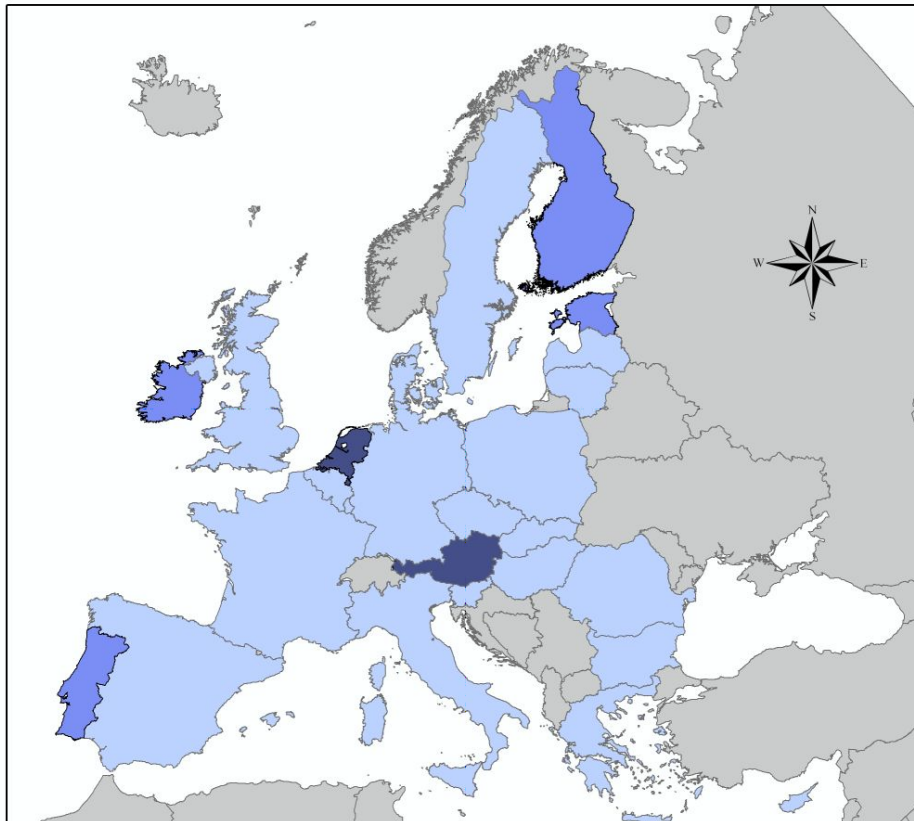




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# STRUCTURAL FUNDS AS INSTRUMENT TO PROMOTE INNOVATION

Theories and practices



ANA MAFALDA MADUREIRA, JAN-EVERT NILSSON & VICTOR GHEORGHE  
BLEKINGE TEKNISKA HÖGSKOLA

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VINNOVA's mission is to *promote sustainable growth*  
by funding *problem-oriented research*  
and developing *effective innovation systems*.

Through its activities in this field, VINNOVA aims to make a significant contribution to Sweden's development into a leading centre of economic growth.

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# Structural Funds as instrument to promote Innovation

Theories and practices

by

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Jan-Evert Nilsson  
&  
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## Foreword

VINNOVA (Swedish Governmental Agency for Innovation Systems) is a State authority that aims to promote growth and prosperity throughout Sweden. Our particular area of responsibility comprises innovations linked to research and development. Our tasks are to fund the needs-driven research required by a competitive business and industrial sector, and to strengthen the networks that are a necessary part of this work.

In the work with the new generation of structural funds from EU and its connection to the 7:th framework program for R&D, VINNOVA asked professor Jan-Evert Nilsson together with two students, Ana Mafalda Madureira and Victor Gheorghe, to carry out a study about how other countries in the Union are working with the funds as a tool to promote innovation.

The group decided to first of all make a screening of six countries. Focus is on the national innovation system in 6 countries (Austria, Finland, The Netherlands, Ireland, Portugal and Estonia). These are countries that have programmes within the structural funds destined to promote innovation and R&D. In the other part of the study, focus is more specific on planning and implementing innovation in Austria and Netherlands.

**Structural Funds as instrument to promote Innovation** are highly recommended for those interested in how to direct the structural funds more in line with the Lisbon agenda.

VINNOVA wishes to express its gratitude for this study and hope that it will be valuable in the planning of the new structural funds in Sweden and elsewhere.

Conclusions are present throughout the study. The fifth chapter presents some of the general findings of this study. The conclusions in the study are all up to the authors.

VINNOVA in February 2007

*Lars Fernvall*  
Director

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# Introduction

The Lisbon Strategy, formulated in the European Council of March 2000, is one of key policies overseeing much of the national and regional policies concerning economical and social development. The UE has basically agreed that for its economic growth to be sustained and its social model to endure, new approaches are required in order to compete with its global competitors.

Together with this Lisbon Agenda, new buzz-words are linked with national and regional development, such as “Knowledge-based economy”, “competitiveness” and linked with these two, “innovation”.

Another important aspect of the current EU regional policy is to think of the regions as living entities, whose capacities, know-how and resources have to be exploited to the full. This means supporting not only the more disadvantageous regions, like was the case until now, but turn the attention also the more dynamic regions, helping them to grow in influence and expect a spread-out effect to happen.

The thematic and priority areas appointed by the EU serve as guidelines for the national and regional levels to design their own strategies, in which can be described as a clear top-down approach. This will transpire on the NRP and the NSRF.

Keeping all this in mind, in this study we address the Lisbon Agenda’s goals and fields of intervention and its particular relation with one of the pillars of the European Community: the Regional Policy. They are, increasingly, complementary policies.

For the period 2000-2006 there are two main financial instruments at the service of knowledge for growth: the Sixth Framework Programme and the Regional or Cohesion policy. The financial instruments of the Cohesion Policy are the Structural Funds. These support structural measures and are distributed according to three Priority Objectives, four Community Initiatives and three working themes under Innovative Measures, all of which already point out for innovation and technology as themes that are gaining importance within the EU area. We will see that especially highlighted in the EU regional policy supporting innovation are the regional approaches to research, the importance of supplying services to support businesses, the significance of investments in eco-innovations and the promotion of entrepreneurship.

For the next period there will be three financial instruments at the service of knowledge for growth: the Seventh Framework programme, the Competitive and Innovation Framework Programme (CIP), and the Structural and Cohesion Funds. The later was reformulated and has new political priorities that reflect not only the need to increase the dynamism of the European economy, but also concerns about the new Member States and the accessions that will certainly follow.

In this context, the Structural Funds and the Cohesion policy have a role in the support of innovation, especially when it is linked with the regional development. It is thus pertinent to analyse the national and regional innovation systems or (when they are non-existent) the regional development strategies and observe what is being done to conciliate this two spheres: innovation and regional cohesion.

In a nutshell we can state that for the countries covered by the Regional Competitiveness and Employment objective and for those with mixed objectives, under the Regional Policy, a particular emphasis is put on the Lisbon goals of innovation, territorial competitiveness, knowledge economy and employment, with the priorities set on innovation and R&D, entrepreneurship, environmental protection and improved human resources. This reflects the Lisbon goals and the Cohesion objectives association.

But the relation between investment in knowledge and innovation and performance of the system is not linear. The diversity of outcomes derives from the roles of the main actors, such as firms, universities, public research institutions, government. What parts to them play in the process of knowledge production, diffusion and utilization? What kinds of interactions are established between them?

Especially relevant for this study is the interest devoted to the promotion of innovation at the regional scale. The EU alerts to the fact that the regions of Europe confront new challenges for their development.

The Commission highlights a sectoral approach, strategies taking-off with SWOT analyses, partnerships, the leaders of the strategy characteristics, communication and evaluations as essential to the success of the innovation system.

The link with National Reform Plans (NRP) and National Strategic Reference Framework (NSRF) is also relevant, as we will later see in the regions' strategies in pursuit of regional development and innovation. In order to ensure that all the Member States directed their development towards the same goal, the Commission put forward the Community Strategic Guidelines (CSG) to serve as guidelines for the NSRF.



The reality that is taking shape under the umbrella of Lisbon Agenda, reformulated Cohesion policy and the quest for innovation and competitiveness is increasing the relevance of “growth poles” and centers of dynamism across the EU. This growth poles are best assessed on the regional scale, as they are thought as a development opportunity for the region as a whole. The national (and European) advantages of such a development emerge later. If the regions are doing well, this will reflect of the national standards and the European level as well.

In short, what are the new perspectives about regional development? How do they complement or are influenced by the national and supra-national ideas about what regional development is? How does innovation take a part in this development? What are the new strategies being pursuit to stimulate innovation and R&D? These are some of the questions that we will see addressed.

# Structure and methodology

We divided our study into four stages. In a first approach, we address the strategies: The Lisbon Agenda, the restructured Lisbon Agenda and within it the issue of the European Social Model and the Knowledge based economy. This chapter aims to set a background to fully understand the later chapters.

The second chapter is entirely orientated towards the EU policies: the regional policy in the current period and the next, the Structural Funds action, the Seventh Framework Programme, the Competitiveness and Innovation Framework and how the regional policy and the structural funds can be linked with Competitiveness and Innovation.

In the third chapter we present a screening of six countries. We will focus on how the Structural Funds were used in the 6 countries (Austria, Finland, The Netherlands, Ireland, Portugal and Estonia), especially which countries make a clear reference to programmes destined to promote innovation and R&D. This will allow us to have a general perspective on what is being done within the European Union. The countries chosen have a population similar with Sweden but the political, economical, social and administrative realities are very diverse. This comes as an advantage to include a wider range of points of view and policies.

In order to better access the status of each country concerning innovation policies and trends, we turned our attention to the European Trend Chart on Innovation.

In the fourth chapter we present the NSRF as a strategic document against which the next Operation Programmes that coordinate the regional development will be developed. The option of referring to the NSRF is based on the need to move the analyses closer to the regional level, to access strategies and programmes being promoted.

The role of national and regional agencies that are closely linked with innovation is also addressed.

Conclusions are present throughout the study, whenever deemed necessary and pertinent. However, there is a fifth chapter that presents some of the general findings of this study.

Throughout our research and working process we used a variety of literature and sources. In the first and second chapter we mainly turned to online information and articles. The third chapter was constructed largely with

information from the European Trend Chart on Innovation and other reports produced by the European Commission.

For these three chapters we interviewed Sverker Lindbland and Björn Näsvall at NUTEK, Olivier Baudalet and Evert Carlsson, from DG for Regional Policy and Elie Faroult, from DG Research at the European Commission. Further contacts were established with Peter Heydebreck, from inno-group, Carlos Lajas, from ADI, Siim Sikkut at the Estonian Ministry of Finance and John Bachtler, from the University of Strathclyde in the United Kingdom.

For the fourth chapter and to consolidate some ideas and findings from the previous chapters we interviewed Michael Leahy, at Enterprise Ireland, Gerd Gratzner, Head of Unit for EU regional Policy and New Technologies with the Provincial Government of Styria, Reinhard Schinner, responsible for Cooperation and EU affairs at the Carinthian Economic Promotion Fund (KWF), Harald Polak, with Österreichische Forschungsförderungsgesellschaft mbH (FFG) and Ron Lander, from the Noor-Nederland organisation.

We established further contacts with Herm van der Beek, Ruud van Raak and Annelieke van der Giessen, in the Dutch ministry of Economic Affairs and Anko Jan Marringa from provincie Gelderland, manager from the Dutch East Region. At the European Commission, with Anna Burylo, from DG REGIO (Evaluation Unit). In Austria, we also contacted Wolf Huber, in the Ministry of Economics and Labour.

Additional contacts were made with regional and national entities considered relevant for the purpose of the study.

# 1 Strategies

## 1.1 The Lisbon Agenda

In each new European Council, issues are debated, strategies are presented and some of these strategies gain relevance over others, due to specific background in which they are formulated and the challenges they propose to address. The Lisbon Strategy, formulated in the European Council of March 2000, is one of these.

The UE has agreed that for its economic growth to be sustained and even increased, new approaches have to be adopted in order to compete with other world players. Economic growth in Europe is jeopardized by the emergence of China and India in the market of manufactured goods. Technologically, both the Japan and the USA have important roles and their products and discoveries are quickly exported and spread out across the rest of the world.

The Lisbon Agenda basically sees a Knowledge-based economy as a driving force to promote economic growth and to allow the maintenance (and future reconversion) of the EU social model.

The Strategy was formulated before the 2004 enlargement and has the characteristics and aims that are expected of the reality of a EU15. Apart from the Cohesion countries, in a catching-up process with the rest of the EU15, the remaining regions were faced with this challenge of increasing its economic dynamism. That is why the Lisbon Strategy highlights Competitiveness as a key subject and knowledge-based economy as a way to promote competitiveness.

At the same time as the economical front is under the threat of decline caused by third parties, the European model of social welfare and social equity is under menace. Declining and ageing population demand for reforms in the welfare system, that are hard (and uncertain) to be achieved. For this reason those two interconnected issues (**European social model** and **Knowledge-based economy**) are addressed further on.

### 1.1.1 The issue of European social model

The EU Commission, the Parliament, the EU Council agree that a more aggressive and renewed economic policy, a reformed role in the world economic arena and a subsequent growth and expansion of the economy in the EU area might allocate sufficient resources to maintain the concepts and improve what they consider to be the European social model.

The European social model is interesting enough and also source for numerous debates.

### **The theoretical point of view**

From theoretical perspective there is widespread agreement that there is not one European social model, but rather a variety of models.

André Spair, from the think-tank Bruegel, presented a study at an ECOFIN meeting in September 2005, entitled “Globalization and the reform of the European Social Models”<sup>1</sup>. Sapir argued that there are four European social models: the Nordic, the Anglo-Saxon, the Mediterranean and the Continental.

- The Nordic model, characterized by the welfare state, high level of social protection, high level of taxation and extensive intervention in the labour market, mostly in the form of job-seeking incentives;
- The Anglo-Saxon system, with more limited collective provision of social protection, seen merely as a mean to cushion the impact of events that would lead to poverty;
- The continental model, with the provision of social assistance through public insurance-based systems and a limited role of the market in the provision of social assistance and;
- The Mediterranean social welfare system, portrayed as having a high legal employment protection, lower levels of unemployment benefits and spending concentrated on pensions.

Some of those models are evidently doing better than others in dealing with unemployment, poverty and the financing of healthcare, thus question arises as to what lessons can be learnt from those more successful models.

It has been argued that the social models of the EU-10, though transitory, must be added to this schema. Controversially, the Sapir study concludes that only the Nordic and the Anglo-Saxon models are sustainable.

### **The EU's point of view**

The Assembly of European Regions Committee on Social Cohesion, Social Policy and Public Health has provided a set of common denominators which, in their entirety, define the European social model as "a set of principles and values, common to all European regions", and it has declared these principles to be:

- a. Solidarity;

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<sup>1</sup> <http://www.euractiv.com/en/socialeurope/eu-debates-european-social-model/article-146338>

- b. Social Justice;
- c. Social Cohesion;
- d. Equal access to employment, in particular for the young and the disabled;
- e. Gender equality;
- f. Equal access to health and social protection;
- g. Universal access to education;
- h. Universal access to health and social services;
- i. Equal opportunities for everybody in society, in particular the elderly, the young, the disabled, the socially excluded and minority groups;
- j. Universal access to, development of and implementation of knowledge in health and social services.

Still Trade Unions, Member States, the Commission, all the implied actors' cannot reach an agreement on what an adequate social model for the EU should be.

### **1.1.2 The knowledge-based economy**

This Knowledge-based economy rests upon three factors: Education, Research and Innovation. The reasoning behind it is that the EU doesn't want to compete in the world markets with cheap products based on low-paid workforce. The added value that the EU wants to export its innovative and design advanced technology and products; new products, processes and services that create the economic turn-over, through up-dated techniques.

But in the field of research and innovation, both the USA and Japan spend more of their GDP then the EU. New technologies, processes and products are being developed in these countries through their clear promotion of research and innovation. As Danuta Hübner points out "according to the latest official data, the EU's overall research effort represents 1,96% of GDP, as against 2,59% for the United States, 3,12% for Japan and 2,91% for Korea"<sup>2</sup>

But other challenges emerge. The Cohesion Policy was and is experiencing a critical moment with the ten new Member States that have joined the EU in 2004. New enlargements are in perspective for the near future. This poses a dilemma for the Lisbon Agenda: as said, the new countries have completely different levels of economic performance from the rest of the EU. Additionally, their image of a social model is different from the models that are common for the more westernized countries. The EU10 also has

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<sup>2</sup> "Regions for economic change – innovating through EU Regional Policy" supporting documents for conference, European Union-Regional Policy; June 2006

different competitive advantages from the EU15, concretely, the lower-paid workforce. This is a competitive advantage that these countries are entitled to use but that goes against the Lisbon goals of promoting economic growth at the expenses not of cheap labour but of qualified and well paid one.

