regions and the development of audiovisual material to be broadcast through IP Television at EU level.

The ESTIIC project has developed its innovative character in all aspects of its life cycle. From the identification of the topics in the first stage of the project, providing answers to the needs each region had identified in the fields of innovation and information society, to the drafting and publishing of the European ICT Manifesto for the Regions. All this while implementing a methodology of monitoring which included as a key feature a mentoring system for assessing subproject progress.

DIPLE Printing Technologies



Region: *Wales*

Programme type: *West Wales and the Valleys Objective 1 Programme, 2000-06*

Duration of project: *January 2004 – April 2008*

Funding: *£2 134 018 in total, of which £1 138 498 in European funding*

The main aim of DIPLE (Digital Technology and Colour Control, Industrial Printing, Packaging, Lean Manufacturing and Environmental Improvement) was to perform case study projects with partner companies, develop best practice methodologies and innovative uses of printing to create high-quality, value-added products. These could then be used as the basis for knowledge transfer.

The project operates within one of the largest of Europe's manufacturing sectors, consisting of approximately 123 000 printing firms employing almost 820 000 people in the EU 25 countries, and forming part of a major industry in Wales which significantly drives the economy.

As part of the case-study activity, DIPLE worked with the printing industry to identify research topics where projects were required using the Welsh Centre for Printing and Coating (WCPC) facilities to support the development of best practice. The main beneficiaries of the project were the printing industry across the whole of the Objective 1 area in Wales, particularly SMEs; companies where printing could be used as a quality manufacturing process, e.g. automotive, aerospace, medical, pharmaceutical, flexible electronics; and new companies provided with start-up assistance.

This project derived from a co-ordinated use of a range of EU, regional and national government instruments to create an innovation and technology transfer centre undertaking fundamental research of direct relevance to industry and transferring the technology in an understandable way into industry, particularly SMEs. This co-ordinated strategy has meant the overall benefit to industry has been greater than the sum of benefits-derived projects run in isolation. The first ERDF project funded by the West Wales Objective 2 Programme in 1996 created the Welsh Centre for Printing and Coating (WCPC) for technology transfer into industry. Further ERDF projects successfully created four printing process networks to provide the technology bridge between the fundamental science and industrial applications.

The key objectives of the project were to:

- Deliver new technologies to industry, helping to support the new expanding high added value industrial and digital printing companies;
- Encourage indigenous industry to innovate;
- Support for knowledge and technology transfer programmes; and
- Promote the wider application of clean technologies and the development of new approaches to reduce the use of natural resources and reduce pollution.

The project, delivered with partner companies, developed case studies on key aspects for the printing industry. Each case study was of direct benefit to the companies (e.g. reducing waste, process improvement) and the geographical spread meant DIPLE had an impact across the whole of Wales.

The benefits of the case studies could be applied across the whole of the printing industry and were relevant to all aspects of 'DIPLE'. The cross-industry themes were: colour consistency, benchmarking of colour reference books, environmental impact, employee health and safety, ink consistency, and innovation.

Thus, a toolbox of solutions was developed and then conveyed to the wider printing industry in Wales through a series of 'surgeries', visits to companies, and networking meetings. These provide the links for future sustainable transfers of technology into these companies and also offer a source for identifying new topics for investigation.

CATEGORY 2:

Adaptation to or mitigation of climate change

Centrale de production d'électricité photovoltaïque en milieu tropical à l'Île de la Réunion



Region: Réunion, France

Programme Type: Programme opérationnel FEDER

Duration of project: janvier 2007 – mars 2008

Funding: Coût total: 6 929 900 euros incluant 623 691 euros du FEDER

Ce projet a permis la réalisation d'une centrale de production d'électricité photovoltaïque de 1,433 MW sur des bâtiments industriels, renforçant ainsi l'autonomie électrique de l'île et créant de l'emploi local. Le développement de techniques d'installation de panneaux solaires innovantes en milieu tropical sert de modèle pour les pays confrontés aux mêmes conditions.

Les objectifs du projet consistaient notamment:

- à accroître l'autonomie de production électrique de l'Île de la Réunion par l'utilisation des énergies renouvelables;
- à adapter les techniques du solaire photovoltaïque dans un milieu tropical en tenant compte:
 - o du territoire restreint,
 - o de la faible disponibilité d'espace,
 - o du milieu insulaire et volcanique,
 - o de l'augmentation du nombre et de la violence des cyclones,
 - o de l'existence d'étés plus chauds.

