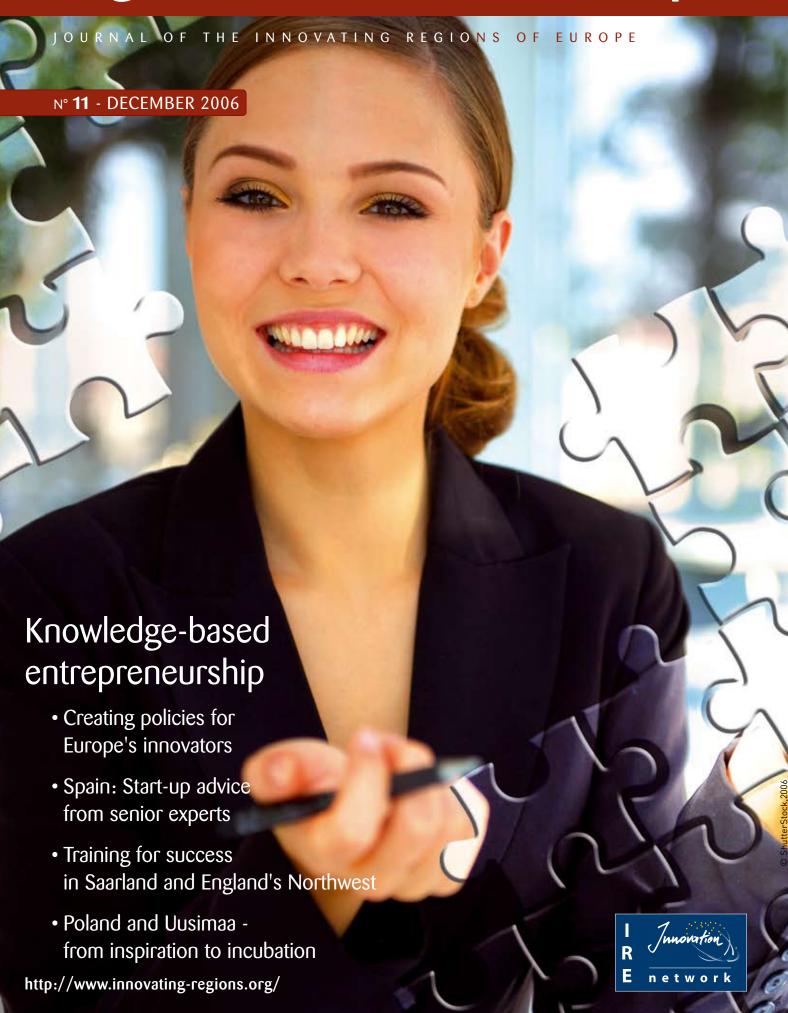
## Regional Innovation in Europe





# Creating a climate for knowledge-based entrepreneurship

Strong entrepreneurial spirit will be vital in the future knowledge-based economy of Europe. This cannot be developed through public support and funding alone, but a positive political climate is essential. The European Commission recognises the need, and is paving the way for action by administrations, development agencies and educators at national and regional levels.

The globalisation of manufacturing and markets is quickly changing the world economic order. In this turbulent environment, Europe cannot compete unless it becomes more innovative and capitalises on its strengths to respond better to consumer demands.

While EU countries have a long tradition of breakthrough invention, they often fail to turn the acquired knowledge into marketable products and services. Member States are already addressing this shortcoming under existing National Reform Programmes. And the regions are playing an especially important role. Their proximity to companies and individuals with the potential to innovate enables them to liaise directly with the stakeholders and respond with measures designed specifically to meet local needs, as illustrated in the following pages.

The Commission nevertheless believes that greater effort is needed at EU level to encourage all forms of innovation – not only in technology, but also in organisational structures and services. Consequently, it is taking further steps to break down the barriers faced by entrepreneurs and small and medium-sized enterprises (SMEs).

### From Action Plan to Framework Programme

An Entrepreneurship Action Plan¹ launched by the Enterprise and Industry DG early in 2004 focused on practical aspects – leading, among other things, to an increase in EU finance for innovating businesses, the promotion of student mini-companies and the development of information centres to help bring business partners together. A new strategy announced in September 2006² will build on this foundation by coordinating the relevant policy areas, framing discussions at national and European levels, and identifying new areas for action, such as facilitating

the creation and marketing of innovative products and services in promising "lead markets". Central to the implementation of this vision is the 2007-2013 Competitiveness and Innovation Framework Programme (CIP), which will run in parallel with the Seventh RTD Framework Programme, fostering links between knowledge creation and commercial exploitation.