## **1.2 The restructured Lisbon Agenda**

On the eve of the enlargement, in the Spring Council of 2003, the Commission established a European Employment taskforce, headed by Wim Kok, former Prime Minister of The Netherlands. The taskforce produced a report where the Lisbon Agenda was evaluated. In the Spring Council of 2004, the EU leaders were faced with the failure to meet up with the Lisbon goals and of an enlargement process that brought with it new realities. Either the intentions were abandoned or a new effort was put into achieving new and more clarified goals.

The EU decided on a new restructured Lisbon Agenda. This presents simplified fields of intervention that aim to tackle with the challenges posed by China and India, the supremacy of USA and Japan in the new Technologies field and allow for the enlargement to be successful.

The different policies complementarity is also addressed. The Cohesion Policy was conceived to give weaker regions within the EU with the instruments to catch up with the more developed ones. For this purpose, mainly financial help was granted in the form of the SF. As explained by Danuta Hübner, “In the period 2007 – 2013, EU regional policy and the Structural Funds aim to increase and improve investment in research and innovation and to enhance synergies with other policies and instruments.”<sup>3</sup>

The current reasoning is to think of the regions as living entities. Money is to be allocated not only to regions that are lagging behind but also to those that have capacities, know-how or resources to exploit. The convergence of the funds for projects in these areas intends to expand its growing potential. The surrounding areas would beneficiate through the spread-out effect.

This is a contested approach. It is not certain that more investments in areas/regions/ urban centres that already show competitive advantage will generate the desired leakage effect to the more depressive surrounding regions. Nevertheless, it is the leakage effect that is being promoted in the new Lisbon Agenda.

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<sup>3</sup> “Regions for economic change – innovating through EU Regional Policy”, supporting documents for conference; European Union Regional Policy, June 2006

As for the Gothenburg Agenda, it mainly added up to the Lisbon Agenda the missing corner of the sustainability triangle: the environmental protection. As such, the new Lisbon Agenda protects this issue by stating that investment in research might conduce to new technological discoveries that will allow more environmentally friendly products to circulate. Also the key themes of the operational programmes for the Cohesion Policy, for example, include environment and risk prevention. Energy dependence is another strong issue in today's EU agenda and investments in research in this field are being welcomed as means to overcome EU's energetic dependence and, simultaneously, contribute to the Kyoto protocol goals to be achieved.

The renewed Lisbon Agenda sets up actions to be taken at three levels: the EU, the national and the regional level. There is clear top-down reasoning, with the thematic and priority areas appointed by the EU serving as guidelines for the national and regional levels to design their own strategies. This means that the lower levels wait for concrete decisions from the EU in order to better define their own strategies, programmes and projects. With the Lisbon themes merging in wider fields, this leaves room for the National level to intervene, proposing more concrete fields of intervention on the national scale.

Since the purpose of this first stage is to describe the EU actions, we will first look up to the national role and, in a nutshell, describe what is expected of it.

The National Level was until now a level with an undecided role. Different countries with different degrees of regional autonomy guaranteed that the EU directives were taken into consideration and put into practice with the national level assuming diverse levels of intervention.

Now, this national level has a clear task: to prepare a National Innovation Strategy. This is basically a national reform programme that translate into the country's reality the main tools and policy guidelines drawn up by the Lisbon Agenda. The Member States are responsible for the preparation and implementation of their own National Strategies and the Commission maintains a regular dialogue with the national authorities responsible for the preparation of the national reforms programmes.

Each national Strategy is individually assed by the Commission, in vision of the recommendations of the Economic Policy and the Employment Committee. Strengths and weaknesses of the national strategies are pointed out but there is a clear attempt of the Commission to empower each Member State with the design and implementation of its own national strategy. The reasoning seems to be that this empowerment will motivate a greater



involvement in the strategy implementation and facilitate internal reforms that, in the end, contribute to the cohesion and economic growth objectives.

## 2 Policies

The European Union sets policies in many areas sharing the policy competences with the Member States. Based on the limited competences delegated by the Member States and on its current fiscal structure, the EU is active on a narrower range of policies and can not finance, for example, the health or the education system. Related to the EU spending, two policies, for historical reasons, appear as a central feature: the Common Agricultural Policy (CAP) and the Cohesion Policy.

### 2.1 The current period

For the current period there are two main financial instruments at the service of knowledge for growth: the Sixth Framework Programme and the Regional policy.

The Regional Policy takes a much bigger share of the resources, 235 billion euros for the period 2000–2006 for the Regional Policy compared to a budget of 17.5 billion euros for the years 2002–2006 for the Sixth Framework Program. From the next programming period on, the Regional Policy will be strongly connected with the objectives of the restructured Lisbon Agenda.

#### 2.1.1 The Regional/Cohesion Policy and the Structural Funds

The Regional Policy represent one third of the funds spent by EU and its purpose is to strengthen the economic and social cohesion between the Member States, and to reduce regional disparities. It was introduced after the first enlargement step (which includes UK, Denmark and Ireland in 1972), being strongly supported by UK in order to compensate the fact that UK was not eligible for the CAP policy. After significant budget increases in 1988, it became a key policy.

Also known as the Cohesion Policy, this policy is a market-correcting policy<sup>4</sup> which attempts to channel and constrain the market itself, by limiting inequality and compensating the costs to a particular group. The Regional Policy is rather redistributive (from rich region to poor region) than regulatory and because of that, similar to CAP, it is very difficult to change. Even so, some revision has undergone in time and starting from

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<sup>4</sup> According to Alberta Sbragia's typology from "The European Union: How Does it Work?"

1992 and The Treaty of the European Union cohesion was designated as one of the main objectives of the Union, alongside economic and monetary union and the single market. The effects of this decision were visible from financial perspective starting with The Edinburgh European Council (December 1993) which increased the budget for the Cohesion Policy to almost 200 billion ECU, one third of the Community budget, compared with allocation of ECU 68 billion for the period 1989–93.

Agenda 2000 continued the process of revising the RP in the same direction with a view in the enlargement process and budgeted 235 billion euros for the current financial period 2000-2006, as presented in Table 1. The European Union’s financial framework for the period 2000-06 was based on the assumption that six countries would join in 2002, but the situation changed during negotiations and 10 countries joined the EU in May 2004. Due to this situation on the 30<sup>th</sup> of January 2002 the Commission updated the common financial framework 2004-06 in order to meet the needs of enlargement.

**Table 1 - The Structural Funds financial framework 2000-06 (2004-2006 for EU+10)**

Area		Objective 1	Objective 2	Objective 3	Community Initiatives	Cohesion Fund	Total
EU-15	Billion €	137,800	22,040	24,050	11,551	18,000	213,441
	Percentage	64,6%	10,3%	11,3%	5,4%	8,4%	100,0%
EU+10	Billion €	13,230	0,120	0,110	0,643	7,590	21,693
	Percentage	61,0%	0,6%	0,5%	3,0%	35,0%	100,0%
EU-25	Billion €	151,030	22,160	24,160	12,194	25,590	235,134
	Percentage	64,2%	9,4%	10,3%	5,2%	10,9%	100,0%

Source: adapted from Working for the regions, European Communities, 2004

The financial instruments of the RP are the Structural Funds and the Cohesion Fund which are used to part-finance regional and horizontal operations in the Member States.

The Structural Funds account most of the money (89%) and are designated to the poor areas in poor countries as well as to declining regions in the rich countries while the Cohesion Fund (11%) goes only to the least prosperous countries of the EU (in addition to Greece, Portugal and Spain, the Cohesion Fund today covers all the New Member States), which have a gross national product (GNP) of less than 90 % of the average for the Union.

The Structural Funds are four:

- the European Regional Development Fund ([ERDF](#)) contributes mainly to assisting the regions whose development is lagging behind and those undergoing economic conversion or experiencing structural difficulties ;
- the European Social Fund ([ESF](#)) mainly provides assistance under the [European Employment Strategy](#) ;

- the European Agricultural Guidance and Guarantee Fund ([EAGGF](#)) a guidance section that helps in both the development and the structural adjustment of rural areas whose development is lagging behind by improving the efficiency of their structures for producing, processing and marketing agricultural and forest products ;
- the Financial Instrument for Fisheries Guidance ([FIFG](#)) supports restructuring in the fisheries sector.

The difference between the Structural Funds and the Cohesion Fund resides in the domain addressed. Compared to SF focus, previously presented, the Cohesion Fund supports projects in the fields of the environment and transport in the least prosperous Member State.

Comparing the allocation of funds (see Table 1) per objective on EU-15 and EU+10 a close value can be found in both cases for Objective 1. Going further with the comparison, the situation changes, with EU-15 having Objective 2 and Objective 3 areas situated on similar percentages. On EU+10, the rest of the money goes primarily on the Cohesion Fund (based on the increased need for infrastructure investments on these countries), around 35% compared with only 8% for the EU-15. For EU+10 the found allocation for Objective 2 and Objective 3 areas goes below 1% due to the fact that the areas from the new Member States are placed, in most of the cases, under Objective 1.

The structural measures under the SF are distributed according to three **Priority Objectives**, four **Community Initiatives** and three working themes under **Innovative Measures**.

### **The Priority Objectives**

[Objective 1](#) promotes the development and structural adjustment of regions whose development is lagging behind (whose average per capita GDP is less than 75% of the EU average). This Objective also covers the regions with very low population density (fewer than eight inhabitants per square kilometer) in Finland and Sweden as well as the most remote regions from the extreme periphery (the French overseas departments, the Azores, Madeira and the Canary Islands). This accounts for 64,2% of the total SF for EU-25 in the period 2000-2006.

Objective 1 covers the entire territory of the new Member States with the exception of Bratislava, Prague and Cyprus, which receive aid under Objectives 2 and 3.

This objective is addressing a low level of general investment and unemployment rates often higher than average in the MS, and in the same

time the lack of services for businesses and communities and the lack of the basic infrastructure necessary for economic activities.

**Objective 2** contributes to the economic and social conversion of regions in structural difficulties other than those eligible for Objective 1.

Represents 9,4% of the total SF for EU-25 in the period 2000-2006.

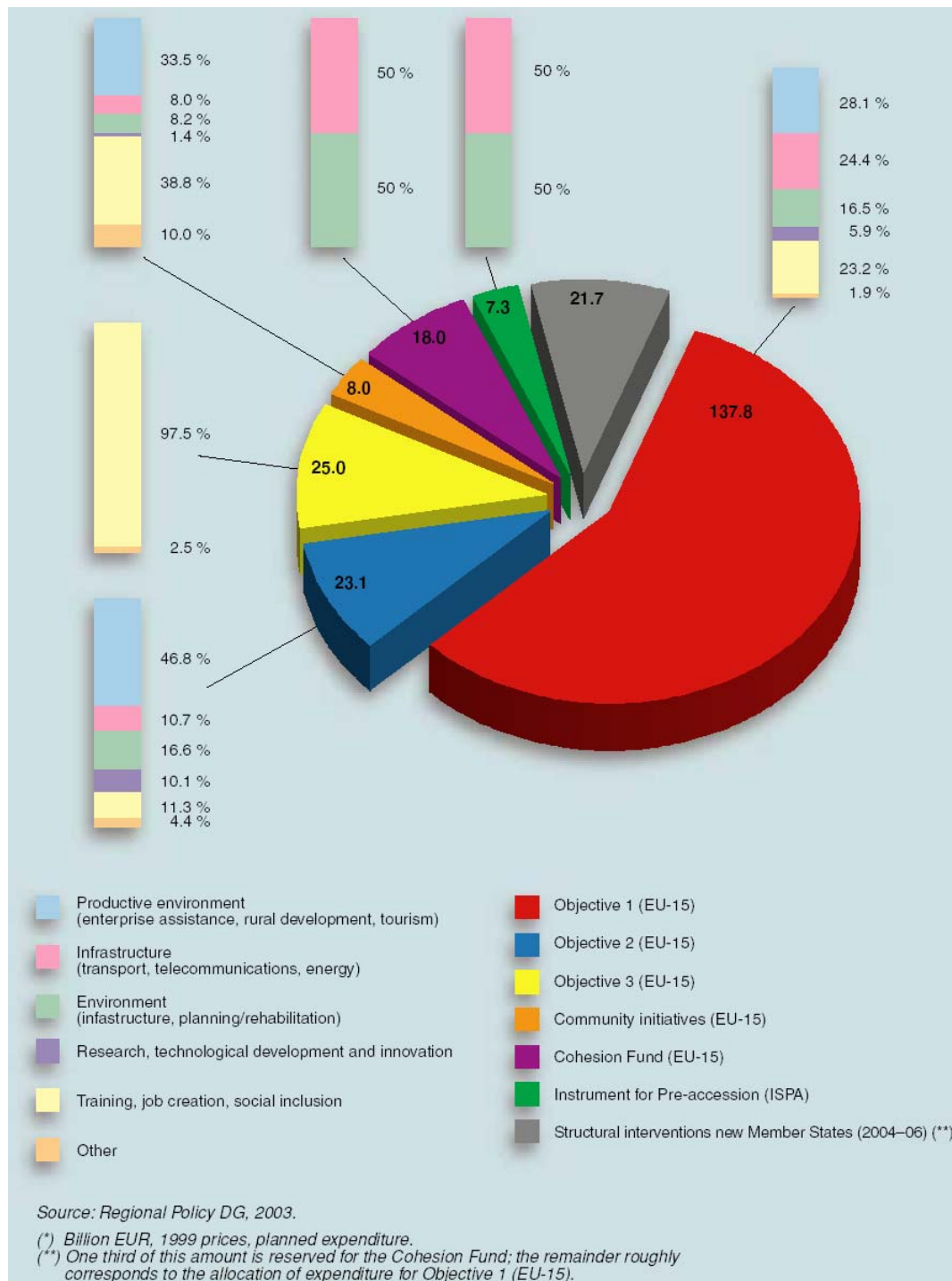
Overall it covers areas undergoing economic change in the key sectors and decline of employment in the areas of industrial activity and services, declining rural areas with decline of traditional activities and depopulation, depressed areas dependent on fisheries and urban areas in difficulty of economic and social crisis and deterioration of neighbourhoods.

**Objective 3** gathers together all the measures for human resource development outside the regions eligible for Objective 1.

It accounts 10,3% of the total SF for EU-25 and deals with Individuals in difficulty on the employment market and it is the reference framework for all the measures taken under the new title on employment inserted in the EC Treaty by the Treaty of Amsterdam and under the European Employment Strategy.

Figure 1 presents the allocation of the Structural Funds for 2000-06 including here, as a distinctive part of the SF, the Instruments for Pre-accession (ISPA) with a value of 7,3 billion € The figure also presents the money allocation by sector of expenditure but only for EU-15. For example ISPA function very similar with the Cohesion Fund, allocating equal shares per sector, but only for infrastructure and environment.

**Figure 1 – Breakdown of Structural Funds and instruments by sector of expenditure, 2000 – 06 (\*)**



Source: Working for the regions, European Communities, 2004

Derived from here Table 2 presents the allocation, by sector of expenditure for the EU-15 area.

Research, technological development and innovation obtain 10,58 Billion € mainly from Objective 1 (5,9%), Objective 2 (10,1) and the Community Initiatives (1,4%). Even if, at the first view, this sector accounts only 5% from the total budget of the SF, the money allocated (10,58 Billion €) represent 60% of the Sixth Framework Program's budget (17.5 billion €), the program dedicated for the support of the research at the EU level. By this, the SF represents an important source of funds for the actions meant to support research and innovation.

**Table 2 - The Structural Funds allocation by sector of expenditure for 2000-06**

Sector of expenditure	Billion €	Percentage
Productive environment	52,21	24,6%
Infrastructure	45,73	21,6%
Environment	36,23	17,1%
Research, technological development and innovation	10,58	5,0%
Training, job creation, social inclusion	62,06	29,3%
Other	5,06	2,4%
<b>Total</b>	<b>211,87</b>	<b>100,0%</b>

*Source: adapted from Working for the regions, European Communities, 2004*

### **Community Initiatives**

Besides the Priority Objectives, Four Community initiatives are aimed at finding solutions to problems common to a number of or all Member States and regions:

- [Interreg III](#) , which aims to stimulate cooperation on three strands: cross-border, transnational and inter-regional;
- [Leader+](#) , which promotes rural development ;
- [Equal](#) , which provides for the development of new ways of combating all forms of discrimination and inequality in access to the labour market;
- [Urban II](#) , which encourages the economic and social regeneration of declining towns, cities and suburbs.

