



- **European ICT Manifesto for the Regions**

Identifying future ICT trends
of exceptional importance
for regional economic change
and successfully incorporating them
into proactive regional policy approaches

Preface

The idea for the “European ICT Manifesto for the Regions” was born during the fruitful discussions between the partners responsible for the ESTIIC-Project. In developing the Manifesto our ambition is to support regional policy makers in their attempts to develop successful strategies for delivering the Lisbon and Gothenburg agendas.

As we came to learn during the course of the ESTIIC-Project, it was not an easy task to reach our aim - “Fostering Competitiveness through Innovation Technology and Information Society”. We had to do considerable groundwork identifying the most influential ICT trends and the technologies which are most important for innovation and also the most promising application fields of those trends and technologies for the regions. We mastered this task and can now proudly present eight successful subprojects.

Nevertheless, we want to go one step further and make the knowledge we gained useful for other regions - to help ourselves as well as other regions to take the right direction in view of a challenging future. Therefore we organised a think-tank in Brussels in which more than twenty technology experts of the research sector and ICT enterprises as well as representatives of relevant EU, national and regional institutions from Italy, Ireland, Germany, Spain, Belgium, Denmark, Sweden, England, The Netherlands and Finland took part. For one day, this think-tank discussed questions on how to identify future ICT trends of exceptional importance for regional economic change and how to successfully incorporate them into proactive regional policy approaches.

With the international conference “Regional Policies on Technology-driven Innovation and Information Society Technologies for SMEs: Groundwork and Next Steps” we continued this discussion with a special focus on application fields which seem to be promising and have a high economic potential. About 100 participants followed our invitation to the conference in Brussels and took part in an interesting event. In the follow up of the conference we added the conclusions from the presentations and discussions and finished our work on the Manifesto.

Now we present the “European ICT Manifesto for the Regions” – a document identifying future ICT trends of exceptional importance for regional economic change and showing how to incorporate them into proactive regional policy approaches successfully.

The Manifesto was written to make the knowledge gained in the ESTIIC-Project useful for other regions. We hope that it will support a huge number of regional policy makers in their attempts to develop successful policy approaches regarding Information and Communication Technologies.

On behalf of the ESTIIC-partners

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Turn Challenges into Opportunities: ICT- Key to European Competitiveness

Without doubt Information and Communication Technology (ICT) is crucial to European competitiveness, innovation strength and industrial development. As a key contributor to growth in the European Union, it prepares the ground for sustainable development and cohesion. The development and application of ICT strengthens the EU as a technologically innovative location and has a powerful influence on growth and employment. The ICT sector contributes 5.3% of EU's GDP - driving 25% of overall economic progress and about 40% of the European increase in productivity.

Bridge the Opportunity Gap

But Europe could do better - none other than Viviane Reding, EU Commissioner for Information Society and Media is convinced. Most experts agree that the comparatively weaker and later investment in ICT by the European economy has widened the productivity gap with the US. Their much larger ICT sector delivers benefits to their economy, yielding as much as 60% of their productivity growth. Commissioner Reding's conclusion shows the fruitful perspective, which European regions should adopt: "This gap between the US and Europe is not a failure, it is an 'opportunity gap', which we should try to bridge. A wider and efficient use of ICT throughout the economy will help the EU to preserve its global competitive position."¹

Foster Networks of Relationships

While this key challenge to the future of the European Union is being signalled at the highest level, regions are playing perhaps the most important role. To encourage the necessary innovation, the proximity to specialised inputs, employees, information, public institutions and firms within regional clusters is fundamental. As Danuta Hübner, European Commissioner responsible for the regions, states: "Fostering innovation needs more than just skills and infrastructures; it needs networks of relationships".²

Drive Growth

In addition to having an important role in strengthening regional competitiveness and encouraging innovation, ICT is a vital component in coping with the negative effects of structural change. This may be especially evident in the many economies which have come to rely heavily on their potential for innovation, made possible in most cases by important developments in advanced ICT and their applications. It is clear that not only does the ICT sector in itself drive regional, national and international economies, but as a spin-off, the positive development of nearly all other economic sectors is dependent on the R&D achievements of ICT and their intelligent transfer into business practise.