#### Spreading the risk

To reach EU investment targets, it is essential to attract more private funding. This can only be achieved by improving the prospects for an adequate return on capital. The Commission advocates the introduction of legislation allowing administrations to offer guarantees and share rewards with private equity investors funding innovating enterprises. At the same time, it emphasises the necessity for changing public and institutional attitudes to business failure, in order to overturn the predominant aversion to risk in Europe.

To ensure appropriate education, the Commission recommends that universities develop curricula teaching entrepreneurship alongside skills such as literacy, numeracy, science and languages. Furthermore, it proposes the formation of a European Institute of Technology as a model of cooperation between academia and industry, and a catalyst for student mobility.

Integrating all of these initiatives into a coherent whole will provide the basis for a concerted drive to transform Europe into a thrusting entrepreneurial community with the capability to lead in tomorrow's knowledge-based global economy.

- 1. Report on the Implementation of the Entrepreneurship Action Plan. SEC(2006)
- 2. Putting knowledge into practice: A broad-based innovation strategy for the EU.  ${\tt COM(2006)}\ 502$

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Innovating Regions in Europe

## Start-up advice from senior experts

The Spanish project SECOT is a successful combination of youth and innovation on one hand, and age and wisdom on the other. This fusion of creativity and experience has proved fruitful, garnering very interesting results for entrepreneurship in the country. SECOT is proving that an old dog can teach a young one a few tricks.

Today's mad rush world is full of opportunities for dynamic young people with bright and fresh ideas. They may see an opening to apply an innovative idea where others merely see a problem. Unfortunately for these young people, while they may be brimming with enthusiasm and thoughts, they often lack the practical expertise that only comes with experience and time. The outcome is that many new ideas fail to make it to the starting blocks.

#### Beating high costs

While private consultants do exist and can help, their time and expertise often comes with a high price tag attached. As a result, this can make them an expensive option for many entrepreneurs as well as for SMEs.

SECOT has found a way to assist entrepreneurs who, for various reasons, cannot afford a professional consultancy firm and need support in setting up their project. SECOT stands for Seniors Españoles para la Cooperación Técnica, which loosely translates to Spanish Senior Citizens for Technical Cooperation. Launched in 1989, it is an association whose members are composed of former entrepreneurs and business executives willing to share their wealth of knowledge and experience with the younger generations.

#### A passion for business

For these retirees, financial reimbursement is not the prime motivator for joining the SECOT association. In fact they offer their consultancy services free of charge. Their passion for the art of business still burns strong; they are eager to jump once more into the fray and teach these young up and comers a trick or two.

These wily experts offer their advice on issues as diverse as business plans for service-orientated companies, including hospitality and retail industries, technical know-how, and training programmes in management and leadership techniques. Subject matters relating to local development plans and commercial relations between companies and other Spanish institutions are also covered.

#### **Educational benefits**

Over 90% of the seniors offering their services are university graduates. One third have a background in engineering and another third have extensive

professional experience in the business arena. As some are former managers or directors, they are exceptionally placed to pass on their tried and true solutions. If a problem arises which is outside their field of expertise, they can always turn to the vast network of seniors and find someone with the appropriate skills who is able to rise to the challenge.

Though they volunteer their services, professionalism is still uppermost in their minds and they abide by a strict code of ethics and professional secrecy.

An association of former entrepreneurs and business executives willing to share their know-how.



#### The more the merrier

Over the years, SECOT's success has spread across all of Spain and the number of volunteers has increased to approximately 900 people who have offered in excess of 190,000 hours in the past 17 years. It is now relatively easy to encounter a SECOT branch in any region of Spain. Following the success in Spain, SECOT seniors have also participated in missions in Central and Eastern Europe, as well as South America and Africa.

These seniors who volunteer their time and knowledge are to be admired for their altruism. The crucial advice they offer for free in turn helps to save and create jobs for others. They are proving that while officially retired, they still have a lot to offer young entrepreneurs, society and the country.

http://www.innovating-regions.org/schemes http://www.secot.org (in Spanish) Case studies: Training for entrepreneurship

# Developing entrepreneurial talents through training

Entrepreneurship training, whilst not being an easy task, is proving essential for Europeans aiming to launch their own businesses. EU powerhouses United Kingdom and Germany are determined to provide this key ingredient for future businesspeople.