### **Innovative Measures**

Also the Commission can support new and little-exploited ideas through innovative measures under the ERDF. Three working themes are promoted:

- regional economies based on knowledge and technological innovation ;
- eEurope-regio: the information society and regional development;
- regional identity and rural development.

Every Member State receives some money from the Regional Policy, but the importance of these funds may differ a lot when a poor country is

compared to a reach one. For example, for Sweden, the money from the SF represent a small share of the national regional policy, while in other countries, especially the new Member States, this money covers a much bigger share of the funds available for the regional policy.

The distribution of funding across countries involves actors from the regional level, the national one or the EU policy-making level which share power. Basically, the EU establishes the money per country and after that at the national level, it is redistributed per region. Especially due to the very large number of regions in the EU, the Commission can not interact directly with the regions and they deal mainly with the national level.

Another important aspect of the distribution among the MS is the dominancy of the intergovernmental bargaining and even if sometimes the national governments act according to strong societal actors, in the end the national ministers ultimately decides.

Table 3 and 4 shows the distribution of the SF and the CF among the member states of EU-15 for the period 2000-2006 and respectively of EU+10 for the period 2004-2006. In the EU-15 only Greece's population is covered 100% by the funds while in EU+10 only Cyprus, Czech Republic and Slovakia are not covered 100%.

**Table 3**

**Structural Funds and instruments for EU-15, 2000–06 (\*)**

(million EUR, commitments in 2004 prices)

Member State	Objective 1 (*)	Objective 2	Objective 3	FIFG (**)	Cohesion F.	Community initiatives	Total	Population in Obj. 1 and 2 areas (million)	% of the population
Austria	288	740	585	0	0	395	<b>2 008</b>	2.270	28.20
Belgium	690	486	817	33	0	231	<b>2 257</b>	1.269	12.50
Denmark	0	199	397	221	0	92	<b>909</b>	0.538	10.20
Finland	1 008	541	442	33	0	280	<b>2 304</b>	2.650	51.70
France	4 201	6 569	5 013	254	0	1 155	<b>17 192</b>	20.412	34.00
Germany	22 035	3 776	5 057	121	0	1 775	<b>32 765</b>	24.447	29.80
Greece	23 143	0	0	0	3 388	952	<b>27 483</b>	10.476	100.00
Ireland	3 409	0	0	0	584	183	<b>4 177</b>	0.965	26.60
Italy	24 424	2 749	4 129	110	0	1 294	<b>32 707</b>	26.704	46.50
Luxembourg	0	44	44	0	0	14	<b>103</b>	0.117	28.20
Netherlands	136	861	1 866	33	0	719	<b>3 615</b>	2.324	15.00
Portugal	21 010	0	0	0	3 388	741	<b>25 139</b>	6.616	66.60
Spain	42 061	2 904	2 363	221	12 357	2 162	<b>62 067</b>	32.027	80.70
Sweden	797	431	795	66	0	307	<b>2 396</b>	1.674	18.90
UK	6 902	5 068	5 046	132	0	1 061	<b>18 209</b>	18.909	32.20
<b>EU-15</b>	<b>150 104</b>	<b>24 367</b>	<b>26 553</b>	<b>1 226</b>	<b>19 717</b>	<b>11 361</b>	<b>233 328</b>	<b>149.13</b>	<b>40.30</b>

(\*) Including phasing out.

(\*\*) Outside Objective 1.

Source: *Working for the regions, European Communities, 2004*



**Table 4****New Member States and Structural Funds and instruments, 2004–06 (1)***(million EUR and current prices)*

Country	Objective 1	Objective 2	Objective 3	Interreg	EQUAL	Cohesion Fund (*)	Total	Population in Obj. 1 and 2 areas (millions)	% of the population
Cyprus (**)	0.00	28.02	21.95	4.30	1.81	53.94	<b>113.44</b>	0.212	30.90
Czech Republic	1 454.27	71.30	58.79	68.68	32.10	936.05	<b>2 621.19</b>	9.460	92.00
Estonia	371.36	0.00	0.00	10.60	4.07	309.03	<b>695.06</b>	1.379	100.00
Hungary	1 995.72	0.00	0.00	68.68	30.29	1 112.67	<b>3 207.36</b>	10.238	100.00
Latvia	625.57	0.00	0.00	15.26	8.03	515.43	<b>1 164.29</b>	2.391	100.00
Lithuania	895.17	0.00	0.00	22.49	11.87	608.17	<b>1 537.70</b>	3.531	100.00
Malta	63.19	0.00	0.00	2.37	1.24	21.94	<b>88.74</b>	0.387	100.00
Poland	8 275.81	0.00	0.00	221.36	133.93	4 178.60	<b>12 809.70</b>	38.654	100.00
Slovakia	1 041.04	37.17	44.94	41.47	22.27	570.50	<b>1 757.39</b>	4.957	91.90
Slovenia	237.51	0.00	0.00	23.65	6.44	188.71	<b>456.31</b>	1.986	100.00
<b>Total</b>	<b>14 959.64</b>	<b>136.49</b>	<b>125.68</b>	<b>478.86</b>	<b>252.05</b>	<b>8 495.04</b>	<b>24 451.18</b>	<b>73.195</b>	<b>97.70</b>

(\*) Average.

(\*\*) Including Fisheries Fund.

*Source: Working for the regions, European Communities, 2004*

## 2.2 The future period

The EU acknowledged that one of the reasons why Lisbon failed was the neglect in connecting the EU's overall goals, the national entities and the regional level. Region's role is highlighted when "spatial proximity remains one of the most powerful factors in favour of intellectual, commercial and financial exchanges, heavily influencing the innovation process."<sup>5</sup> But tailored regional and local projects, that implement the EU's goals for economic growth, must work together with national strategies – there is the need for political coherence at all levels.

Indeed, the national strategies are suppose to address different issues that work together to implement the Lisbon's goals: means of promoting employment, increasing the number on SME's, stimulating entrepreneurship and, through educational programmes, reduce the fear of failure and stimulating the venture capital and risk taking spirit that is uncommon in Europe.

The Commission recommends that the different public and private stakeholders and the representatives of regional and local authorities are involved in the formulation of the national strategies. "As the Lisbon strategy is a medium to long-term agenda requiring implementation on the ground, the sustained involvement of parliaments, local governments, social partners and civil society is essential."<sup>6</sup> Additionally, 54% of R&D funding

<sup>5</sup> "Regions for economic change – innovating through EU Regional Policy" supporting documents for conference, European Union-Regional Policy; June 2006

<sup>6</sup> Europe on the move: Working together for more growth and jobs; 2006 annual report

at the EU level comes from the business sector, making it an essential partner to include in discussions about innovation strategies and which steps to take next.

The EU reserves for itself a most decisive role. The financial instruments attached and the evaluation procedures still rest in the Commission's hands and assure that the Lisbon goals are implemented.

These investments will be made according to four priority guidelines<sup>7</sup>:

- strengthening co-operation among business and between businesses and public research/higher education institutions by supporting the creation of regional and trans-regional clusters of excellence;
- supporting research and innovation activities in SME's and enabling SME's to access RTDI services in publicly-funded research institutions;
- supporting regional cross-border and transnational initiatives aimed at strengthening research collaboration and capacity building in priority areas of EU research policy;
- and strengthening R&D capacity building, including information and communication technologies, research infrastructure and human capital in areas with significant growth potential.

Especially highlighted in the EU regional policy supporting innovation are thus the regional roles in research, the importance of supplying services to support businesses, the significance of investments in eco-innovations and the promotion of entrepreneurship, as a lacking characteristic of European research and investment.

For the next period there will be three financial instruments at the service of knowledge for growth:

- The Seventh Framework programme, focusing on the research system and its actors;
- The Competitive and Innovation Framework Programme (CIP), with a clear orientation towards the privileged themes for research;
- The Structural and Cohesion Funds, which focus on the regions.

### **2.2.1 The Seventh Framework programme**

The 7<sup>th</sup> Framework programme develops around 4 objectives or thematic fields: Cooperation, Ideas, People and Capacities. For 2007-2011, according

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<sup>7</sup> "Regions for economic change – innovating through EU Regional Policy" supporting documents for conference, European Union-Regional Policy; June 2006

to the last Council's agreement from July 2006, the 7<sup>th</sup> Framework programme will have a budget of 50,5 billion €

By **Cooperation**, the Commission expects Member States to support and promote the cooperation between universities, research centers, industries and the public authorities. It's a clear Triple-helix approach. It aspires that closer contacts between key players might induce new technological and research projects to come forth, based on local/ regional/sectorial problems. Reality is no longer filtered through time and distance since universities, research centers, public sector and industries maintain an open dialogue and exchange information and knowledge.

The Cooperation objective is the one that covers the whole range of research activities, at different levels. A thematic flexibility and the organisation of all themes into one programme allows for multidisciplinary work to happen.

“**Ideas**” is a programme that promotes excellence and tries to foster competition between individual teams of researchers at the EU level.

“**People**” is design to facilitate the mobility and strengthen the career prospects of researchers across the EU space. This mobility is not only between universities but also involves industries and public and private research institutes.

Finally “**Capacities**” is mainly driven to the support of innovating SME's and the creation of research-driven clusters.

### **2.2.2 The Competitiveness and Innovation Framework Programme (CIP)**

The **Competitiveness and Innovation Framework Programme (CIP)** is designed to become the main legal basis grouping the Community actions in the field of innovation, entrepreneurship, SME's, ICT development and industrial competitiveness. For the period 2007-2013, the European Commission has foreseen for the CIP a budget of 4,21 billion € in order to support the three main blocks of activities:

- the Entrepreneurship and Innovation Programme;
- the ICT Policy Support Programme and
- the Intelligent Energy Europe Programme.

### **2.2.3 The Regional/Cohesion Policy and the Structural Funds**

Between 2000 and 2006 the Structural Funds spent about 10.5 billion on research infrastructure, projects, innovation transfer and training of researchers. Geographically this investment was carried out in Europe's most disadvantaged regions and in those going through economic and

structural change. For the next period, there is a boost in the investment in innovation and research and also a closer connection established between the Regional Policy, other EU policies and its instruments.

**Table 5 – Structural Funds: instruments and objectives**

2000–06		2007–13	
Objectives	Financial instruments	Objectives	Financial instruments
<b>Cohesion Fund</b>	Cohesion Fund	<b>Convergence and competitiveness</b>	Cohesion Fund ERDF ESF
Objective 1	ERDF ESF EAGGF-Guidance FIFG		
Objective 2	ERDF ESF	<b>Regional competitiveness and employment</b> — regional level — national level: European employment strategy	ERDF ESF
Objective 3	ESF		
<b>Interreg</b>	ERDF	<b>European territorial cooperation</b>	ERDF
<b>URBAN</b>	ERDF		
<b>EQUAL</b>	ESF		
<b>Leader+</b>	EAGGF-Guidance		
<b>Rural development and restructuring of the fisheries sector outside Objective 1</b>	EAGGF-Guarantee FIFG		
<b>Nine objectives</b>	<b>Six instruments</b>	<b>Three objectives</b>	<b>Three instruments</b>

Source: “Source: Working for the regions”, European Communities, 2004

As for the **Cohesion Fund**, the **ERDF** and **ESF**, the transformations underway are worth being addressed, since it is in this field that a new look on innovation and R&D is taken place.

### The Priority Objectives

The New Cohesion Policy has reviewed its **Political Priorities**. There are now only three:

- Convergence (countries with GNI < 90% of the average) and regions (regional GDP < 75% of the average) and the regions concerned by the statistical effect, that is 33% of the population of the Union
- Regional competitiveness and employment: to reinforce attractiveness and ensure that socio-economic changes are anticipated in other regions;
- European territorial cooperation: Cross-border, trans-national and inter-regional

The Convergence objective is not closely linked with the Lisbon Strategy. Countries that are covered by this objective have to face the challenge of catching-up with the rest of the EU. While the Lisbon Agenda calls for competitiveness based on knowledge, the convergence countries usually compete on a lower-wage base. However, the restructured Cohesion Policy can easily motivate these countries to pursue economic policies that comply with the Lisbon goals and to invest in their innovation, R&D and educational legacy as a way to sustain their economic and social development.

The Convergence Objective is also the one that retains the larger share of the funds, as illustrated in the table below.

**Table 6 The Structural Funds financial framework 2007-13 by objectives**

Area		Objective 1	Objective 2	Objective 3	Cohesion Fund	Total
EU-15	Billion €	89,561	46,130	4,899	9,261	149,851
	Percentage	59,8%	30,8%	3,3%	6,2%	100,0%
Eu+10	Billion €	85,025	3,000	1,896	44,514	134,435
	Percentage	63,2%	2,2%	1,4%	33,1%	100,0%
EU-27	Billion €	189,604	49,127	7,75	61,558	308,039
	Percentage	61,6%	15,9%	2,5%	20,0%	100,0%

Source: adapted from "Fourth progress report on cohesion: Growth and jobs and the Reform of cohesion policy"; Commission of the European Communities, Brussels, June 2006

For EU-15 Objective 2 areas gain importance covering 30,8% allocation from the SF, including here the Objective 2 and 3 areas and also the majority of Community Initiatives from the previous framework period. A special situation appears for Interreg, previously one of the Community Initiatives, which gain importance and became now the current Objective 3, but with a similar share of the SF as in the previous period. The Cohesion Fund rises to 20% of the total SF allocation due to the fact that most of the new MS are now Cohesion countries.

**Table 7 The Structural Funds allocation share by area**

Area	SF allocation		Surface		Population	
	billion €	percentage	sq km	percentage	mil. inh.	percentage
EU-15	149,85	48,6%	3 239 207	74,9%	382,7	78,7%
EU+10	134,44	43,6%	738 280	17,1%	74,1	15,2%
EU-27	308,04	100%	4 325 897	100%	486,4	100%

Source: adapted from "Fourth progress report on cohesion: Growth and jobs and the Reform of cohesion policy"; Commission of the European Communities, Brussels, June 2006

Based on the declared objective of the RP, to reduce disparities, the EU is allocating 391€inhabitant in EU-15, even if the surface covered by this area represents 74,9% of the EU's total surface and in the same time represents 78,7% of the total population of the Union. Because of the reduced development (low GDP, infrastructure and environment problems) compared to EU-15, the EU+10 areas receive almost five time more money, accounting for 1814€inhabitant.

The group of MS, which are under the Regional competitiveness and employment objective, are typically Lisbon-orientated.

As for the third objective – European territorial cooperation – it can easily be traced back to Lisbon when we think of cooperation between

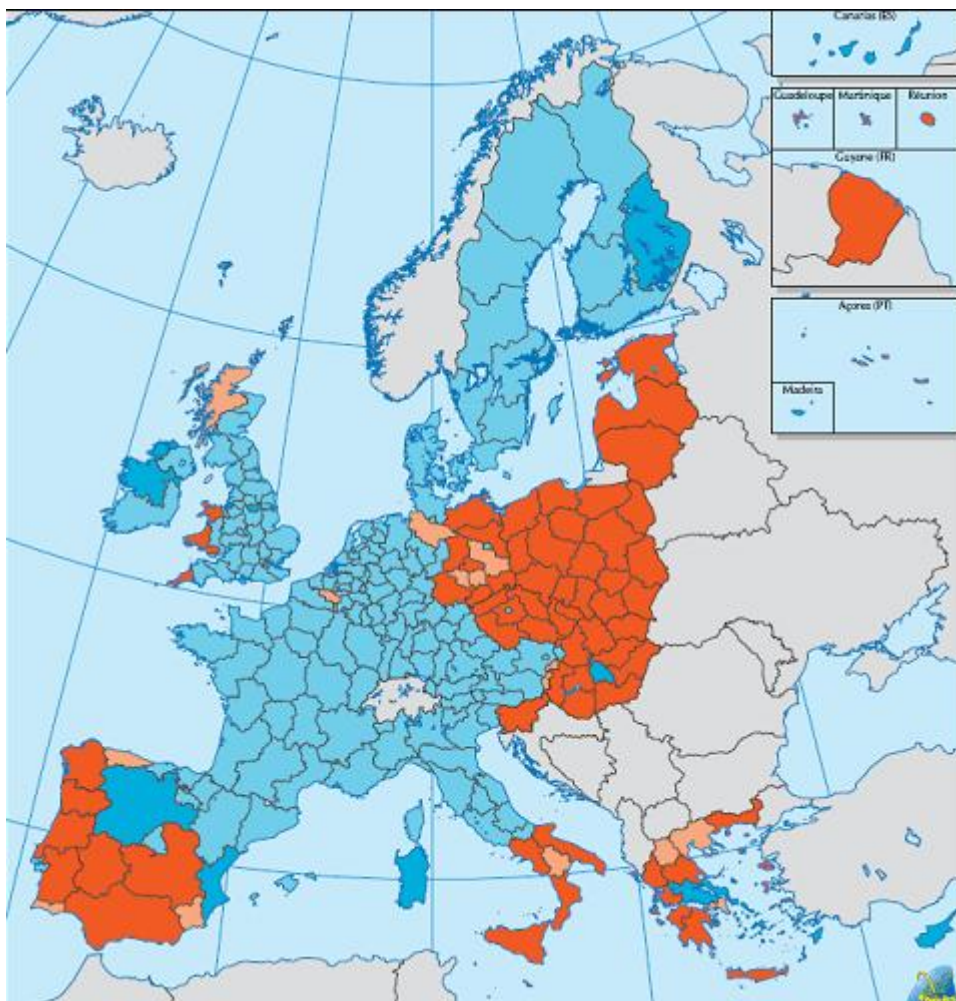
universities, innovative systems emerging through the cooperation of different regions, universities, research institutes and industries. Thus, Cohesion and Lisbon goals are combined and one promotes the other.