The ever-wider uptake of ICT and continual emergence of new developments actually change markets and hence business models for companies. Technological advances have the potential to improve the productivity and the competitiveness, strengthen innovation and breathe new life into existing production methods. Additionally they encourage new businesses to emerge by creating new fields of activity. ICT also generates positive side effects in the economy through learning-by-doing, faster transfer of know-how and increased transparency. The developments in Information and Communication Technologies create effects on the vertical as well as the horizontal level, in the same way that potential new technologies which benefit ICT business are often beneficial to other sectors also.

¹ <http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/05/486&format=HTML&aged=0&language=EN&guiLanguage=en>

² <http://www.europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/07/398&format=HTML&aged=0&language=EN&guiLanguage=en>

Take the right Approach

From the policy point of view, a proactive approach is needed to stimulate favourable market developments in order to benefit fully from ICT's economic potential. The nature of ongoing technological change and innovation dynamics tend to have strong local and regional components. It is clear that the contribution of ICT to regional growth is tied to the existing conditions and structures of the economy. However, as well as national-level initiatives, public policies need to be designed at sub-national level and to be tailored according to region-specific circumstances.

Against this background it becomes clear that the task for regional policy makers is very demanding. Traditional measures to foster regional ICT sectors will neither bridge the "opportunity gap" nor will they result in proactive policy approaches. At this point the "European ICT Manifesto for the Regions" steps in and answers the two most important questions: What are the main technological trends shaping the future of ICT and how are they to be successfully incorporated into proactive regional policy approaches?

First step: Understanding the Basics

As the technological landscape changes quickly, new challenges lie ahead and it is an opportune time to review the overall situation. New ways of mobile communication are a clear indication that major changes are underway, with many buzz words seemingly paving the way to the future: 'Web 2.0', 'semantic web', software for 'Service-Oriented Architecture', 'Software as a Service', 'next generation networks' etc. Without doubt it is difficult not only to learn enough about these technological trends, but also to gain a proper understanding of their importance. Radio Frequency Identification (RFID), for example, is a technology which nearly all prominent experts forecast will utterly change "the rules of the game" in fields ranging from logistics to storage. Does this mean that regional ICT policies should be focused more strongly on this topic, including the related vision of "the internet of things"? Without doubt, businesses and even political administrations must face the challenge of recognising and incorporating ICT in a meaningful way. For a proper understanding, it is necessary to know the underlying trends, which are important for the future development of Information and Communication Technologies, as follows.

Ubiquity: Access to information from anywhere at anytime, by anyone and anything

The vision of a ubiquitous network society depicts a world in which information can be accessed from anywhere, at anytime, by anyone and anything. In this digital future, the world's networks will not only connect corporations, people and data, but also everyday objects. New and exciting technologies are making this vision a reality - with the help of sensors and Radio Frequency Technology, the physical world can be monitored in real-time. The development of embedded systems further advances this trend. Miniaturisation and ubiquitous networks make it possible not only to connect anything, but also for objects to become increasingly intelligent through developments in "smart technologies". They are already prevalent in some areas like consumer electronics, automotive engineering and medical technology. Fully networked ICT systems connect complete supply chains containing different companies. The term "Internet of Things" is now used to describe that closely interlinked physical world and cyberspace.