The 1970s crisis in the shrinking steel, coal and copper industries hit the regional economy and employment in Northwest England particularly hard. Like other, similarly affected regions, the Northwest realised that a shift to a knowledge-based economy, and in particular science-based entrepreneurship, held the potential to accelerate growth. Manchester University rose to the challenge, became solution-focused and launched an academic incubator, where entrepreneurs learned how to build businesses. This, however, proved costly, as entrepreneurs were being admitted into the programme without any preparation process.

Enter the "Master of Enterprise" Programme at the University, which aims to enable post-graduate students to develop their business ideas. Professor Dave Auckland, Director of One Central Park Ltd and Chairman of Incubation NW, says the fundamental concern was that students' ideas develop from mere concepts to viable business propositions. The solution was a three-stage process: business creation, business formation and business incubation.

#### Business training, the British way

Master of Enterprise "works by providing facilities and business support," Prof. Auckland explains: "From Day One of signing up to the programme, the students start developing their business ideas, and learn to develop skills for innovation." The programme attracts a growing number of students from Manchester, the UK and the world who are seeking viable business ventures, he adds.



#### Creation, formation, incubation

Launched in 2001 by Prof. Auckland, Master of Enterprise has proven its success because its graduates now head their own businesses, whereas they could not bring their ideas to fruition before. They create ventures and are trained to hone their business skills, he notes. Two thirds of the graduates enter the knowledge transfer field, by launching their own businesses or by acting as consultants.

A case in point is the company Sign Assured Ltd, founded in 2004. Managing Director Charlie Ding says his company achieved its current level of success following its participation in Master of Enterprise. "The concept of the company," he notes, "was conceived whilst I was doing the course, so yes, the course was fundamental to the success and existence of my company. The mentors I had on the course are now on the Board of Directors, as they have firm understandings of the business and good contacts."

Master of Enterprise supports graduates once they get their businesses up and running. The university provides a Venture Centre or "open office", which offers various business services for graduates. The first three months are free; after this period, the fee is only €50 per annum. The university also offers graduates an incubator. Once they complete the programme, they set up their own offices.

According to Prof. Auckland, the programme has succeeded in implementing changes in the academic environment. "Academics are no longer focusing on research alone," he says, adding that he is also looking to expand the programme to the general public. "We are offering training at night for individuals who work during the day."

#### Commitment is crucial

For his part, Mr Ding says that Sign Assured has benefited a great deal from the programme. "The course highlighted all the aspects needed to run a small company, focusing on the practical," he explains. "The confidence of the people running a small company must be high, else motivation within the venture will be

"From Day One of signing up to the programme, the students start developing their business ideas, and learn to develop skills for innovation."

A pro-active effort to foster close relationships between academic research and start-up companies, and develop business-oriented R&D and technology infrastructure.

difficult to generate, and the course offered a lot of this."

What gives a Master of Enterprise student the edge? Prof. Auckland says that whilst communication is an important element, what really counts is character. "It's not about how really good an idea is, but rather how committed you are to making it happen."

#### A German take on business

The Starterzentrum has been an evolving process in the Saarland region (Germany) since the early 1990s. Faced with a failing resource-based economy, the region turned its attention to R&D, technology and other knowledge-based industries. Mr Wolfgang Lorenz of Kontaktstelle für Wissens- und Technologietransfer (KWT) at Saarland University explains that the Starterzentrum, therefore, is one of the results of a pro-active effort to develop close relationships between academic research, start-up companies, and the development of business-oriented R&D and technology infrastructure. More importantly, however, it is an effort to raise employment and encourage people to remain in the area.

Located on the Saarland University Campus, the Starterzentrum is a new form of incubator centre for Germany, as it is the first that allows technology-or science-based firms to launch their business ideas, Mr Lorenz explains. "The mere proximity to the university campus facilitates closer connection between entrepreneurs and exchange of experience," he says. The fact that the Starterzentrum can be found on campus has also led to some interesting side effects. Whilst it has been the launching pad for 170 start-ups and has created over 1,000 jobs, the Starterzentrum has also had a more subtle and perhaps more profound effect in encouraging students to become entrepreneurs themselves.

#### **Educating entrepreneurs**

According to Mr Lorenz, students can also enrol in a course of studies. Launched in 1998, these studies are open to students and graduates, as well as future entrepreneurs. Consisting of 30 lectures over two terms and covering topics of extreme importance, the course assists anyone wishing to start their own business, from business administration and marketing to accounting and taxation.

For those eager to start, an intensive crash course is also offered. It is a two-week course covering basic business management in week 1 and advice for company establishment and information about legal forms, company types, trademarks, patent rights, funding programmes and taxation in week 2.