As the Figure 2 reveals, most of the EU15 regions will be under the Competitiveness objective or phasing out of the Convergence objective. The exceptions are the Cohesion countries – Portugal, Spain and Greece that still large portions of its territory under the Convergence objective. The south of Italy is in the same situation.

All the new MS are covered by the Convergence objective, except for some isolated areas (urban regions linked with the capital, like Budapest or Prague).

Sweden is covered by the Regional Competitiveness and Employment objective. Thus, this is the most relevant one to analyze in respect to strategies, eligibility and resources.

**Figure 2 – The EU Convergence and Competitiveness Objectives 2007 – 2013**



*Source: "Fourth progress report on cohesion: Growth and jobs and the Reform of cohesion policy"; Commission of the European Communities, Brussels, June 2006*

This objective will take its financial resources from the ERDF and the ESF. It is proposed that the regional development programmes, sponsored by the ERDF, will be aimed at strengthening regional competitiveness and attractiveness by anticipating economic and social change and supporting innovation, entrepreneurship, protection of the environment and risk prevention. The ESF will be used on programmes at the national (or the appropriate) level, to help workers and companies, on the basis of the European employment strategy, to adapt to change and encourage the development of job markets that award priority to social inclusion.

All the regions that are not covered by the convergence objective will benefit from the competitiveness objective. It will be for the Member States to present the list of regions for which they will be submitting a programme to be co-financed by the ERDF. Regions under the present Objective 1 that, in 2007, will no longer be eligible under the convergence objective due to the economic progress achieved, will receive specific 'phasing in' support.

The competitiveness objective will have a budget of 17.22 % of the total SF allocation, to be distributed as follows:

- 83.44 % for regions not emerging from the present Objective 1,
- 16.56 % for the 'phasing in' regions.

The ERDF/ESF will contribute on a fifty-fifty basis in the case of regions not emerging from the present Objective 1. For the 'phasing in' regions, the ESF's share will be a maximum of 50 %<sup>8</sup>

It is interesting to see how the Regional Policy intends to guide the regions towards the Lisbon objectives. The ERDF allocations for the "Regional Competitiveness and Employment objective", for example, will be orientated towards projects that aim to enhance regional R&D and innovation capacities directly linked to regional economic development objectives, projects that support or promote entrepreneurship and to facilitate the introduction or formulation of financial instruments and incubation facilities that will contribute to the research and technological development capacity of SMEs.

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<sup>8</sup> "Cohesion policy: the 2007 watershed - Legislative proposals by the European Commission for the reform of cohesion policy (2007-13 period)"; European Regional Policy, Inforegio, 2004

## The Thematic Priorities

There are also new **Thematic Priorities** within the Cohesion Policy, to be observed in all the objectives, which reflect a Lisbon and Gothenburg articulation:

- Competitiveness: innovation, research, education and accessibility;
- Employment and social inclusion;
- Environment and risk prevention.

By selecting these themes as priorities within the Cohesion Policy, the EU safeguards the role of both old and new Member States. Each country, independently of its development level, can see its own needs reflected in these broad thematic priorities. For example, Estonia is covered by the Convergence objective but can deal with the need to promote its international competitiveness and meet the Lisbon goals by improving its infrastructure when it comes to transport systems.

The approach to the way the new Cohesion Policy is suppose to operate is also described as more strategic, with a clear top-down reasoning: the Union defines priorities in the strategic guidelines established by the Council; the Member States translate this priorities into National Strategies, within a Commission's framework; and finally, there are regional and thematic programmes that make up for the actual operational process.

The following table shows a clear picture of the programmes, the eligibility criteria and the priorities reserved for the new period.

As the table reveals, there are thematic similarities within all the three objectives – the ones that comply with the Lisbon Agenda (Innovation, Environment and Risk prevention and Accessibility). But additionally to these, each objective has its own separate priority: sustainable growth and human resources are highlighted in the Convergence Objective; the European employment Strategy appears under the Regional competitiveness and employment objective and finally, European territorial cooperation includes Culture and educational programmes as priorities.

**Table 8 - Cohesion policy 2007 – 2013**

	<b>Programmes and Instruments</b>	<b>Eligibility</b>	<b>Priorities</b>	<b>Allocations</b>
Convergence Objective (including special programme for outermost regions) Allocated 78,5% of funds	National and regional programmes (ERDF; ESF)	Regions with per capita GDP < 75% of EU25 average	1. Infrastructures 2. Accessibility 3. Human Resources	67,34% 177,8 billion €
		Statistical effect: regions with per capita GDP < 75% of EU15 average and >75% of EU25 average	4. Administrative capacity 5. Environmental/ risk prevention 6. Innovation	8,38% 22,14 billion €
	Cohesion Fund	MS with per capita GNI <90% of Community average	- Transport Networks - Sustainable Transport - Environment - Renewable energy	23,86% 62.99 billion €



Regional Competitiveness and Employment objective Allocated 17,2% of funds	Regional Programmes (ERDF) and National programmes (ESF)	MS propose a list of regions (NUTs 1 or 2)	1. Innovation 2. European Employment Strategy 3. Environment /Risk prevention 4. Accessibility	83,44% 48,31 billion €
		"Phasing-in" regions covered by objective 1 between 2000 and 2006 and not covered by the Convergence		16,56% 9,58 billion €
European Territorial Cooperation objective Allocated 3,94% of funds	Cross-border and trans-national programmes and networks (ERDF)	Border regions and large trans-national cooperation regions	1. Accessibility 2. Culture/ education 3. Environment/ Risk prevention 4. Innovation	35,61% (cross-border cooperation) 12,12% (European neighborhood and partnership instrument) 47,73% (transnational cooperation) 4,54% (networks)

Source: adapted from "Cohesion policy: the 2007 watershed - Legislative proposals by the European Commission for the reform of cohesion policy (2007-13 period)"; European Regional Policy, inforegio, 2004

By the analyses of the table 9, we can see how the Lisbon Agenda, represented in the Regional Competitiveness and Employment Objective, gains relevance in the EU15 countries above any other.

**Table 9 Cohesion Policy 2007-2013: indicative financial allocations (million EUR, 2004 prices)**

	Convergence Objective			Regional Competitiveness and Employment Objective		European Territorial Cooperation Objective	Total
	Cohesion Fund	Convergence	Statistical Phasing-out	Phasing-in	Regional competitiveness and employment		
EU15	9 261	77 042	12 521	8 157	38 020	4 899	149 900
EU10	44 514	85 025	0	2 228	722	1 896	134 385
Bulgaria + Romania	7 784	15 016	0	0	0	563	23 363
Not Allocated	0	0	0	0	0	392	392
TOTAL	61 558	177 083	12 521	10 385	38 742	7 750	308 041
TOTAL %	81,5%			16%		2,5	100%

Source: adapted from "Fourth progress report on cohesion: Growth and jobs and the Reform of cohesion policy"; Commission of the European Communities, Brussels, June 2006

As for the Convergence Objective, not surprisingly is relevant especially for the new Member States. Although infrastructural deficiencies play a big role in the allocation of the funds for the EU10 (they receive the greater portion of the Cohesion Fund), this does not hinder the possibility that under the Convergence funds, actions and programmes that promote innovation and R&D won't be found.

**Simplification** is a word often referred to when describing the new Cohesion policy. Basically, because there are now only 3 funds (ERDF, Cohesion Fund, ESF) and each programme can only have one fund, which is an attempt to make it more coherent. Additionally, the Cohesion Fund's projects are thought up in a multi-annual programming.

Identical management rules for the Cohesion Fund and the Structural Funds facilitate the understanding of procedures and rules applied.

In the field of financial management, the Commission introduces three simplifying elements: payments and financial management will be carried out at the level of priorities rather than measures; the Community contribution will be calculated on the basis of public expenditure only; and the rules of eligibility for expenditure will be largely national rather than Community based, with the exception of a limited number of fields, which will remain ineligible.

In the field of controls, increased confidence will be placed on the national level for financial control and certification of expenditure when the Member States are the principal financial contributors and the Commission has obtained an assurance of the reliability of control systems. This assurance will be based, in particular, on the opinion of an independent audit body (Principle of proportionality). Evaluation will be done on the Community strategic guidelines, the national strategy reference frameworks and the operational programmes.

With new rules and instruments to support the Lisbon Agenda and a restructured Cohesion Policy, the EU was also made aware of another missing piece for the policies, guidelines and investments to reach the regions: dialogue.

Raising the relevance of the national level in the whole strategy is a way of contributing to enhancing the dialogue at all levels. But additionally the European Commission's Regional Policy Directorate-General and the European Investment Bank launched two initiatives for the period 2007-2013 that are to help the beneficiary countries to efficiently absorb the Structural Funds: **JASPERS** (Joint Assistance for Preparing Projects in European Regions) and **JEREMIE** (Joint European Resources for Micro to Medium Enterprises).

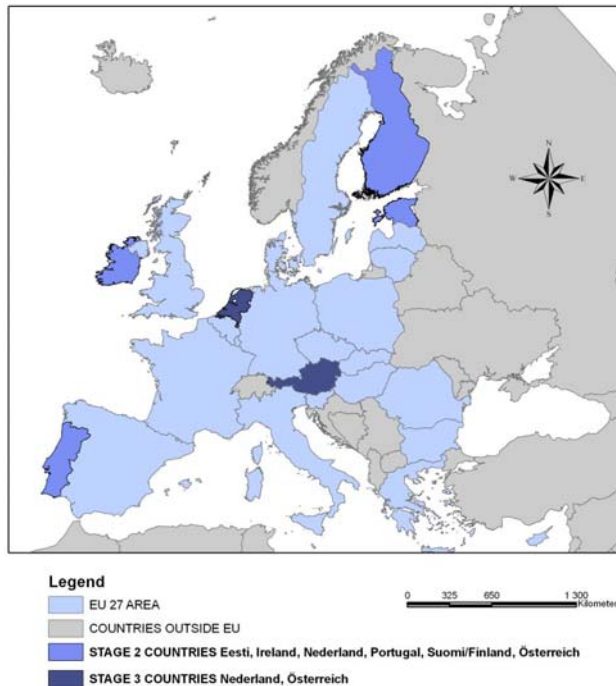
### 3 Screening

With the challenge of the enlargement and the disparities within the EU increasing when ten new countries joined in, the period of 2000-2006 of the Structural Funds saw the Cohesion policy gaining relevance and being subject to numerous studies and discussions. Over a third of the EU budget goes directly to the Cohesion Policy, during this period. Also, there is a concern that the money will not serve merely a redistribution of wealth objective but that it is used for the creation of new wealth – an attempt for the money allocated to contribute to the sustainable growth of the regions in focus.

There remains a great focus on the regional programmes and in how the regions justify their use of the funds. This decentralization was an increasing tendency, with concepts like “public-private partnerships” and “cooperation” gaining relevance and with an increase diversification of the actors involved in designing, implementing and following up the programmes.

In the next chapter, we will focus on how the Structural Funds were used on the 6 countries in study (Austria, Finland, The Netherlands, Ireland, Portugal and Estonia), especially which countries make a clear reference to programmes destined to promote innovation and R&D. The map presents the countries selected for the screening.

## THE COUNTRIES STUDIED IN THE PROJECT



We will also characterize the innovation agencies in these countries, their goals, programmes and influence.

### 3.1 The eligibility for the Structural funds

The countries involved in this study have so far, had distinct programmes running under the Regional Policy and the Structural Funds financial help, illustrating their own particular situation.

As shown in the table below, we have three countries that have mixed areas (objective 1 and 2): Austria, Finland and The Netherlands. None of them is receiving support from the Cohesion Fund.

Ireland and Portugal are entirely under Objective 1, but have some regions with “phasing-out” status. Estonia is entirely covered by objective 1 but only joined the Union in 2004. These three countries received extra support from the Cohesion Fund.

**Table 10 - The Regional Policy and the different countries –money allocated and Objectives**

Country	Money allocated	Objectives	Cohesion Fund
Austria	2.07 billion €	Objective 1 (1 region) Objective 2 (8 regions)	no
Finland	2.39 billion €	Objective 1 (2 regions) Objective 2 (3 programmes)	no
Netherlands	3.7 billion €	Objective 1 (1 region phasing-out) Objective 2 (4 multi-regional programmes)	no
Ireland	4.31 billion €	Objective 1 (south region in phasing-out)	yes
Portugal	26 billion €	Objective 1 (1 region phasing-out)	yes
Estonia	695 million € (2004/2006)	Objective 1	Yes

*Source: The European Structural Funds (2000- 2006) Annual Report, EU, Regional Policy*

All the countries had at least 1 region covered by objective 1. However, while in Austria the challenge was to bring Burgenland (the less developed of the Austrian regions) closer to the economic development of the rest of the country; in Finland the main objective was to halt the continuous depopulation from the northern and eastern regions. As for the priorities, there were some similarities in the path these two countries saw as fit to achieve their goals. Both Finland and Austria invested the SF in encouraging the creation of SMEs, in innovation and technology transfers and in training the human resources to enhance these regions' competitiveness.

In The Netherlands there was only 1 phasing-out region from the Objective 1. The main objective for Fleveland was (similarly to Burgenland), to be included in a wider economical area through the strengthening of its competitive advantages and production structures. Encouraging the development of SMEs was seen as essential.

The remaining three countries were all mainly covered by objective 1 and, additionally, received support from the cohesion fund to improve its infrastructures (transports, water systems).

Ireland saw as general issues the pursuit of a sustainable economic growth and employment; enhancing the countries international attractiveness; promoting a balanced regional development and an equitable distribution of income and the promotion of social inclusion.

Although not referring innovation as a way to achieve some of these goals in the National Programmes, Ireland included a specific programme to the productive sector, where research, development and innovation are highlighted. Its priorities were:

- supporting competitiveness in SMEs through innovative networks and the recruitment of researchers in the productive sector;
- improve the potential of R&D in higher education while investing in facilities for research communities and stimulating cooperation among these.

Portugal's entire territory was also covered by objective 1. The country prepared 12 sectoral programmes and 7 regional programmes with a common set of general objectives:

- to improve the level of skills among the workforce;
- to modify the production profile, to be prepared for and anticipating future changes;
- to better exploit the territory socio-economic position;
- to encourage Sustainable Development and Social Cohesion.

These objectives are too broad. However, looking at the 12 sectoral plans, some more concrete actions take shape.

In the sectoral plan regarding Science, Technology and Innovation, the priorities were:

- to improve R&D human resources;
- to support R&D and innovation through the transfer of knowledge to SMEs;
- to stimulate the cooperation between universities, research centres and companies;
- create a network of research activities and;
- the promotion of scientific culture.

As for the newly arrived Estonia, there was one single development programme for the entire national territory: to achieve sustainable and rapid development that is both socially and regionally balanced. Contrarily to the other two Cohesion countries, innovation appears already as a priority in the more general programme: seizing the opportunities of the new technologies and encouraging innovation in companies. There is a simple explanation for this. The later arrival allowed Estonia to draw its objectives based on the goals proposed by the Lisbon Agenda, linking the national programme with the ideas that were being cherished by the EU.

It is in the field of business competitiveness that Estonia sees Innovation and R&D as essential. The country fears the unavoidable increase in the workforce wages will lead to a loss in its competitive advantage: “due to the toughening global competition and the accelerating rise of prices and wages following the incorporation into the EU, the Estonian firms will not be able to retain for long the competitive edge of cheap input”<sup>9</sup>. Thus, the need to find new competitive edges that will make Estonia economical growth viable. This means that the drive for R&D and innovation in the country will include improvements to the R&D infrastructures and support systems; measures to encourage cooperation between researchers and entrepreneurs, the launch of R&D initiatives and the promotion of Quality. SMEs creation and development is promoted by the setting up of advisory services, host infrastructures and the access to finance.