Ce projet a été novateur puisqu'il a intégré l'adaptation aux impacts des changements climatiques. Il est en effet nécessaire de prendre en compte les contraintes spécifiques au milieu tropical cyclonique pour l'installation des panneaux photovoltaïques, notamment au niveau de leur fixation. En conséquence, la solidité des installations des panneaux photovoltaïques a été testée. Les fixations peuvent ainsi résister à des vents de 210 km/h. La pose de panneaux photovoltaïques sur les toitures permet aussi de baisser légèrement les températures à l'intérieur des bâtiments et ainsi de réaliser des économies en matière d'utilisation de la climatisation.

Le partenariat avec l'État (ADEME) et le producteur national d'énergie (EDF) mais aussi avec les autres collectivités et les entreprises a été une des conditions permettant de mettre en œuvre ce programme ambitieux d'autonomie énergétique pour la Réunion. Ce projet s'est aussi inscrit dans la coopération vers des stratégies d'autonomie énergétique et d'adaptation aux changements climatiques. Le Conseil régional de la Réunion a décidé de s'engager dans cette coopération, notamment en créant le réseau Island-NEWS, associant des représentants de Mayotte, de Madagascar, de Maurice, des Seychelles et de Rodrigues. Dans ce cadre, le Conseil régional souhaite profiter de l'expérience des autres îles et diffuser les bonnes pratiques.

Suite à la mise en service de l'installation, la production de cette centrale est de 2 GWh/an, soit la consommation annuelle de 850 foyers réunionnais. Cet équipement permet d'économiser annuellement le rejet de 1 400 tonnes de CO₂, soit l'équivalent des rejets produits par une voiture parcourant sept millions de kilomètres!

De plus, le domaine de l'énergie solaire a généré 543 emplois en 2006, point primordial dans une région comme la Réunion, qui est fortement touchée par le chômage.

La réalisation de ce projet innovant de production d'électricité solaire en milieu tropical a permis à l'Île de la Réunion de connaître des retombées positives significatives aux niveaux social, économique et environnemental. Le projet démontre ainsi la pertinence des stratégies de développement durable pour les régions ultrapériphériques. Par ailleurs, à partir de l'expérience acquise au titre de ce projet, la société gestionnaire a développé d'autres projets qui sont en cours d'étude à l'Île Maurice, en Afrique du Sud, en Australie et à Dubaï, permettant ainsi au savoir-faire européen de rayonner dans cette partie du monde à partir de l'Île de la Réunion.

EnergyAgency.NRW



Region: North Rhine-Westphalia

Programme type: EU-NRW – Objective 2 Programme 2000–06

Duration of project: 1 January 2002 – 31 December 2007

Funding: €42 913 054.48 in total, of which €6 306 527.24 in European funding

In times of volatile energy prices and supply it is vitally important to develop innovative energy technologies and provide impartial guidance to companies, local authorities and individuals on sound energy management and the potentials of renewable energies. This is the role of EnergyAgency.NRW, the new central contact point for all energy issues in North Rhine Westphalia.

Energy is of particular importance to North Rhine Westphalia: it generates 30% of German electric power and hosts 40% of industrial energy consumers. In total, 1.1 million people work in the energy and energy-intensive industries in the region. The new EnergyAgency.NRW was created in 2007 after the merger of the former Energy Agency and Initiative on Future Energies. The new EnergyAgency.NRW is now the single body for all energy issues aiming to ensure energy efficiency, security of supply and environmental and social responsibility for the region.

The new EnergyAgency.NRW has wide-ranging competence and adopts an integrated approach: from funding research, technical development, demonstration and market launch to cluster support and advisory services. In the focal areas of energy efficiency and renewable energies, EnergyAgency.NRW works to advance technical innovations and foster know-how transfer between science and industry, and provides advice, consultancy, continuous training services (over 280 000 people trained to date) and support for companies from NRW in foreign trade issues.

EnergyAgency.NRW aims to improve energy management in the region by focusing experience and expertise in a single impartial agency and developing local strategies for better energy policies and practice, including in the areas of: energy efficiency and renewable energies in business and local government; climate protection; energy-efficient and solar construction; innovative power stations and grid technology; biomass, fuels and propulsion systems of the future; fuel cells and hydrogen; and photovoltaics.