The experts of the think-tank forecast that “by 2010-2012 most of Europe will be able to communicate effectively everything over every network anywhere”. And - ubiquity is not the last step; it is a necessary step to the next level, which is ambient intelligence. “Ambient intelligence is the idea that the intelligence is activated proactively. It’s the next step where the system is there when we want and can be used without having to instruct it in a complicated way. For regional communities it’s very important to be sure that that is not missed”

Flexibility: Decoupling and recombining loose formations of functions and services

Due to globalisation and increasing volatility of markets, business processes need loose formations of functions and services which can be decoupled and recombined. Information and Communication Technologies enable new, flexible business models, which are nowadays necessary, for example the outsourcing even of complex business processes. In this context new opportunities to control and manage processes in real time are important. The decisive effect of cross-linked processes is the enhancement of their flexibility. ICT concepts like Service Oriented Architectures, web based IT and Software as a Service and Utility Computing meet these new demands.

Regional policy makers should also know, that “the big challenge with the ICT trends is that they are about technology flexibility, not necessarily about business flexibility.” Therefore it is very important for regional policy makers to keep in mind that especially small and medium sized enterprises may face further difficulties: The challenge for businesses is: How do I understand that complexity? Where should I be flexible? Where should I be compliant? These questions are posed because flexibility isn’t something that applies everywhere.” Flexible IT architectures have become a crucial prerequisite for businesses in a global and flexible economy. “Current ICT trends like SOA, Web-based IT, BPM, SaaS and Utility Computing reflect that need and indicate the future direction, but generic ICT platforms that are commercially available

still show a lack of business process flexibility. Technology for automation and management of individual processes in specific domains is still a research topic”. Therefore dedicated domain-specific models and services on top of generic process- and service-oriented platforms are needed to meet the economic requirement and business need for flexibility of ICT.

Convergence: Distinct technologies share resources and interact – creating new efficiencies

Traditionally, communications media were separate and their services were distinct. Television channels broadcasted television programs; telecommunication companies enabled phone calls IT services providers essentially processed information. But due to the IP standard and fast growing data transmission bandwidth formerly separated technology silos now converge. On top of the converging technology, also, content is no longer assigned to selected networks and devices. Nowadays convergence becomes a matter of fact and everything is possible - Voice over IP, mobile TV or Internet Protocol TV are examples. This trend also affects the content market. Classic telecommunication companies buy content or engage in relevant partnerships. Media companies and equipment / device manufacturers look for ways to influence the networks delivering their contents to the customers. At the same time more and more users generate and publish their own content. Against this background convergence technologies and -applications promise to be innovative and are unleashing a wealth of opportunities.

The advent of IP has initiated a major transformation in technology development and also usage. “Taking a closer look at the convergence of classic IT services and telecommunication services it is obvious that the primary separate underlying platforms of the architectures to provide communication services and IT services are converging.” Formerly dedicated infrastructure which shaped whole industries has experienced this over the last few years, and ways of communication between people and things have also adapted. “The Web 2.0 discussion is basically about convergence of content production and content usage across different

segments. Even if the concept of convergence has been discussed since the 90s, regional policy makers should take into account: Things are starting to get real on a broad basis today.”

Information growth: Making masses of data meaningfully accessible

In the past, most data was available in a structured form and could be used directly. Today we are drowning in a sea of data which is occasionally generously referred to as “information”. By 2011, the amount of electronic data created and stored will grow to 10 times the 180 exabytes that existed in 2006, reflecting a compound annual growth rate of almost 60 percent. In fact, the number of bits stored already exceeds the estimated number of stars in the universe, research firm IDC stated. The challenge today is to make the increasing masses of decentralised distributed data meaningfully accessible. Against this background it is necessary to develop organisation wide policies for information governance: information security, information retention, data access and compliance. ICT is the driver of this development and will make it possible to administer data efficiently, to make it usable and to use it commercially. Many tools are in place – from Web 2.0 technologies and terabyte drives to unstructured data search software and the Semantic Web.