In a brief conclusion, we have the cohesion countries seizing innovation and the new theories about regional development (triple helix, clusters, networking) and highlighting them in their national priorities with specific programmes. The fear of losing in their current competitive advantage, which is now based primarily in low wages, is openly expressed by both Estonia and Portugal.

As for the other 3 countries, the concern in objective 1 region is above all, to bring it closer to the national average. Innovation and R&D are already important sectors within Finland and The Netherlands. Austria is heavily investing on the sector and catching-up with the other two, as we will later see. The need is, in all three, focused in the creation of SMEs to diversify the regional economy and make it more dynamic and less vulnerable to cyclic and business fluctuations. Innovation is used to achieve this general goal, by being the key focus of the development programmes proposed. An economy overly centered in a few big “key” industries can be found in countries like Finland, The Netherlands and Sweden.

But is Innovation and R&D addressed in the Objective 2 regions? We have to keep in mind that the Objective 2 regions cover situations of areas that are undergoing a restructuring process, both socially and economically.

In Austria, the focus of the SF goes to increasing the different regions attractiveness, economic dynamism and job creation capacity, once again

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<sup>9</sup> “Innovation in Estonian Enterprises 1998-2000 – Executive Summary” Commissioned by the Division of Technology and Innovation, the Ministry of Economic Affairs and Communications  
Financed and published by the Estonian Technology Agency (ESTAG) under Foundation Enterprise Estonia -  
[http://www.eas.ee/vfs/2128/Innovation\\_in\\_Estonian\\_Enterprises\\_1998-2000.pdf](http://www.eas.ee/vfs/2128/Innovation_in_Estonian_Enterprises_1998-2000.pdf)

through the support to SMEs and “starters”. Improving the companies’ innovative capacity and the workforce skills is regarded as essential, but it goes hand-in-hand with improving local living conditions and the quality of the environment, typically seen as equally important to increase a region’s attractiveness to new companies and investors. It is a general approach. Austria tries to attract investment to its regions not only through very economically orientated programmes, but also focusing on the social and ecological aspects.

The same emphasis in all the 3 corners of Sustainable Development is put on the Finish and Dutch regions under Objective 2.

## **3.2 The innovation perspectives**

### **3.2.1 The national innovation system**

In order to better access the status of each country concerning innovation policies and trends, we turned our attention to the European Trend Chart on Innovation. We will briefly address each country’s strengths and weaknesses and potentials and threats with regards to innovation. From this we hope to draw some more conclusions on the best suitable examples to pursue in our study.

#### **Austria**

Austria has an economy based on low R&D small enterprises but since joining the EU it has made an effort to improve its R&D capacity. This effort paid off, when the country recently exceeded the EU average on R&D intensity. Alongside a continuous growth in R&D financial resources, the investment sources have changed over time with the business sector substantially increasing its financial flow to the sector.

Nevertheless, the share of the business sector in financing R&D is still low, compared with the most R&D intensive European member states.

The public sector maintains a key role by providing most of the financial support and stimulating cooperation. The main governmental goal concerning innovation over the last years was to increase the R&D expenditure to 2.5% of the GDP. A strategy was put forward in the National Research and Innovation Plan in 2002. Based on an international comparison, this plan makes policy proposals to achieve the 2.5% goal. These include proposals for a re-organization of the environment for promotion of innovation, a structural reform of the individual R&D performance sectors and the development of scenarios for the use of public funds and funding provided by the business sector. Two major steps were taken within this plan to increase the R&D expenditure:



- Simplification and re-organization of funding structures;
- Budget increase for Research and Development measures.<sup>10</sup>

Some organizational changes were made in order to simplify the whole plan and processes. The administration of the programmes is slowly being transferred to agencies and the strategic intelligence is being kept within the Ministries and the Council for Research and Technology Development.

Some changes are still required in the number of programmes available: too many programmes remain.

Additional effort has to be made in order to change Austria's position in the following indicators:

- number of graduates in Science and Engineering;
- Scientific publications/ population;
- Share of population with tertiary education;
- Business R&D expenditure/ GDP
- International patent applications/ population;
- Early stage venture capital/ GDP.

The lack of human resources is expected to be Austria's biggest challenge concerning its innovation performance, for the upcoming years. Another issue is the low participation of women (only 9% - the lowest rate for women researchers in Europe)<sup>11</sup>.

## **Estonia**

The Estonian economy has grown continuously at a rate of 5-7% annually since we entered the 21<sup>st</sup> century. The Estonian development model is characterized by balanced budgets, low government debt, rather low inflation, strong dependence on the foreign direct investments and export. Unemployment has decreased in the recent years.

The Estonian innovation potential has been characterized by the low number of patents, small number of S&E graduates and low business R&D expenditures, but as a whole Estonia has been considered one of the best performing new EU member states. However, EIS 2004 results show that the old weaknesses have not been overcome and compared to the other countries Estonia's formerly quite strong indicators are losing their positions. At the same time the innovation support measures that have been

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<sup>10</sup> "Annual Innovation Policy Trends and Appraisal Report – Austria" European Trend Chart on Innovation, European Commission, DG Enterprise, 2005

<sup>11</sup> "Annual Innovation Policy Trends and Appraisal Report – Austria" European Trend Chart on Innovation, European Commission, DG Enterprise, 2005

put in place are considered reasonable and should have an effect after some time.<sup>12</sup>

The strategic goals of the Estonian R&D strategy for 2002-2006 are to ensure sustainable economic growth, improve the standard of living and social welfare by renewing the knowledge basis, including improvement of research quality; and improving the competitiveness of firms, including both the stimulation of technology change in traditional industries and the creation of new high technology.

The Innovation policy implementation has been centred on the support of high-tech start-ups (university spin-offs) and R&D capable businesses. In 2004 the fostering of long-term cooperation between enterprise and research sector was added, with the launching of the Competence Centres Programme. This year the focus has expanded to the wider range of enterprises and infrastructure development.

Estonia has now several good opportunities to improve its innovation capacity. The development of a new R&D strategy for 2007 -2010 and the new round of Structural Funds; the ongoing development and launching of new innovation support schemes targeting the existing company base and its needs to become more competitive; the launching of a State venture capital fund in 2005 and the increased financial support for national R&D infrastructures.

The development of Estonian innovation policy is mainly obstructed by three factors:

- Insufficient awareness of the need for an innovation policy among politicians.
- Different understanding of innovation policy among various ministries. There is lack of co-ordination in the priorities set by both the Ministry of Education and Science and the Ministry of Economical Affairs. The first emphasizes the need for innovation policy to appreciate research more clearly as a key to innovation; the second proposes a predominantly horizontal policy and is trying to unify the use of the sums allocated by the structural funds.
- The lack of resources. Inconsistency at the government level has delayed the establishment of the state venture capital fund. Also, the EU structural funds, which initially were viewed as supplementary to the state's contribution, have now replaced a large share of the state's allocations for RDI development. In a situation, where innovation has been secondary priority, it is logical that its financing is shifted so as to

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<sup>12</sup> “Annual Innovation Policy Trends and Appraisal Report – Estonia” European Trend Chart on Innovation, European Commission, DG Enterprise, 2005

depend on the structural funds rather than on the finances from the Estonian state budget<sup>13</sup>.

## **Finland**

Finland's recent economic success and international competitiveness has been largely built on developing and exporting high technology. It is one of the leading countries in innovation, as measured in terms of growth, competitiveness and technological sophistication and infrastructure.

Finland has a systemic approach when it concerns Innovation, with a rather horizontal line of thinking and policy-making, involving economic, industrial, labor, environmental and regional sectors in a collaborative effort. This is one of the country's strengths: openness and intense collaboration among actors, with easy information flow. Additionally, the number of key players participating in science, technology and innovation policy is relatively small, making it easier for trust and consensus to be reached. The Science and Technology Policy Council of Finland has a visible coordinator role and the key innovation agencies (Tekes and Academy of Finland) maintain close ties and co-ordinate their activities continuously.

Involving the regional level in the innovation process, as a mean to promote regional development, is considered an opportunity that the country should exploit. Also, the active participation of Finland in international innovation governance structures, such as the Nordic and Baltic Sea co-operation, is seen as an opportunity.

However, the country seems to be losing its economic dynamism. According to the European Trend Chart on Innovation, some challenges remain:

- There is a mono-cultural approach, with little room for experimentation.
- The focus of the innovation policies still reflects a duality between science and technology, which is characteristic of the country.
- The number of students in Science and Engineering is slowly diminishing;
- The need to change the national policy from a sectoral science and technology, to a boarder Innovation policy, which has been highlighted by recent reports and evaluations but that seems hard to implement.<sup>14</sup>

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<sup>13</sup> "Annual Innovation Policy Trends and Appraisal Report – Estonia" European Trend Chart on Innovation, European Commission, DG Enterprise, 2005

<sup>14</sup> "Annual Innovation Policy Trends and Appraisal Report – Finland" European Trend Chart on Innovation, European Commission, DG Enterprise, 2005

## **Ireland**

Ireland has one of the fastest growing economies in the EU. This small country has an open economy and is extremely dependent on external trade. It accounts for 1.8% of the overall output in the Eurozone<sup>15</sup>. The country has been enjoying a high growth performance since the late 1990's, with its GDP per capita doubling in size and now exceeding the EU average.

However, with regards to innovation, the country's expenditure in R&D is below EU25 average (1.17% and 1.93% respectively, in 2001). Ireland also ranks low in areas like venture capital, number of researchers, scientific papers published and patents.

The positive developments are the recent efforts to change the situation in the areas where it ranks below EU25 average. Ireland is now the second highest high-tech exporter in Europe, its labour productivity is the highest of OECD 19 countries and it has a favourable business environment.

The government has made innovation a central part of the National Development Plan - 2000-2006. It has been increasing the level of funding, establishing an effective innovation structure and is supporting relevant investments and stimulation programmes. The challenge is to ensure the NIS delivers the expected outputs and impacts and that weaknesses are identified and rectified in the process.

In a nutshell, we can say that Innovation in Ireland has been gaining relevance, with both political and social actors actively involved in the challenge of improving the country's innovation indicators. Most of the essential NIS structures can now be found in the Irish system and the structures are working reasonably well. There are also a new plan being prepared to meet the Lisbon targets and new opportunities have been identified (business networks, international cluster creation and identification and development of new niche platform technologies and related IP).

Ireland has to make additional efforts in improving the co-ordination between the implementing and the policy making bodies. Also there persists a low ability to influence some implementation areas (seed capital).

## **The Netherlands**

The Netherlands has its strengths, in regards to innovation indicators, in the high quality of output of scientific research, the high level of patenting, the high share of financing of public research by industry and high use of ICT

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<sup>15</sup> "Annual Innovation Policy Trends and Appraisal Report – Ireland" European Trend Chart on Innovation, European Commission, DG Enterprise, 2005

and access to its applications. However, it is losing ground in a number of other relevant indicators. The total R&D expenditures is stagnating, especially business R&D is lagging behind. Adding to this, there is a shortage of skilled personnel, especially in science and technology fields. The interaction between the actors of the NIS is limited and the exploitation of the research results is considered inadequate. Another problem resides in the limited entrepreneurial activity<sup>16</sup>.

These problems are well identified and are faced as the **challenges** to address by the Dutch government, on the White paper on Innovation from 2003:

- strengthening the climate for innovation;
- creating the right dynamics (encourage companies to be innovative);
- and taking advantage of opportunities for innovation by opting for strategic areas (key areas).

The Netherlands is a country with a small economy. The investment in a number of “key areas” is considered the solution to increase its international competitiveness. The choices are being made in a dialogue involving both private and public stakeholders, in order to create “critical mass” in these key areas. We can see the reflex of this preference by “key areas” in the regional policy, where the emphasis is switching from helping the more deprived regions to catch-up, towards “backing winners”, regions that show the capacity to develop into internationally competitive innovation “hot-spots”.

On an organizational level, the key areas will develop through programmes and action plans design by knowledge institutes, business and government in co-operation, to stimulate research and innovation. The process is considered open and bottom-up, to facilitate the interaction of all the relevant stakeholders and to facilitate information flow and responsibility account.

The Dutch system concerning Innovation is extremely complex, with numerous internal and external studies, analyses, benchmarks, advice from advisory bodies and policy consultants, evaluations, prioritizations and stakeholders involvement, all adding up and feeding back to the strategic policy making. The coordination rests in the hands of the Committee on Science, Technology and Information Policy and the level of the ministries, the Council of Science, Technology and Information Policy at the level of the Cabinet, and with the Innovation Platform. Improvements have been

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<sup>16</sup> “Annual Innovation Policy Trends and Appraisal Report – The Netherlands” European Trend Chart on Innovation, European Commission, DG Enterprise, 2005

registered in the coordination of priorities and targets setting between the ministry of Economic Affairs and the ministry of Education, Culture and Science.

Evaluations are a constant, with clear sets of indicators to judge on the performance of the different projects. Additionally the ministry of Economic Affairs is involved in several studies on policy topics and new policy instruments with an international comparison.

The major strengths of the Dutch system reside, thus, in the broader involvement of the stakeholders in early phases of the policy cycle; the shift towards creating networks of existing organizations instead of launching new organizations or structures; an ongoing streamlining of instruments which increase transparency in national innovation policy, a willingness to undertake policy experiments and various cases of good practice in interdepartmental co-ordination.

The downside of this wider stake holder's involvement and complex system of innovation is that decisions take long time to be reached and there are higher transaction costs. Additionally, there are a small number of key stakeholders that have a large influence in various committees and a tendency for a "Committee culture" with the publication of strategic documents receiving more attention than its actual implementation. The room for experimentation is limited to streamlining and there is little experience in inter-departmental collaboration<sup>17</sup>.

## **Portugal**

Portugal's economic climate has, in the recent years, been undermined by globalization challenges, weak economic performance and political instability. The country slightly improved in the Global Competitiveness Index (from 25th to 24th), but the economic performance was generally disappointing. GDP growth was around 1.3% for 2004, in spite of the positive impact of the Euro 2004 football championship, and labour productivity increased more slowly than the EU average<sup>18</sup>.

Innovation performance, as measured by the EIS, continues to be weak, with most indicators below EU-25 average. Generally speaking, Portugal is catching up, but still remains well below the EU-15 average.

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<sup>17</sup> "Annual Innovation Policy Trends and Appraisal Report – The Netherlands" European Trend Chart on Innovation, European Commission, DG Enterprise, 2005

<sup>18</sup> "Annual Innovation Policy Trends and Appraisal Report – Portugal" European Trend Chart on Innovation, European Commission, DG Enterprise, 2005

Portugal's current performance is significantly better for the indicators on 'transmission and application of knowledge' and 'innovation finance, outputs and markets'. It ranks worse in 'human resources' and 'knowledge creation'.

The main innovation challenge faced by Portugal is the lack of a systemic and consistent innovation policy that might bridge the traditional gap between science policy and enterprise policy. Policy coordination is clearly needed. Other relevant challenges are the low business sector R&D expenditures, and the low patenting level.

New opportunities have recently emerged. There is a political commitment towards technology and innovation, expressed in the Technological Plan. Also 3 complementary features can now be found: a new political cycle, new round of EU Funds for 2007-2013, and re-launch of the Lisbon Strategy, with a strong focus on innovation for creating new and better jobs. A mission unit was created to be in charge of coordinating the Technological Plan. The country has several organizations with the appropriate capabilities to promote and coordinate 'innovation' activities (both in the private and public sector) and this can generate demonstration effects to other actors. Finally, the new Operational Programmes for 2007-2013 have a transversal nature which might benefit the creation of information flows, and facilitate target and prioritization settings.

As for the threats, we can highlight the persistent difficulties in promoting a 'vision' about the future and in mobilizing the actors around that 'vision; the dominance of a linear perspective of innovation; the prevalence of short term concerns, the budgetary constraints and the decline in EU Funds, thereby putting a stronger pressure on Government budget allocation and the insufficient commitment to pursue a coherent and sustained governance of innovation policy<sup>19</sup>.

In conclusion, we have one group of countries formed by Finland, Austria and the Netherlands that are ranking well in the innovation indicators. But while Finland has been in the top positions regarding innovation for long and The Netherlands have showed great performances in the scientific and technological output, Austria is a newcomer. The budget increase for R&D measures and the willingness to adopt reforms to simplify the funding structures reveal awareness of the importance that innovation plays in the country's future. This awareness is also shared by Finish and Dutch alike.