In initiating innovative projects, EnergyAgency.NRW collaborates closely with a wide variety of partners. Jointly with North Rhine-Westphalian tradesmen and the chambers of architects and engineers, the NRW Energy Agency had formerly carried out energy checks on buildings for many years. Since 2006, EnergieAgency.NRW has coordinated the collective initiative 'Mein Haus spart' designed to save energy in private households. 15 organisations have joined forces in the initiative to improve building performance in response to the German Government's 'CO₂-Gebäudesanierungsprogramm', which aims to reduce CO₂ emissions from buildings using funds from KfW (a State-owned bank). The NRW initiative has been a success with approximately 62 000 households benefiting from building improvements.

EnergyAgency.NRW has won several awards, including for its significant contribution towards achieving a breakthrough for renewable energies in the context of the EU's Sustainable Energy Europe campaign. It has organised or co-organised over 100 conferences and been represented at 18 trade fairs. The NRW energy advice-mobile has been on the road with engineers from the Energy Agency since 1999, working around 200 days a year. Over the years more than 90 000 visitors have sought advice from the advice-mobile.

North Rhine-Westphalia is striving for a reduction of CO₂ intensity and a further decoupling of CO₂ emissions and gross domestic product (GDP). In this context, CO₂ emissions in North Rhine-Westphalia must be reduced by nearly 98 million tonnes, or 33% compared to 1990 levels. Offering a comprehensive range of services to improve energy management in the region, EnergyAgency.NRW is a central element in the region's strategy for meeting its CO₂ reduction targets.

Northern Maritime Corridor (NMC)



NORTHERN MARITIME CORRIDOR

Region: North Sea Regions (including Norway)

Programme type: INTERREG IIIB Programme

Duration of project: 06/2002 – 12/2005 (Phase I), 06/2005 – 06/2008 (Phase II)

Funding: €6 456 000 in total, of which €5 288 000 in European and Norwegian funding

The aim of this two-phase project was firstly to establish new/improved short sea shipping services to shift cargo from road to sea and thereby contribute to sustainable transport. The second phase aimed more broadly at integrating the Northern Maritime Corridor as a 'motorway of the sea' within the TEN-T network, thus improving the accessibility of the North Sea and the Northern Periphery regions.

The core approach was to create an arena for networking between key actors from private and public sectors and to favour region-to-region cooperation. The different strands of this cooperation involved the promotion and creation of short sea shipping initiatives (around 15 altogether), the improvement of maritime safety in the region (by facilitating the setting-up of standing committees between Norway and Russia and defining risk management strategies) and the reinforcement of links between European and Russian entities – in particular on the issue of petroleum development in the Barents region and the logistical challenges this presents.

In terms of innovation, the NMC project developed principle models as well as concrete ICT tools for the intermodal transport industry. In particular, NMC brought in the use of radio-frequency identification for the tracking of cargo.

The innovative character of the project was also pursued in other ways. In partnership terms the project covered more than 20 regions in nine countries, including Russia (an unusually high number for a project supported by an INTERREG IIIB programme). In many regions the project established regional maritime clusters, each involving 10 to 20 sub-partners. These clusters were used as real cooperation platforms and some are likely to continue after the project period. Lastly, the partnership, including its sub-partners, comprised both private-sector and public-sector players (with a majority of private-sector entities).

The NMC project has had an important impact on the expansion of maritime services in the North Sea regions (so much so that the new National Transport Plan in Norway has taken due account of it). Yet the most significant impact has been the acceptance by the European Commission to extend the 'motorways of the sea' network into the Barents region. In a way, the Northern Maritime Corridor has become the fifth such 'motorway of the sea'.



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Press release

“RegioStars Awards” for Europe’s most innovative regional projects

Tonight Wallonia, Wales, Réunion Island, North Rhine-Westphalia and Greece take centre stage in Europe as winners of the 2009 RegioStars Awards. Danuta Hübner, European Commissioner for Regional Policy, and the President of the RegioStars Jury, Mr Job Cohen, Mayor of Amsterdam, will award prizes to the most innovative projects which have been supported by European Cohesion Policy. The Awards take place during a two-day conference in Brussels entitled “Regions for Economic Change – Networking for Results” (IP/09/259).

“Stimulating Europe’s competitiveness and employment, particularly in this difficult economic climate, calls for new ideas and progressive thinking. The innovative projects under the spotlight today, provide a clear demonstration of how Cohesion Policy can make a difference and provide inspiration to other European regions,” Commissioner Hübner said.