One of Starterzentrum's success stories is Pharmacelsus, a start-up in the exciting field of biotechnology. The Managing Director, Dr Christine



Batzl-Hartmann, and her team made active use of a third programme offered by the centre: the coaching programme. This initiative involves a series of workshops organised in small groups where entrepreneurs can improve their strategic, communication and social skills. The workshops themselves tackle time management, training methods for selling and successful marketing techniques, among others.

Looking back at the first years of business, Dr Batzl-Hartmann says, "The Starterzentrum and the coaching programme of the Office for Technology Transfer at Saarland University have been very valuable for us in the stage of preparing and establishing our start-up."

The coaching programme concludes with a series of roundtable meetings, which form the base of a support network of consultants, ranging from lawyers to insurance managers. It also connects start-ups with regional and trans-national institutions such as Saarländische Wagnisfinanzierungsgesellschaft (operating venture capital), Mr Lorenz adds.

#### Start-ups leave the campus

The success of the Starterzentrum has, however, outpaced the resources of the centre, Mr Lorenz explains. "Staff shortages and financial constraints are slowing the pace of creating a university-wide culture of self-employment," he notes. "These constraints mean that our plan to motivate students by implementing courses for future entrepreneurs into all curricula and make it obligatory for them could not be realised yet."

As for Pharmacelsus, it started on campus grounds in 2000 and after a period moved off the grounds of the Starterzentrum to a science park located near the university campus. Dr Batzl-Hartmann recounts that the Starterzentrum "facilitated to find the appropriate premises, the necessary infrastructure and the connections that are essential in order to get access to the know-how and information that help to manage and to save costs."



## Turning bright ideas into brisk business

Incubators throughout the EU are providing necessary support to up-and-coming entrepreneurs with promising business ideas. In many cases, academia is proving instrumental in this endeavour. A closer look at academic incubators in Poland and business support systems in Finland reveals two successful approaches to promoting entrepreneurship.

Championing business start-ups in the face of changing labour market conditions, Poland had already been supporting fledgling entrepreneurs through incubators and technology transfer centres for several years when the first academic incubators were introduced. "Academic entrepreneurship is a new concept in Poland," says Mr Krzysztof Zasiadly of the Polish Business Centres Association (PBICA), which has been representing the country's incubators since 1992. And yet, Poland's university community has taken on a crucial role in the development of innovative entrepreneurship, paving the way for the promotion and development of business incubators, science and technology parks and technology transfer centres (TTCs).

#### Fresh focus in Poland

Recognising the strong link between academia and business entrepreneurship and convinced that much of its potential remained untapped, Poland recently launched its first academic incubators, which focus more specifically on the advancement of entrepreneurship among young researchers, students and university graduates. This initiative, which PBICA has now been promoting for three years, is backed by the Polish

Ministry of the Economy and the Polish Agency for Entrepreneurship Development (PAED).

Fifth edition of business plan competition in Poznan, March 2006



Poland is encouraging its citizens to participate the incubation programmes, and the benefits experienced by the regions across the country are numerous. To date, 30 academic business incubators have been created at the nation's universities and about 60 business ideas have been developed. "Interest in business activity is growing among students and researchers, especially young ones," Mr Zasiadly

remarks, adding, "Business plan competitions are very popular."

Thus the country's efforts to boost academic entrepreneurship have proven fruitful. The majority of academic incubators, TTCs and technology incubators have been developed over the past six years. Poland has also implemented special regulations, including tax cuts, in order to increase the universities' scope for business activities.

#### Now to business

A case in point is the Polish company LEDIKO, which introduces innovative and reliable technological solutions in lighting. Adam Wilanowski, LED expert at LEDIKO, explains that he won a contest entitled Idea for Own Company, organised by the Wroclaw Centre for Technology Transfer (WCTT). After winning a lump sum of €1,250, which financed part of its initial setup, the company was offered the use of a modern building at Wroclaw Technology Park free of charge for one year. He explains that throughout this first year, the company only paid running costs such as Internet access, electricity and heating, adding, "We now pay a lower rental rate than what is currently on the market."

#### Cooperation breeds success

Mr Zasiadly notes that incubators and academic entrepreneurship in Poland are part-financed by the EU's Structural Funds. The financing is used for the promotion of entrepreneurship, training, business plan competitions and support for newly established enterprises.