It is obviously difficult to make sense of the growing mass of data. One important technology in this field is semantics, because it deals with the problem that *“‘Meaning’ is in the head of the people who generated the document, not within the document”*. Only after eliciting the meaning from a document or data, it will be interoperable with other documents or data. *“Interoperability is a key problem, because the Internet gives us a physical level of interoperability, but we need a semantic level of interoperability.”* Despite these difficulties one trend which must be taken into account for the future is the whole group of Web 2.0 applications. Their success in business, eLearning, public service etc. is enormous: *“This is an important enabler of the information society because it is very easy to set up, it’s cheap, and people like it.”*

Second step: Knowing thy technologies - strengthening the ICT-supply side

Most of the European regions recognize the importance of Information and Communication Technologies for the future development of economy and society. However, to effectively build a proactive regional strategy, they need to know which technologies are the most important to jump on the right trend. The following technologies and solutions have powerful potential to shape the future of the regions:

RFID and sensor networks – key enabler to “Ubiquity”

The Radio Frequency Identification (RFID) of products and goods will play an outstanding role in the future. It is seen as a powerful technology to optimise existing processes, make them more reliable, offer new services and to realise benefits from rationalisation. RFID is also expected to create opportunities for new business models that will take advantage of a global network, in which any object can be linked to any context - the “Internet of Things”.

In addition, it will impact the daily lives of European citizens in many different ways, as it is a bridge between the physical and the virtual world. As a cornerstone of new ICT enabled technologies, RFID particularly in combination with sensor networks, prepares the ground for the “Ubiquitous Network Society”. Commissioner Reding estimates that there will be one billion computers, five billion users of mobile communication systems, ten billion appliances, one hundred billion sensors, and one quintillion electronic tags by the year 2020, most of which will be internet enabled.

RFID is the long missing link between the world of information and the world of things. *“Regions should support their major actors, their particular ecosystems or clusters to take-up RFID”*. To maintain and strengthen their competitiveness European SMEs should be supported, on a permanent basis, to build up their own RFID competency, to develop promising strategies and to implement economically reasonable applications: *“That can boost the region’s position and give it a competitive advantage.”* RFID also has the potential to enhance the quality of life, e.g. with regard to consumer goods,

in the health sector or in the environmental field. But regions should not forget that they are *“asked to take the serious citizen concerns about their privacy into account when entering the RFID world”*.

SOA - Delivering data as an integrated service

One of the big buzz words these days in the software sector is Service Oriented Architecture, most commonly known by its acronym SOA. Often it is claimed that SOA is the future of IT services. A service-based architecture approach, experts promise, will make it possible to refashion older information and processes as modular, standards-based services, so that they can be re-used time and time again for different applications and purposes. Within the concept of SOA business process activities, applications and data are no longer locked into independent, often incompatible “silos”. Therefore the burden to log into multiple systems, search for relevant data and integrate the results manually while completing business processes becomes obsolete. Alternatively, SOA delivers the data needed for business process activities as an integrated service - first and foremost, SOA is a business topic. Although it is currently sometimes difficult to explain SOA and its benefits to potential users, in the medium-term SOA will disseminate over all sectors, increasingly reaching small and medium enterprises also, especially in regions with a considerably number of providers of IT, services and solutions. Their presence will make SOA-based services more attractive for service providers, e.g. in the fields of system integration and consulting.

SOA is of strategic importance for the European software business: *“It’s a very important technological driver for creating software business on top of the systems that we are not controlling ourselves.”* It is important to keep in mind for responsible actors in European regions that *“the European software business does not create the basic technologies used in making software-based systems”*. But SOA is opening chances for EU companies in the software sector: *“They might become world champions in using those basic technologies, in their own domain, thereby creating the opportunity for creating jobs that are not easily sourceable.”*

Geospatial information: Creating conditions to store, handle, and use spatial data

Geospatial information is an economic good of outstanding impact. It offers the capability of developing important new applications - from digital maps in vehicles to the management and maintenance of city infrastructure, regional agriculture and forest lands. Powerful new technologies have emerged in recent years that greatly improve our ability to collect, store, manage, analyse and utilise information regarding the features of the Earth’s surface, and to combine these with other types of economic, social and environmental information. Scientists, municipal employees and a variety of business practitioners utilise geospatial technologies for resource and emergency management, land use planning and crime prevention. Geospatial information can be particularly useful to State, regional and local agencies in their efforts to plan for and manage the impacts of growth and development, as well as in environmental impact and disaster relief planning and management.