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<sup>19</sup> "Annual Innovation Policy Trends and Appraisal Report – Portugal" European Trend Chart on Innovation, European Commission, DG Enterprise, 2005

Finland and Austria enjoy a relative simplified innovation system. The Netherlands more complex view and structure can be seen as both a potential, when we consider the multitude of actors (and perspectives) involve, and also a threat, when the system's complexity makes it harder for changes to occur and policies and consensus to be reached.

As for the Cohesion countries (Ireland and Portugal and the newcomer Estonia) they all rank very poorly in the innovation indicators. However, Ireland has had a booming economy for the past ten years. The EU financial support, high foreign and national investments in the country and a favourable tax policy are the reasons pointed for this success, not a well implemented and adjusted innovation policy. However, the country is now trying to track the same steps as other Member States in the EU and has increased the level of funding, established an effective innovation structure and is supporting investments and stimulation programmes. These steps are similar to the ones adopted, for example, by Austria. Time might be the factor that decides if Ireland will eventually catch-up.

As for Portugal and Estonia, the picture is different. Estonia is making an effort to adopt the measures and policies that are advised by the European Union and it is against this background that the country's innovation system is developing. Thus, the policies, programmes and projects found in the Estonia system are very similar to those found elsewhere in Europe and that are well regarded by the EU.

Portugal doesn't have a stable innovation policy and thus programmes and policies keep changing and the results are hard to evaluate. Good examples are harder to track. The country ranks better in "Transmission of Knowledge" and "innovation finance, outputs and markets" and has new opportunities arising from the new round of Structural Funds (it is considered one of the "big losers" but it still receives funds from both the Convergence objective and the Cohesion Fund). Also, there is a new political cycle and the new Government has publicly elected Innovation and R&D as prime goals. But contrarily to the Austria, Finland and The Netherlands, and even to Ireland, there seems to lack awareness among key actors and the society in general of how relevant innovation and R&D can be for the country.

As a last remark, we would like to point out that all the countries in this study are facing the threat of declining workforce in the field of Science and Technology and that this is one of the hinders for a truly successful innovation policy and it is transversal for all economic structures and performances.



### 3.2.2 The national expenditures on R&D

The EU R&D intensity is close to stagnation, according to numerous recent reports. On the other hand traditional competitors like the USA and Japan are catching up rapidly and new players are emerging, like China and India. Recent analyses indicate that the increasing gap between the R&D financing is almost entirely due to the differences in contributions from the business enterprise sector to R&D. In the EU, the role of the government in financing R&D is still important, as revealed by the fact that the countries with high level of government funded R&D intensity (Sweden and Finland) are also the ones with highest levels of business R&D funding<sup>20</sup>.

The business sector R&D in Europe remains low in spite of some increases in several Member States. And at the same time, Europe is losing its attractiveness for international R&D investment. The EU is continuing to increase, by 54%, the investments in the US, while the US companies investing in R&D in the EU is only 38% (increases in real terms)<sup>21</sup>. Furthermore, the USA outward R&D investment is moving to the emergent economies of China, for example.

But the situation inside the EU is different. The study cases that we are analyzing reflect well the traditional clusters of countries that emerge from the analyses to innovation performance: the Nordic countries (Finland), the new Member States (Estonia), the peripheral countries (Ireland and Portugal) and continental Europe (Netherlands and Austria).

If we look at the percentage of the country's GDP that is directed to R&D activities, we also have a clear division into groups. Not surprisingly, Finland and Sweden are the countries with the higher expenditure in R&D activities and the amount spent has increased in the period between 1995 and 2004. Austria is quickly catching up and distancing itself from The Netherlands.

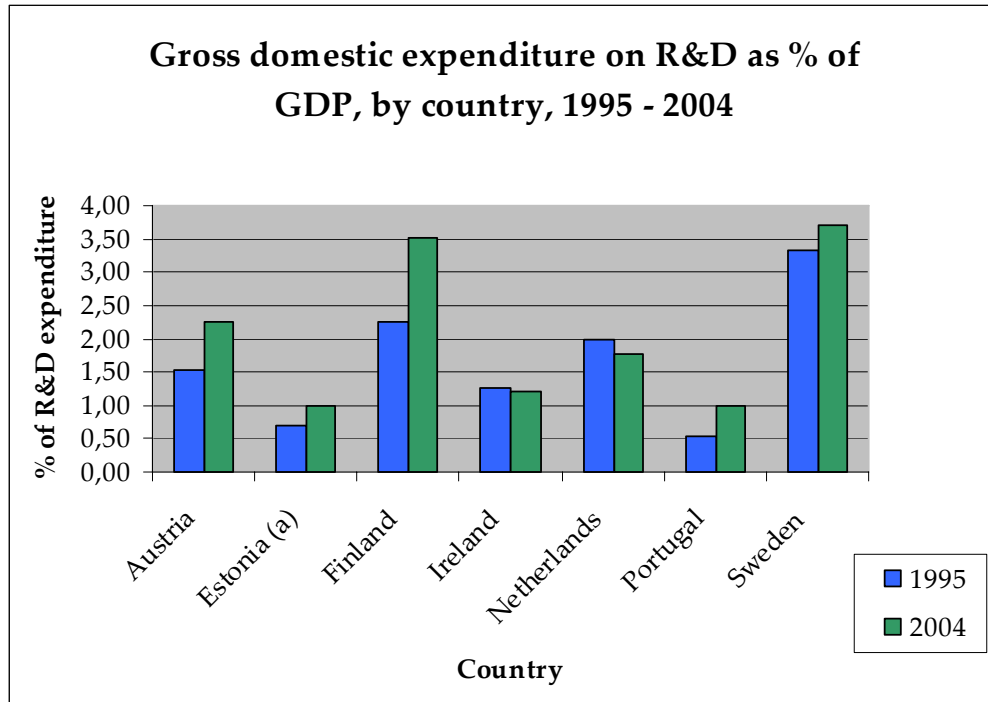
The Dutch had, in 1995, an investment in R&D superior to that of Austria. However this has decreased in 2004. From the study group, it is the country that more intensely decreased the national support to R&D activities. Austria and Finland, on the contrary, are the ones that have grown more.

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<sup>20</sup> "Key figures 2005 – Towards an European Research Area – Science, Technology and Innovation" European Commission, DG Research, 2005

<sup>21</sup> Idem

Figure 4



Source: Eurostat/U.S. Bureau of the Census; *Europe in figures - Eurostat yearbook 2005*

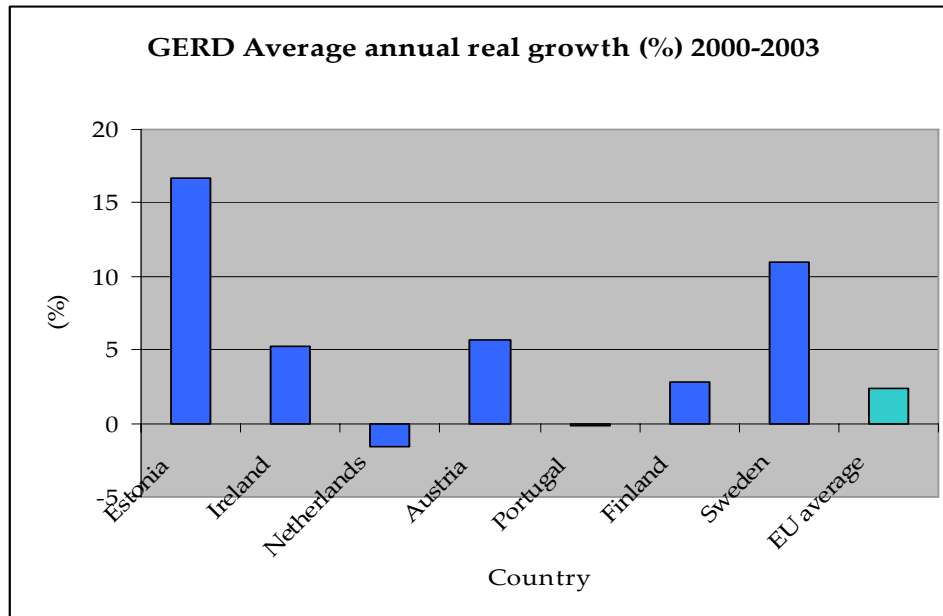
Expenditure on R&D by the public sector in the Netherlands is amongst the highest in the EU (5th in EU-25). However, private spending is relatively low by international comparison (12th in EU-25). About 50% of this private expenditure on R&D originates from the seven major companies of the Netherlands, operating mainly in the microelectronics, food, pharmaceuticals and chemicals sector. This picture reflects the expenditure in innovation of the industry sector (0.87% of GDP). The service sector is an important one in the Netherlands, employing approximately two thirds of the total active labor force. Its expenditure on innovation is considerably lower than the industry sector (0.2% of GDP, which is average in the EU). Additionally, productivity in the much larger service sector is lower than in industry<sup>22</sup>.

As for the peripheral countries and Estonia, their national expenditure in R&D is much smaller than from the remaining countries. A significant increase was registered in Estonia and in Portugal during this period. Not neglecting that these remain the two countries where less money is spent, this increase might reflect the efforts in directing the country's economy towards fields that are named as winners and whose importance is highlighted by the EU.

<sup>22</sup> Annual Innovation Policy Trends and Appraisal Report- The Netherlands, European Trend Chart on Innovation, European Commission, DG Enterprise, 2005

We will get a slightly different picture if we analyze the average annual real growth in relation to the EU25 average.

Figure 5



Source: "Key figures 2005 – Towards an European Research Area – Science, Technology and Innovation" European Commission, DG Research, 2005 (adapted)

We can see that Estonia is the fastest growing country, followed by Sweden, Austria and Ireland, the last two with similar growth rates (little above the 5% per year). One of the leading countries in the previous chart, Finland, is now increasing almost at the same rate as the EU average (2.8 and 2.4 respectively). Portugal and especially The Netherlands are not performing as well. Especially the case of The Netherlands, it is curious to see that there is a significant drop in the growth rates.

We thus have Sweden, Finland, The Netherlands and Austria with high levels of R&D expenditure. However The Netherlands is definitely losing momentum and Austria is catching up rapidly.

Ireland also is catching up, but contrarily to Austria, it doesn't seem as determined. From similar starting points, the two countries seem to be adopting different kinds of strategies which might mirror in the growth figures we see here.

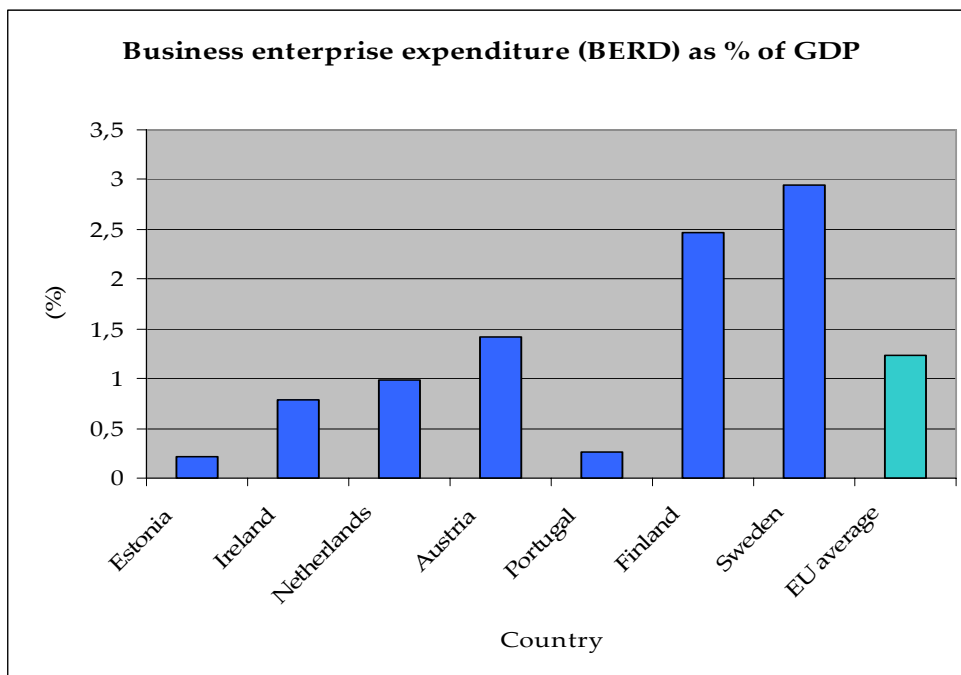
Estonia performs very poorly but it is the country with the fastest growing rate.

Portugal has a GERD position similar to the Estonian one, but contrarily to the Baltic state, its average annual growth rate is decreasing.

But in most EU countries, the rising R&D intensity has largely been built on an increase funding from the business sector. This situation is clearly observed in the catching up-countries.

Business R&D expenditure is market-driven and directly, or through stimulating other sectors, can lead to economic and employment growth. This influenced was clearly highlighted when the European Council stipulated that two thirds of R&D expenditure should be financed by the business sector.

**Figure 6**



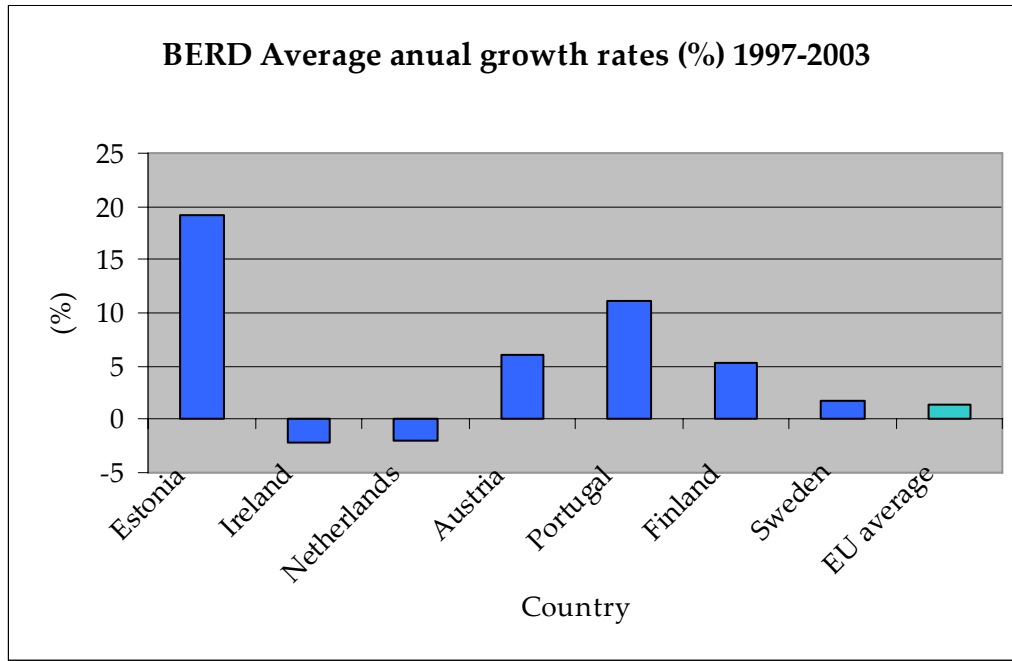
Source: "Key figures 2005 – Towards an European Research Area – Science, Technology and Innovation" European Commission, DG Research, 2005 (adapted)

From the countries in the study, Finland and Sweden take the lead, but interesting enough is the case of Austria, that from an economy based on small R&D SME's it is working to increase the involvement of business in research and development activities.

The situation of Portugal, Estonia and Ireland is reversed. The business enterprise expenditure on R&D as % of the GDP is still low. However it goes hand in hand with the fact that all countries are now experiencing or have experienced recently some economical progress and are on a catching-up process with the rest of the EU. Additionally, the innovation systems in these countries are recent and the effects of the policies implementation are still starting to reveal themselves.

To get a clearer picture of the dynamic behind the business expenditure to R&D we can turn to the average growth rates. The result is somewhat opposite to the graphic above. Estonia and Portugal have the fastest growing rates which reveal it's catching-up process.