With respect to LEDIKO and how it is holding up, Mr Wilanowski says that while it is working almost like a standard company, it continues to derive benefits from its location at Wroclaw Technology Park. "We recently moved to newer and bigger offices and are still growing."

Poland's university community has taken on a crucial role in the development of innovative entrepreneurship.

### Resources are provided to encourage researchers and research groups to get their ideas off the ground.

A significant change in the development of business incubators is that while the academic community used to place greater emphasis on research and education than on business activities, the new regulations and competencies on patenting and licensing have now prompted them to gain a new perspective. Mr Zasiadly says, "It is more and more positive."

#### The fine Finnish way

Finland is renowned across Europe for its innovation system in the business sector. Located in Espoo in Helsinki's metropolitan area, Otaniemi is the leading technology hub in the Nordic region, featuring a unique mix of top-level research organisations, academic institutions and technology businesses. Otaniemi's InnoTULI¹ Business Evaluation system is a strong example of this successful support structure.

Dr Pertti Vuorela, Project Director and Business Development Advisor at Technopolis Ventures Ltd, explains that the system specifically targets researchers, innovators and entrepreneurs in order to discover and evaluate new ideas, research-based innovation and business concepts, and help to support commercialisation. "InnoTULI is a good example of a private-public partnership, financed by TEKES, the Finnish Funding Agency for Technology and Innovation, and operated by the private non-profit business incubator Technopolis Ventures," Dr Vuorela notes, adding, "Technopolis Ventures' mission is to find the best business ideas and help turn them into international success stories by offering a comprehensive set of packaged development services." It is the country's largest business incubator, with upwards of 180 high-tech and knowledge-based companies in its development programmes in the Helsinki region, as well as Oulu, Lappeenranta and Jyväskylä.

Dr Vuorela notes that InnoTULI is beginning to take off. "The processes' main steps are activating, screening, evaluating, selecting, project study consulting, reporting and following up of these innovations," he explains. A whole range of activities are organised to source promising ideas, for example through events, innovation clinics, research project portfolio follow-up, communication activities and personal contacts. As a next step, resources are provided to encourage researchers and research groups to get their ideas off the ground, for example through small grants for critical tasks, studies or developments. Evaluation services ensure the success and sustainability of their business innovations.



Technopolis Innopoli

#### Strengths bring solid results

In addition to Technopolis Ventures, other InnoTULI actors in Otaniemi include Helsinki University of Technology (TKK) and the VTT Technical Research Centre of Finland. Otaniemi is a 31,000-strong high-tech community comprised of 16,000 technology professionals and 15,000 students at TKK. Dr Vuorela sees InnoTULI's main strength in its proven concept, stating that "It is a good tool for cooperation between universities, research institutes and science parks."

InnoTULI is part of the Otaniemi New Technology Based Firms (NTBF) support system, which aims to create a high-efficiency start-up support environment, link scientific innovation and entrepreneurship, and foster incubation services and partnering to generate technology-based companies and global success stories. The success can be measured by annual performance indicators. According to Dr Vuorela, Otaniemi has generated 55 new high-tech start-ups and records around 50% average growth in incubator generation. Of a total of 55 start-ups, 25 are InnoTULI-based. Overall, 160 ideas have been registered and 80 ideas evaluated. The survival rates are 95% during and 86% after incubation.

#### Bigger and better ventures

"InnoTULI has successfully lowered the barriers for academic entrepreneurship and has generated spinoffs and licensing of innovations," Dr Vuorela remarks, adding that today, InnoTULI is the operative part of the national TULI programme, a network of eight regional programmes. "Otaniemi was also the forerunner in this kind of operation, so we can say that the national programme is based on Otaniemi's good experiences," he adds. These successes have also triggered changes in the academic environment. "Now it's more action, not just talk," Dr Vuorela asserts. "Operating in a networking way towards common targets is the power. Everyone benefits."

The name InnoTULI combines the acronym of the Finnish expression "TUtkimuksesta Lliketoimintaa" and the concept of innovation into an expression which translates as "Generating business out of innovative research". "TULI", which is also the Finnish word for fire, is also the name for the national programme covering most of the Finnish programmes aiming to commercialise university-level research results.