Geospatial industries are a fast growing, but very specialised business sector. The public perception around Google Earth and Neogeography shows that the usage of geospatial information is no longer a domain of specialists. The spatial dimension is a key component of the ‘context’ of objects, which affects our daily lives and actions in a globalised world. It is the concept of ‘location’ that provides the best means of connecting virtual and real worlds or computer models for analysing and planning an economic or social reality. Therefore it is not surprising that 52 % of all public sector information in the EU is geospatial information.

European regions should be aware of the potential of geo-spatial information to develop existing and potential assets and to make products and services based on geographic and geo-referenced data available. *“The current development of Web 2.0 and Neogeography (social networks, Wikis, Second Life, Google Earth Mash Ups) shows great potential for the development of new business models.”* Therefore spatial information should be perceived as an economic good that can be used to enhance business

processes and to increase economic benefit as well as to achieve social gains. At the same time *“these developments reflect a European cultural tradition: Positive perception of regional characteristics, distinctiveness and differentiation combined with a global perspective.”*

IT security: Protecting the confidentiality, integrity and availability of data

The rapid development of Information and Communication Technologies has led to innovation and growth in both the economy and the public sector. However as a result, associated dependencies and risks have increased. IT security risks endanger and impair not only existing applications, but can prevent the general lasting acceptance of related business models and services. The know-how in the IT security field therefore contributes considerably to the extent of the welfare effects which can be obtained. IT security thus becomes an important location factor - on national as well as on regional levels. Beyond that, the range of IT security creates additional indirect welfare effects, particularly obtained from the protection of sensitive information in enterprises and public institutions, the protection of critical infrastructures, the building of trust in electronic transactions and also by the prevention of criminality results. Due to the fact that there are still many unsolved problems concerning e.g. copyright and data protection, an important factor to foster IT security is to strengthen both research and business.

Without doubt, IT security is a *conditio sine qua non* for the further development of all mentioned trends and technologies in the IT sector. Over and above that *“IT security has become an important management task as a result of new laws being introduced and the increasing involvement of organised crime in hacking.”* Companies as well as public institutions need to have a wide range of knowledge in order to be capable of making wise decisions concerning their IT security investment.

Mobile communications - Service and application ubiquity

The saturation of the market, convergence and price erosion are just a few factors, which are driving the competition of mobile communications. As a result, the market participants will have to create new business models. European regions can use this entrepreneurial movement to foster sustainable networking in this area. Individualised and localised information, as well as sectoral mobile applications, will play an important role in the future market for mobile communications. Mobile devices are more and more equipped with additional features of larger computing power for facilitation of voice, text and multimedia content. This emergent behaviour, enabled by the convergence of personal communications and publishing technology with massive private, business and government data sources, could empower individuals, enterprises and regional authorities in their internal and external relationships.

Mobile end-devices like PDAs, navigation systems and smartphones play an increasingly important part in communication and interaction between individuals. The demand for selected and individualised information is rising: *“This trend towards ‘personal connectivity’ will be one of the biggest challenges for the ICT sector over the next few years.”* Last, but not least, if we look at connectivity and its availability in Europe, we have good networks, mobile and fixed, *“but we need to be careful that we provide enough stimulus for investment in next generation infrastructure that will be the prerequisite for success in 15-20 years.”*

Third step: Putting technologies to work - fostering ICT-demand side

Creating proactive policy approaches is a complex undertaking. To unlock business potentials of ICT, regions should look at different application fields, like eHealth, eTraffic, eDisaster Management, eGovernment, eEnvironment or eEnergy. Surely not all those areas are of equal importance for all regions. To meet the challenge policy makers and politicians are faced with when developing successful innovation policies, a strategy of “smart specialisation” is promising. Without doubt, fostering the demand side with specialisation on promising application fields is a means to bundle forces. But at the same time it is of high relevance to do this specialisation in a really smart way: To choose the area of application so wisely, that the region can reach an outstanding position.