On his experience as President of the Jury, Mr Job Cohen, Mayor of Amsterdam said “Not everybody in Europe is aware that the EU invests in thousands of projects in areas as varied as health, innovation and sustainability. These projects do not only enhance living and working conditions for those who benefit from them, but they also create networks throughout Europe which facilitate the exchange of experience. That makes Europe stronger and better. So it is only right the best projects get the attention they deserve. And that is just what the RegioStars are helping to do!”

The RegioStars Awards ceremony will take place tonight at the Centre for Fine Arts (Bozar) in Brussels. All 271 regions of the European Union were invited to submit projects co-funded by the European Regional Development Fund (ERDF) in the period 2000-2006. Eligible applications were submitted from 18 Member States, out of which 25 projects were shortlisted by the Jury.

The winners:

Five projects will be awarded in three main categories:

Category 1: Research, Technological Development and Innovation

• DIPLÉ Printing Technologies from Wales, UK

The printing industry plays an important role in the Welsh economy. The Welsh Centre for Printing and Coating (WCPC) in Swansea undertook a project entitled DIPLÉ, the main aim of which was to develop case studies, undertake research on innovative uses of printing and transfer this knowledge to industry, particularly small and medium enterprises (SMEs).

• Cenaero Recherches from Hainaut, Belgium

This centre of excellence in aeronautical research has played an important role in Wallonia's economic development. The centre bases its success upon a well-developed cooperation between universities and industry, and is a recognised leader in Europe in the field of numerical simulation, in particular for aerospace applications.

Category 2: Adaptation to or mitigation of climate change

• Centrale de production d'électricité photovoltaïque en milieu tropical, Ile de la Réunion, France

This station produces photovoltaic electricity from panels located on three buildings connected to one transformer. In adapting techniques in a tropical environment, it has helped the island towards self-sufficiency in electricity production, and created local employment.

• EnergyAgency.NRW, North Rhine-Westphalia, Germany

In times of volatile energy prices and supply, it is vitally important to develop innovative energy technologies and provide impartial guidance to companies, local authorities and individual citizens on sound energy management and renewable energies. This is the role of EnergyAgency.NRW, the new central contact point in Düsseldorf for all energy issues in North Rhine-Westphalia.

Category 3: Audiovisual spot or programme highlighting the contribution of Cohesion Policy

• "Do you know about ESPA?", Greece

The spot entitled "Do you know about ... ESPA?" was conceived by the Greek Ministry of Economy and broadcast on main Greek public TV channels. In the spot, the famous actor Thodoris Atheridis explains the meaning of "ESPA" which is the "National Strategic Reference Framework" defining the priorities of Cohesion policy in Greece.

Two other projects received special mentions from the RegioStars 2009 Jury:

• ROADEX – Interreg project, Lead partner Västerbotten, Sweden

This project involves trans-national collaboration between Sweden, Finland, Norway, Scotland, Iceland and Greenland. The ROADEX network focuses on research on a wide range of issues affecting rural roads (roads engineering, health, environmental issues etc.). This has led to the development of a range of new technologies and practices that address the particular needs of northern regions and their users.

• **SpaceInnovation SAAR, Saarland, Germany**

Although Saarland is not a traditional “space region”, it has developed a particular know-how which is useful for the space industry. In harnessing its expertise in nanotechnologies, IT, automotive, and biomedical technologies through this project, innovative industries, SMEs, research institutes in Saarland have become partners of the European Space Agency.

Note for editors

The winners’ prizes consist of crystal trophies representing a star as well a project video (for categories 1 and 2) which may be used by the region and project holders in promoting their project. Information on all the finalists, eligibility criteria, members of the Jury can be found on the following website: http://ec.europa.eu/inforegio/innovation/regiostars_en.htm.

2009 is also the “European Year of Creativity and Innovation”:

<http://www.create2009.europa.eu/>

RegioStars Awards 2009

The second RegioStars Awards was launched at the 2008 Regions for Economic Change conference. Mr Dirk Ahner, Director General for DG Regional Policy, explained that the aim of these awards is to highlight innovative projects within the 268 EU regions which could be attractive and inspiring to other regions. The themes for the RegioStars 2009 centred on learning from good practices and support the themes of climate change as well as the 2009 European Year of Creativity.

RegioStars 2009 has seen applications from innovative projects from 18 Member States. This year's award categories were; "Research, Technological Development and Innovation", "Adaptation to or mitigation of climate change" and "Radio or television spot or programme that highlights the contribution of Cohesion Policy". The RegioStars Jury selected 25 finalists. More details on these projects can be found on the inforegio website:

http://ec.europa.eu/regional_policy/index_en.htm