Figure 7

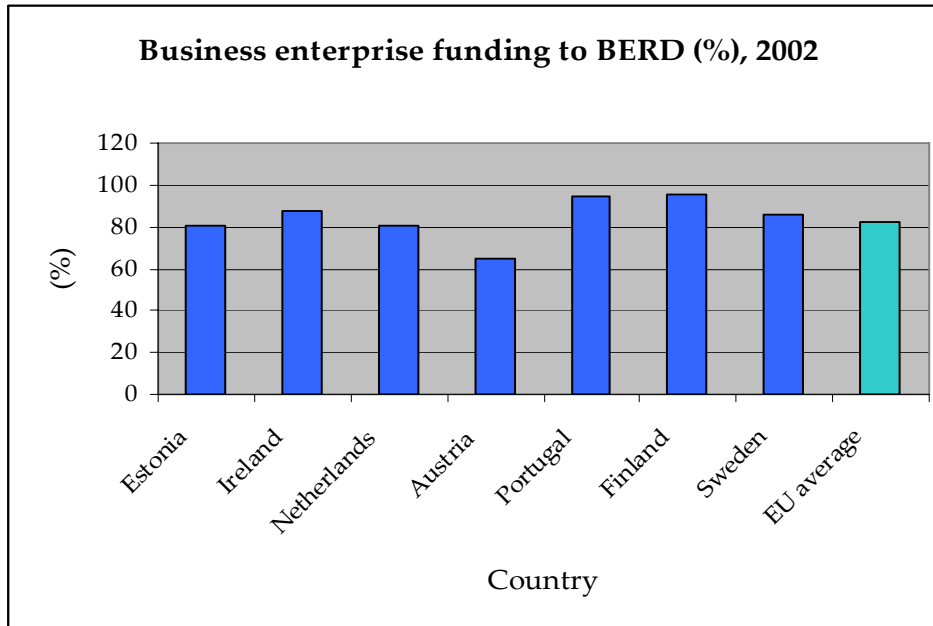


Source: "Key figures 2005 – Towards an European Research Area – Science, Technology and Innovation" European Commission, DG Research, 2005 (adapted)

The sources of financing to business R&D are changing slowly all over the EU, with the business sector gaining relevance. From the study cases, Portugal was the one where the increase in business financing to business R&D was more significant.

From the graphic below we can get a picture of which countries are taking the lead in business R&D funded by business and enterprises.

**Figure 8**



*Source: "Key figures 2005 – Towards an European Research Area – Science, Technology and Innovation" European Commission, DG Research, 2005 (adapted)*

The diversity of countries ranking at the top indicates that different market solutions, innovation traditions and economic performances influence less this indicator. However, it is interesting to see that Austria is the country with fewer amount of business R&D funding coming from the business sector. This might be due to an economy based in SME that had little or no tradition in R&D. The government's role in promoting innovation and research is, therefore, still very significant.

But additionally, it is important to realize that the graphics shown here reflect two different stages in the economic development and approaches to policies that promote innovation. The countries with higher expenditures are also the ones whose economic advantage has not been based on low-wages for several decades. Therefore, other competition advantages have been though up and implemented. These are the countries where the theories regarding the importance of Innovation Systems, Clusters, Networking and Triple Helix have been studied, implemented and observed in reality. Oscillations and negative trends observed in these countries might be merely an indicator of the maturity or decline of the system in which they acted so far.

On the other end we find countries which are just now awakening for the potentialities that are found in the innovation systems and that still have to go through the process of raising awareness to the significance of innovation for the economy, the advantages it brings next to their competitors, to perform policy and organizational changes to better adjust to the new

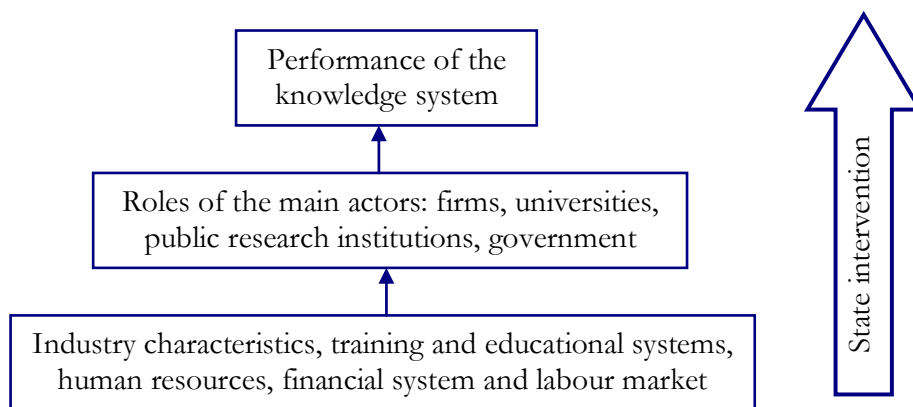
reality. They also need time, to see the policies and strategies implemented to get its results.

### 3.3 The National innovation agencies

There is a complex and non-linear relationship between investment in knowledge and performance. The diversity in outcomes relates to the respective roles of the main actors (firms, universities, public research institutions, government, etc). What parts to them play in the process of knowledge production, diffusion and utilization? What kinds of interactions are established between them?

These actors are influenced by multiple factors, such as the industry characteristics, the training and educational systems, the human resources, the financial system and the labour market. State intervention influences all over the other institutions in the “knowledge system”.

**Figure 9 - Influences over the knowledge system performance**



Among these influencing actors we can find the national innovation agencies. These agencies were created against very different backgrounds. Some emerged as part of the restructuring of previous institutions that dealt with knowledge and/ technologies. Others were created as part of the national innovation systems. They also have different objectives and fields of direct intervention. The degree of autonomy and the services provided also differs from country to country.

The National Innovation Systems in the countries in study all have a national Agency responsible for the implementation (in whole or of certain aspects) of the national strategy concerning innovation and R&D. In Austria the sister-organization for VINNOVA is FFG – the Austrian Research Promotion Agency; Estonia created in 2000 the Enterprise Estonia, Finland has Tekes coordinating the national technological and innovation strategies since the early 1980’s. In Ireland the responsible agency is Enterprise Ireland, created in 1998 and in Portugal, we found ADI – Innovation

Agency (Agência de Inovação). SenterNovem, in the Netherlands, is an agency with responsibility in the field of innovation programmes but also Environment and Spatial Planning and Energy and Climate Change, that came out of the merger, in 2004, of two independent agencies: Senter and Novem.

All the agencies in question were created by the national governments. Most are linked to one specific ministry: FFG is under the Austrian ministries of Transport, Innovation and Technology and Economic Affairs and Labour; Enterprise Estonia is linked with the Ministry of Economic Affairs. SenterNovem in The Netherlands is linked with the Ministry of Economic Affairs, the Ministry of Housing, Spatial Planning and the Environment and the Ministry of Transport, Public Works and Water Management. Tekes receives its funding directly from the Ministry of Trade and Industry. As for ADI it represents the combined efforts of the Portuguese ministries of Science, Technology and Universities and the Economic Affairs and Innovation. Enterprise Ireland is under the Department of Industry, Trade and Employment.

As a general rule, most agencies work with national enterprises, universities, research institutes and government officials. These are its main costumers. However some differences have to be highlighted: Enterprise Estonia adds NGO's and development institutions as important costumers. The large scope of costumers' profiles reflects the role of Enterprise Estonia as one of the implementing institutions of the EU's Structural Funds in Estonia and the main provider of support and development programmes directed towards entrepreneurs. Enterprise Ireland also has an important role in the attribution of Structural Funds support. Two thirds of the agency's approved projects in the fields of Universities' Research and R&D comes from the Structural Funds. Enterprise Ireland is the authority that approves the funding for projects in this field. However, the approach taken in regards to innovation is focused on the support to SME's and the internationalization of Irish companies, much more than in promoting innovation and research per se. Thus the programmes created and the projects financed have a strong emphasis in market solutions, as we will later see.

Tekes also implements the Structural Funds in Finland. The reason is that innovation and competitiveness in Finland are linked with Regional Development and included in one of the solutions to halt depopulation, especially in the north and eastern parts of the country. Thus, the financing instruments of the EU's Regional Policy fall under the scope of the finish innovation agency.

SenterNovem over 300 assignments for eight ministries, local governments and the European Union and has control over the amount of funds allocated.



Portugal has a different approach. The Structural Funds are directed towards Operational Programmes and from this programmes some funding is allocated to the ADI to help financing the agencies services. But ADI has no direct power over the amount of money allocated. It functions more as a distributor of the Structural Funds.

In the table below the services offered by the different agencies are grouped. The general perspective permits to highlight the scope of intervention in the different cases.

**Table 11: Services provided by the innovation Agencies**

Services	Tekes	Senter Novem	FFG	Enterprise Estonia	Enterprise Ireland	ADI
Consultancy	X	X	X	X	X	X
Funding	X	X	X	X	X	X
Implementing national technology policy	X	X	X	X	X	X
Access to global and national business networks	X	X	X	X	X	X
Access to global and national networks of research	X	X	X	X		X
Customized solutions	X	X			X	
Monitoring	X	X		X		
Planning of national technology policy	X					

Source: ADI homepage <http://www.adi.pt/>, Enterprise Ireland homepage <http://www.enterprise-ireland.com>, Interview with Michael Leahy, from Enterprise Ireland, on 9 August (via phone); Enterprise Estonia homepage: <http://www.eas.ee>; Tekes homepage: <http://www.tekes.fi>; FFG homepage: <http://www.ffg.at>

As a rule, the innovation agencies in this study act as implementation agencies for the respective country's innovation policy. They also act as consultants for projects in the field and are responsible for the funding of the approved projects. One highlighted aspect that all the agencies mention is the advantage of participating in global and national networks of business and research. This aspect is presented as a possibility offered to costumers to gain direct access to knowledge and business opportunities that derive from the exchange of experiences and expertise on an international and national scale. This way both researchers and entrepreneurs benefit from a wider range of possibilities to explore its potential.

We didn't include Enterprise Ireland in the group of agencies that take part in research networks because the role of research within the agency is very

limited, mainly focusing in applied research focused on the demands and needs of the Irish enterprises.

Customized solutions are a service that only Tekes, SenterNovem and Enterprise Ireland offer. This means that in these agencies there is an attempted to make the programmes flexible enough to fit every customer's needs. The flexibility enables the customer and the agency to better fit the specifications of the project to the characteristics, potentialities and weaknesses that the customer wants to address. In the remaining agencies the projects must fit a pre-set of rules. The rigidity might reveal a need to privilege certain projects or fields of intervention or derive from financial constraints that don't allow for a larger number of aspects to be included in the available funding.

Monitoring is a function that is considered relevant and an indicator of the agency's degree of intervention and influence. Monitoring permits the different projects to have a follow-up strategy to solve or address specific problems as they come along and to evaluate the consequences the project. Although monitoring and evaluation are services provided by Tekes, Enterprise Estonia and SenterNovem alike, it is worth mentioning that the Finish and the Dutch agencies have the longer tradition in this kind of procedures. Nevertheless, the presence of evaluation and monitoring aspects in Enterprise Estonia can be a good indicator of the will to learn from past and current projects and to improve on experiences and knowledge. Evaluation is an important tool when creating organisational learning and for discovering new market opportunities<sup>23</sup>.

Only Tekes is directly involved in the planning of policies related to the national innovation and technological strategy. While not minimizing Tekes's role as an intermediary agency, between the government and the customers (universities, research centres, enterprises), it also takes a leap into the top position, directly influencing policies that derive from the top. The other agencies have a role much closer to a bottom-up approach. When interacting with the customers they serve as facilitators between the coordinates given by the national body and the specifications of the projects. The project dictates the degree to which the agency's intervention in the innovative capacity of the country is felt. In the case of Tekes, its degree of intervention can be felt on the project level - the concrete effects that a certain number of Tekes projects have in the innovative and technological capacity of Finland, - and on a policy and programming level, directly

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<sup>23</sup> "Final report – Supporting the Monitoring and Evaluation of Innovation Programmes"; a study for DG Enterprise and Industry, Louis Lengrand & Associés (study coordinators), January 2006 [ftp://ftp.cordis.europa.eu/pub/innovation-policy/studies/smeip\\_finalreport\\_master2.pdf](ftp://ftp.cordis.europa.eu/pub/innovation-policy/studies/smeip_finalreport_master2.pdf)

influencing the options taken by the upper level and thus influencing the downstream levels and their impact as well.

We asked all the agencies what their main strength was. Enterprise Ireland sees its main positive aspect the fact that it “is a one stop shop which provides a range of critical services to indigenous industry across the categories of the Business Development Model, Strategy, Marketing, Human Resources, R and D and Finance”<sup>24</sup>. SenterNovem see its potential as the ability to “bring together the societal objectives with respect to innovation and sustainable development, through its efficient operational management that focuses on the quality of products and services, client orientation, expert employees and a challenging working environment”<sup>25</sup>. This might be common features that the agencies are trying to develop.

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<sup>24</sup> Answer from Michael Leahy, via email from 4<sup>th</sup> of September 2006

<sup>25</sup> Answer from Vincent van den Hoek, via email from 6<sup>th</sup> of September 2006

## **4 The use of Structural Funds to promote innovation**

### **4.1 The EU regions and the pursuit of innovation**

The interest in the regions is growing within the EU. As we have seen, several studies, analyzes, measures and funds are put on the service of the regions who wish to promote their own development. The Union believes that through regional development it is possible to achieve the development of the European space as a whole.

Especially relevant for this study is the interest devoted to the promotion of innovation at the regional scale. The EU alerts to the fact that the regions of Europe confront new challenges for their development. The liberalization of the economy brings forth increased competition from south-east Asian countries. Globalization of trade causes the redistribution of activities, especially significant for the European industries that operate with high labour force intensity activities (for example, textiles) or certain service activities (for example, call centres), that don't require special skills. The increasing externalisation of these services and companies is a challenge Europe must urgently address.

Alongside with the spread with the information and communication technologies, an open economy signifies that factors of competitiveness no longer reside in costs or natural/ geographical advantages, but in the enterprises capacity to create and explore new added-value goods and services. They must be able to quickly respond to the market's needs, to make changes in the development of goods and services, the organization of production, distribution, marketing training and research. Quality, innovation and creativity are the new buzz-words for European enterprises to continue to prosper.

The expectations are that, especially through partnerships of different actors at various levels, the right dynamic is created that stimulates enterprises to adopt innovation as a key-policy. But also on the services area, the EU has concluded that the improvement of the quality and effectiveness of less exposed factors, like education, health and personal services, is often the result of experimentations based on partnerships<sup>26</sup>. The role of the public authorities, seen as catalysts for these partnerships, is highlighted. From

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<sup>26</sup> "Innovative Strategies and Actions: results from 15 years of regional experimentation", European Commission; DG Regional Policy, June 2006

them it is expected the ability to restore confidence and to mobilize citizens around a common vision.

Large metropolis and more developed regions can better adapt to globalization, since their strong demand for quality goods and services stimulates the enterprises to invest in knowledge, innovation and new opportunities.

Additionally, regions have great interest in establishing policies in strong sectors of their economy, because these will facilitate interactions between innovative actors. The reasoning is that demand, competitiveness and dynamism will continuously feed-back into the system, stimulating increasing innovation. “Innovation comes above all from the quality of interactions between producers, users and mediators of knowledge in the regions: local authorities, companies, centres of production or of transfer of knowledge, local coordination institutions, bodies providing financing for SMEs or research, collective foresight systems, etc.”<sup>27</sup> These interactions might also serve to protect the region of the seasonal fluctuations in the market’s demands. A region that is too focus in a smaller number of key-areas is more vulnerable to changes in the markets that undermine their economical sustainability. Interactions between the key actors help to anticipate and better prepare for these changes.

Regions are best placed to encourage relevant actors to focus on shared interests and to actively develop policies and appreciate needs. Sharing a territory, culture, values and references facilitates exchanges and joint projects. Each of the actors involved has the ability to influence the innovation strategy from a different point of view, thus contributing to a wider range of perspectives and a more close-to-reality project.

Experimentation takes up a big role for the regional development, in the EU’s perspective. Regions that wish to invest in innovation can draw inspiration from the actions developed in other regions. That is the reason why several studies and reports are continuously prepared by the EU- to provide information of the “best practices” being experimented on the regional level.

Additionally, the Operational Programmes of the Structural Funds will co-finance innovation strategies and, in implementing these strategies, they will focus both on tried and tested actions (research infrastructures, seed capital funds, venture capital, traditional training activities) and experimental actions, which might be considered risky and need to be tested before

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<sup>27</sup> “Innovative Strategies and Actions: results from 15 years of regional experimentation”, European Commission; DG Regional Policy, June 2006

possible generalization of the strategy. Thus, there is a window of opportunity for regions to freely experiment their own ideas or to adapt ideas from other regions, to promote their own endogenous development.

The regions that we will be focusing in this study are located in The Netherlands and in Austria. The reasons for our choice reside in the fact that both countries have very active policies and regions developing strategies and projects in the field of innovation and R&D. The closeness to the Swedish reality facilitates that conclusions and ideas from these countries can be more easily adjusted to better fit the interests of Swedish regions. The institutional and social development, the specific organization of the regions, historical and cultural differences must be taken into account, since they are of relevant influence for the degree of intervention from public authorities and how they incentive actors to step in to the strategy. Thus, from the group of countries first analyzed, Netherlands and Austria seem to be the ones that best resemble Sweden.