The conclusion of the discussion on the conference in Brussels, which focused especially on application fields with a high potential was, that the most important aspect European regions have to consider when they start to develop successful strategies to incorporate ICT trends in regional policy approaches is to analyse the given circumstances in their regions and to adapt the new activities to them. A sustainable implementation of new technologies depends on the cooperation of all stakeholders responsible for an area.

The application fields described in the following are examples of areas in which a “smart specialisation” seems to be promising and in which Information and Communication Technologies can be introduced in a reasonable manner. They should be taken as suggestions for possible areas in which regions can specialise, enlarge their current activities and therefore foster their demand and strengthen the market development. The fields do not exclude each other, there are several similarities between them, but each has a different focus on a special task.

eHealth

Clinical Information Systems, Telemedicine and Home-care, personalized health systems and services or integrated regional / national health information networks are examples of eHealth applications with a high economic potential. The use of eHealth tools can reduce costs, enhance clinical care and public health services and

reduce health disparities. Forecasts for the future development of the European eHealth market show that this is a promising field - experts from the Unit ICT for Health, DG Information Society and Media predict an increase of 43 percent by 2020, bringing the total volume of the market to 30 billion Euro from the 2006 estimate of 21 billion Euro within the EU. This would result in an increase of approximately 360,000 health sector jobs in Europe. There is huge visible political commitment to foster the eHealth sector, e.g. in the declaration on European co-operation on Europe-wide electronic health services. Regions should jump on this train and specialise in eHealth, to help implement a roadmap for regional and cross-border eHealth services.
Important technologies: RFID, SOA

eTraffic

eTraffic is a broad application field because it combines traffic on street, rail, water and in the air. The traffic volumes grow steadily and at the same time the traffic is problematic. An increasing number of traffic jams as well as train and flight delays are just the tip of the iceberg. The need for intelligent eTraffic solutions is obvious. Information and Communication Technologies can create an intelligent network of all carriers and better traffic management which leads to less traffic jams, more security and a healthier environment. Other application fields are e.g. hazardous-cargo monitoring systems or automatic road toll systems.
Important technologies: Geospatial information, mobile communications, RFID

eDisaster Management

There are a lot of environmental risks European regions are faced with, e.g. forest fires, floods, landslides, storms, earthquakes, etc. The number of natural and man-made disasters is increasing, as are the number of victims and economic losses. Applications focusing on eDisaster Management should integrate government, civil protection bodies and emergency services, as well as private companies and organizations. Such applications must also work across national borders since disasters do

not respect any borders. Efficient Disaster Management requires that regions are able to interoperate and efficiently access and exchange relevant data. Due to the fact that most of the existing information systems function as “islands of information”, the need for new and interoperable risk management solutions is great and it is high time for multi-risk scenarios containing the most useful and adequate services for risk management.

Important technologies: Geospatial information, mobile communications, sensor networks

eEnvironment

The necessity for intelligent solutions to enhance the environment is, in the context of an increasing number of climatic-caused disasters, undisputable. Major environmental threats like climate change, management of dangerous chemicals, sustainable consumption and poverty alleviation can be responded to adequately with the help of Information and Communication Technologies. One important and promising application field is ICT-enabled energy efficiency. Possible fields to work on include the take-up of ICT-supported approaches to produce, distribute and trade energy efficiently or to develop ICT solutions for an efficient environmental monitoring and management. The information from such monitoring can be used for further activities: The personal energy usage could be reduced by analysing the collected information. Important technologies: Sensor networks, mobile communications

eEnergy

In recent years, the energy market was faced with substantial changes concerning the liberalisation and decentralisation of the energy sector as well as the necessity to reduce CO₂ emissions. The reaction to those changes will not be successfully incorporated without a comprehensive penetration of Information and Communication Technologies, experts agree. For example, a study by the German Economics Ministry³ analysed the energy market in