Further information: http://parp.gov.pl/en/acad.php http://www.sooipp.org.pl (in Polish) http://www.otaniem.ifi http://www.technopolisventures.fi http://www.tuli.info/fuli\_numeroina (in Finnish) http://www.tuli.info/yhteystiedot (in Finnish)

## The **Innovating** Regions in Europe



Austria

Burgenland, Lower Austria, Salzburg, South Lower Austria, Steiermark, Tirol, Upper

Belgium

Brussels-Capital Region, Flanders, Limburg, Wallonia North-East Bulgaria,

Bulgaria North-Western and North Central Bulgaria, South Central Bulgaria, South-East Bulgaria,

South-West Bulgaria Cyprus Cyprus Czech Republic

Moravian and Silesian Region, North and North-West Bohemia, Pilsen, Prague Region South Bohemia, South

Moravia, Zlin Aarhus, Bornholm, Denmark

Funen, Greater Copenhagen, North Denmark, Ringkøbing

East, North and West Estonia, Ida-Virumaa Tallinn, Tartu and South Estonia

Finland East Finland, Häme

Kouvola, Northern EU, Northern Finland, South Karelia, Southwest Finland, Uusimaa, West Finland

France Alsace, Aquitaine, Auvergne, Basse Normandie, Brittany, Île-de-France,

Languedoc-Roussillon, Lorraine, Midi-Pyrénées, Nord-Pas de Calais, Poitou-Charentes,

Greece

Hungary

Ireland

Aachen, Altmark-Harz Magdeburg, Baden-Württemberg, Bavaria, Berlin, Brandenburg, Bremen, Dresden, Halle-Leipzig-Dessau, Hamburg, Hanover, Lower Saxony, Lüneburg, Mecklenburg-Vorpommern, Neubrandenburg-Greifswald, North Rhine-Westphalia, Rhineland

Provence-Alpes-Côte

d'Azur, Rhône-Alpes

Palatinate, Saarland, Saxony, Saxony-Anhalt, Schleswig-Holstein, South Brandenburg, Stuttgart, Thuringia, Upper Lusatia, Weserbergland, Weser-

Fms Central Macedonia, Crete, Eastern Macedonia and Thrace. Epirus, Magnesie, North Aegean, Sterea Ellada,

Thessaly, Western Greece, Western Macedonia Central Transdanubia and Central Hungary, East Hungary, North Great Plain North

Hungary, Pest-Basc-Kiskun, South Great Plain, South Transdanubia, West Pannonia

Cork, Dublin, Eire,

Gaeltacht, North-East Ireland, North-West

Latvia Lithuania Malta

Italy

Slovakia

Portugal

Romania

Ireland, Shannon, South-East Ireland, Tipperary Galilee, Jerusalem Abruzzo, Calabria, East Lombardy, Emilia-Romagna, Friuli - Venezia Giulia, Lazio, Liguria, Marche, Milan, Piedmont, Puglia, Sicily, Trento, Tuscany, Umbria, Valle d'Aosta, Veneto Latgale, Latvia Kaunas, North and West Lithuania, South and

East Lithuania Luxembourg South Luxembourg Malta Norway Trøndelag, Oslo, Western

Norway Kujawy Pomorze, Łodz, Poland Lower Silesia, Lublin, Malopolska, Mazovia, Opole, Podkarpackie, Podlaskie, Pomerania, Silesia, Swietokrzyskie Warmia and Mazury,

> Wielkopolska Alentejo, Algarve, Lisbon and Tagus Valley Madeira, North

West Pomerania,

Bucharest-Ilfov, Maramues, North-East Romania, North-West Romania, South-East Romania, South Muntenia, South-West Oltenia, West Romania Banska Bystrica, Kosice Self-Governing Region, Nove Zamky, Nitra and

Bratislava, Presov

Trencin, Trnava, Zilina

Slovenia

City of Maribor and Podravje, Ljubljana, Slovenia Andalucia, Aragón, Asturias, Balearic Spain Islands, Basque Country, Canary Islands, Cantabria, Castilla y León, Castilla-la

Mancha, Catalonia, Extremadura, Galicia, Huelva, La Rioja, Madrid, Murcia, Navarra,

Blekinge, Central Sweden, Dalarna, East Sweden

Sweden, Jönköping, North Sweden, Northern EU, South Sweden, Stockholm, Western Sweden

Central Switzerland, Western Switzerland The Netherlands

Gelderland, Groningen, Limburg, North Brabant, Nothern Netherlands, North Holland,

Overijssel, Rotterdam, Utrecht Turkey Eskisehir, Mersin

Dorset Hampshire, East Midlands, East of England, England's Northwest, Highlands and Islands, Kent. London South, North-East England, North London, Northern Ireland, South-East England, South-West England, Wales, Western

and Humber

Scotland, West Lothian,

West Midlands, Yorkshire

United Kingdom

Switzerland