Germany, which led to the conclusion that the necessary steps to achieve a continuous optimization of business processes and technical system across all stages of the value chain of the energy market can only be reached with ICT. The optimisation of the chain can result in a higher level of economic viability, security of supply, as well as climate and environmental compatibility. ICT can significantly improve energy efficiency, the development of renewable energies and CO₂ reduction. Possible applications for ICT in the field of eEnergy are e.g. intelligent grid management, smart metering or eEnergy for SMEs. Important technologies: RFID, sensor networks, mobile communications

eGovernment

eGovernment means to use Information and Communication Technologies to provide better public services to citizens and businesses. There are already a lot of government bodies using ICT, but there are also a lot of institutions which do not. For example, only around five percent of crossborder procurement by public administrations in France and Germany is managed electronically and a total of 30 percent of Europe’s population does not use the advantages of eGovernment solutions.⁴ Nevertheless the benefits are obvious, as the following two examples show: If electronic invoicing was introduced all over the European Union, taxpayers would save 150 million Euro and businesses 50 million Euro annually. Further, the full deployment of eProcurement across the EU could reduce the overall procurement bill by up to 80 billion Euro a year. Some more areas in which eGovernment solutions can be used include Regulation, Cross-agency Collaboration, Participation, Public Communication or Inclusion. To implement eGovernment solutions effectively, a rethinking of organisations and processes and changing behaviour is required. Implemented well, eGovernment enables all citizens, enterprises and organisations to carry out their business with government more easily, more quickly and at lower cost. Important technologies: Web 2.0 technologies, SOA

³ “Potentials of Information and Communication Technologies to Optimise Energy Supply and Consumption”,

German version: <http://www.bmwi.de/BMWi/Redaktion/PDF/Publikationen/Studien/e-energystudie,property=pdf,bereich=bmwi,sprache=de,rwb=true.pdf>

⁴ <http://cordis.europa.eu/ictresults/pdf/policyreport/INF%207%200100%20IST%20Results%20brochure-egov.pdf>, S. 4, 5

Experts contributing to the ICT Manifesto for the Regions

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Background: The ESTIIC-Project



The project ESTIIC “Fostering Regional Competitiveness through Innovation and the Information Society” is a Regional Framework Operation (RFO) and was born in April 2005. Four European regions participate in the project: Asturias, Cantabria, Nordrhein-Westfalen and Southern & Eastern Region of Ireland. The regional government of Asturias through the IDEPA is leading the project which is funded under INTERREG IIC and began its operational activities in July 2005. ESTIIC is concerned with fostering regional competitiveness through innovation and the Information Society by facilitating SME access to emerging, high potential scientific and technological know-how. The project involved the setting up of a cooperation framework among the four participant regions that fostered a series of initiatives which were developed by regional agents. These initiatives should improve the effectiveness of the policies

and tools used in the regional development and were focused on two thematic areas: Technologically-driven Innovation and Information Society. Those two themes have been identified as the pillars for both regional and SME competitiveness. Pilot sub-projects involving cooperation between public organisations have been selected on the basis of their capacity to develop useful new instruments and approaches of direct benefit to businesses and of possible transferable value in the application of enterprise and regional development policy. Support has been provided to develop actions related to cross-sectional technologies, e.g. RFID; clusters and networks generation e.g. in the mobile publishing sector; the further extension of broadband functionality and its interaction with regional development; business potentials of spatial information, e-health and IT-security. More information: <http://www.estiic.org>



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