Based on past experiences and experiments, the Commission has highlighted some aspects that are common to the more successful innovation strategies and policies. We will briefly address some of their main conclusions and these will serve as introduction to the initiatives taken in Austrian and Dutch regions.

#### *Sectoral approach*

The more advanced regions programme actions focus on a limited number of key sectors, considered priority to the international competitiveness of the region. Also, actions are developed that concern all sectors and that try to strengthen the base of scientific or technological knowledge. This approach makes it possible to strengthen clusters of strategic activities that have potentially, competitive value. This might come through, for example, developing key technologies for the sector in question or by addressing specific difficulties and gaps in the market (financing of basic research, establishment of foresight mechanisms for SME's, consultancy and monitoring services to support SME's).

When the interest is in the information society, there is also to consider the involvement of actors from very different fields. This transversal nature results in a more complex process for the definition of strategic guidelines and choices. Negotiations require a strong commitment of regional decision-makers to reach a consensus. However, the process itself contributes to awareness-raising.

#### *Strategies take-off with SWOT analyses*

Most regions start their strategies by evaluating the strengths, weaknesses, opportunities and threats that are present or might line up in the future of the

region. This allows for a more focus establishment of priorities and measures that consider the concrete situation and needs.

The way the regions organize themselves to carry out this evaluation differs: some use external consultancies, others use existing studies and internal working groups that bring together key regional actors. As a rule, the regional actors are the ones best placed to define the needs and to identify the actions already undertaken with good results. A more critical and close to reality perspective makes them particular useful when new actions need to be tested, regional resources are being unexploited or links are missing.

But external advisors have the distance to evaluate results from previous experiments and actions. Additionally, they bring with them new knowledge and ideas, collected in other regions and cases and that might be emulated. A mixed working group is, therefore, a good choice.

Additionally, the evaluation process in these cases should consider the regional environment for innovation: current regional strategies and the possible synergies, factors contributing to innovation (entrepreneurship, training, attractiveness of the territory for companies, availability of modern infrastructure, quality of cultural and social services and quality of life).

### *Partnerships*

Partnerships ensure that the development of the strategy responds to the real needs of the region and its inhabitants, while simultaneously contributing to the involvement of the actors and allows for a more successful outcome.

The ways to promote successful partnerships differs according to the concrete problem faced, actions to be implemented or even projects that were defined. The stage of the process also influences the characteristics and the number of partners involved, for example in an initial phase the wider range of actors directly involved might bring forth new solutions and better understanding of needs and potentials, while in a subsequent phase a smaller managing group might allow for greater flexibility in decision-making and in follow-up procedures.

One way to keep the key actors, the public sector and the general public involved in through conferences and workshops, arranged during the development of the strategy.

### *Leading the strategy*

The strategy can be co-led by an influential actor in the region or be delegated to a body responsible for economic action or to a development agency. It can also be directly implemented by the regional authority, in particular when the regional innovation system is less developed.

A strategic committee should be put together, involving a reasonable amount of key actors (maximum twenty people, otherwise it will be in danger of not being able to agree on an operational strategy). This committee is a place of meeting and debate for the new partners, thus the people involved must be active personalities with influence over the regional innovation system. Strong involvement of those involved is crucial when it is necessary to modify the implementation of the strategy or even to change priorities.

Certain regions, once the first analyses have been completed, establish working parties on precise topics or at a local level involving a wider partnership. These groups need a clear mandate, which will have the benefit of convincing influential actors to take part in the work. Being closer to the ground, these groups will be able to more easily evaluate the potential impact of actions.

#### *Communication is essential*

Communication is often neglected but it has an essential role in the strategy. It allows citizens to be made aware of the issues, identifies and mobilizes relevant actors (for example, information about calls for proposals launched within the framework of the strategy, associates actors with the results of the strategy (which might be seen by some actors as good publicity) and contributes to attract talent and capital to the region.

Effective communication should have the effect of making the region more credible for foreign investors and regional actors. In this sense, good targeting and the choice of the best media requires the intervention of communication professionals. International marketing is still not well developed in most regions. However, the more dynamic regions have fully adopted this weapon to promote their national and international image (that is the case of Amsterdam and Copenhagen).

#### *Evaluations as key factor of success*

Evaluation is not technical and financial monitoring or a tool to manage funds. It is essentially a mean to make it possible to modify actions during the process or to redirect the strategy in order to maximize its regional impact. It should bear in mind immediate results of the strategy (for example, job creation) but also the achievement of the expected results, other side effects in the region and, when possible, estimate the costs for the region of not holding the strategy.

In evaluations, external observers might prove a good addition, since they can more easily draw conclusions and lessons from the experiment, especially when the evaluator has already experience in similar situations in other Member States. It should be faced as a resource to identify causes of



success or failure, often hard to access when they rest in the national or regional administrative, economic or social backgrounds.

#### *Link with NRP and NSRF*

The more successful regions elaborate their own regional innovation strategies within the frameworks of their operational programmes and the pre-existing national or regional plans. This approach has two major advantages: first, it contributes to a greater coherence between all the different plans. Secondly, it strengthens the credibility next to the involved actors and enhances its impact, far more than an isolated strategy would have.

In this perspective, the major objectives of the innovative regional strategies often reflect the options taken in the national plans, such as the National Reform Plan that countries had to draw for the period 2005-2008, and also the national ambitions for the next round of Structural Funds- the National Strategic Reference Framework, elaborated by each Member State and based on the Commission guidelines: Community Strategic Guidelines.

We will briefly present the background and main features of these documents. From there, we will sketch some conclusions that will guide the analyses of the operational programmes and some of the projects developed by the regions in The Netherlands and in Austria.

## **4.2 The new EU's strategic planning system**

Following the Spring EU Council of 2005 and over the past year, the Commission has set out the Community Lisbon Programme and the 25 MS have submitted their individual National Reform Plans (NRP). With the Cohesion Policy now also devoted to delivering the Lisbon's goals, there is a new strategic planning system adopted, parallel to the Structural and Cohesion Funds: the Community Strategic Guidelines (CSG). These require that the future Cohesion Policy programmes be targeted towards three objectives:

1. improving the attractiveness of MS, regions and cities;
2. encouraging innovation, entrepreneurship and the growth of the knowledge economy and;
3. creating more and better jobs.

### **4.2.1 The National Strategic Reference Framework (NSRF)**

The National Strategic Reference Framework comes as a document that combines the NRP and the CSG. The MS are asked to concentrate Cohesion Policy on actions that support the "growth and jobs" strategy via specified earmarking targets.

However, the degree to which NRP and NSRF complement each other varies considerably according to the country. Most NRP and NSRF contain broad references to shared goals but the strategies to make the Structural Funds work in favour of the NRP is less concrete and references of how NRP might enhance the NSRF scope of influence are also vague. Only in countries where there is significant funding under the Convergence objective, in this complementarity better defined. On the other hand, MS covered by the Regional Competitiveness and Employment objective tend to target their intervention towards the Lisbon goals, with the SF and the Cohesion Policy gaining less relevance.

Earmarking was seen as a way to better focus strategies and goals. It basically means identifying specific areas of investment that directly contribute to the “growth and jobs” objective, such as research and innovation, human capital, business services, major European infrastructures and improvements of energy efficiency.

Strategic links between the NRP and the NSRF and earmarking commitments are seen as the 2 key elements that will help combine Lisbon and Cohesion policies.

### **Preparation of the National Strategic Reference Framework**

The process of preparing the NSRF varied according to the country. In the majority of the MS, it was the national level that took the lead coordination role. The need to prepare a strategy with a national scope has greatly involved the central government in strategy development, although cooperation and closer contacts with the regional and local bodies have been encouraged and achieved in different degrees.<sup>28</sup>

For most countries the process was thus a Top-bottom approach, especially in Ireland, the Netherlands and Estonia. A middle ground compromise seems to have been achieved in Austria, Finland and Portugal.

As for the preparation of the Operational Plans (OP), there are also some differences to point out among the MS: some chose a close link between the NSRF drafting and the OP preparation, often involving the same group of actors; others just give a central guidance in the NSRF and its up to the regions to follow this guidance in the preparation of their own OP. In Austria, for example, regional programmes are prepared largely independently from the centre.

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<sup>28</sup> “The National Strategic Reference Frameworks: between myth and reality – Towards a new generation of Structural Funds Strategies” IQ-Net 10<sup>th</sup> Anniversary Conference, Hampden Park, 27-28 June 2006; European Policies Research Centre, University of Strathclyde; United Kingdom

## **NSRF scope and strategic focus**

In principle, there are a few elements that have to be present in the NSRFs:

- development disparities, weaknesses and potential’;
- a comprehensive, national strategy which applies to both the Convergence and the Regional Competitiveness and Employment regions;
- outline thematic and territorial priorities.

By addressing these requirements, the MS are facing the following key challenges:

- making strategic choices;
- creating nation-wide strategies;
- territorializing investment choices;
- deciding on the strategic direction;
- finding a balance between equity and efficiency;
- and achieving coherence with domestic policies.

However, these ambitions are hard to achieve because the NSRF has to be both strategic in nature (implying the making of choices) and a framework (covering all possible options). Concretely in Portugal, where we find different eligible areas (Convergence, Phase-out, Phase-in, and Competitiveness) this ambition is hard to achieve.

How are the countries dealing with this apparent contradiction in expecting purpose of the NSRF?

Austria is focusing its attention in “growth poles”, which implies a change from areas in need to areas with potential (that might be located in areas in need). Urban development and the development of metropolitan areas and of networks of urban centers is also a feature of Austria. This perspective is shared by Ireland and Portugal.

In The Netherlands, the territorial choices in the NSRF are related to the ones from the domestic policies and stress national growth in areas that are already revealing great dynamism.

Basically, for the countries covered by the Regional Competitiveness and Employment objective and for those with mixed objectives, a particular emphasis is put on the Lisbon goals of innovation, territorial competitiveness, knowledge economy and employment, with the priorities set on innovation and R&D, entrepreneurship, environmental protection and improved human resources.

Another problematic aspect is how the funding will be allocated between the national and regional administrations and what will be the reasoning behind it. An emerging trend, according to the study from IQ-Net, is a further regionalization of the allocations and a reduction of the number of OP.

### **4.3 The Structural Funds allocation for Austria and the Netherlands**

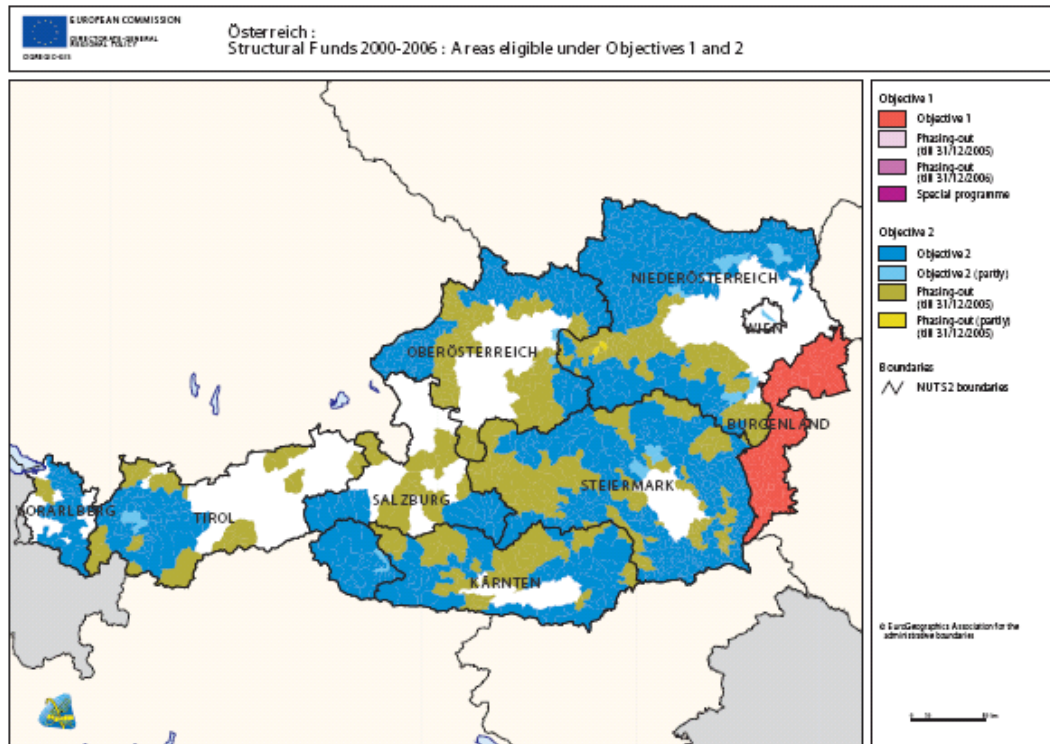
#### **4.3.1 The national allocation for the Structural funds**

Although not covered by the Cohesion Funds and not being one of the great receivers of the ERDF and the ESF, Austria and Netherlands recognize the importance of the money received from Brussels. There is a double importance to it: the projects financed by this money remember to the population the importance of the EU project, in a time that the EU credibility and durability as an institution is put into check.

At the same time, there is a “forced” coherence between the national and regional policies and the European priorities that creates a suitable background for any administrative or political changes that need to be made. Small “revolutions” that can take shape in the foot-steps of an increased European integration.

Parallel to this coherence between policies is the need to promote dialogue and partnerships among the regional and national actors; a pre-requisite for all EU subsidized projects and the guarantees greater public participation.

**Figure 10**



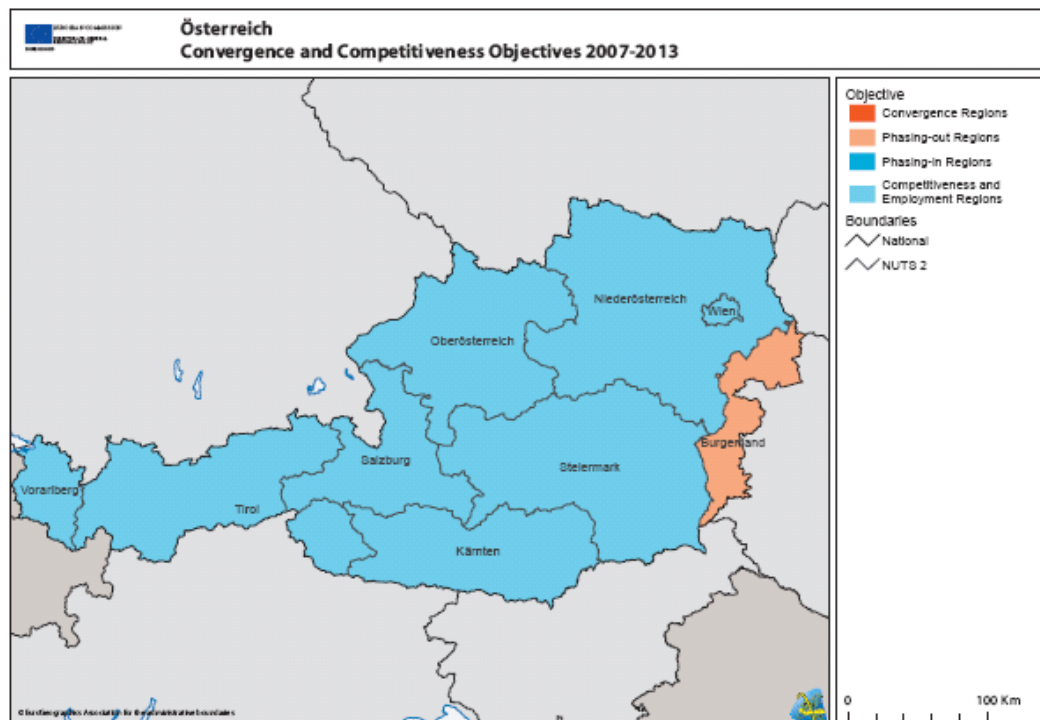
Source: European Commission, DG REGIO

For Austria, the current period defined 1 region entirely covered by objective 1- Burgenland, with the remaining territory covered by objective 2 in different stages (partly, phasing-out or full).

This mixed of areas that received the total, only part or even different funds was responsible for great confusions on the financing of programmes. It was harder, for the regions, to define where the Structural Funds money was used in combination with the regional and the national funds and where only national resources was used, under the same programme.

For the next period this situation is overcome. There is a homogenous coverage of the whole territory which facilitates the programmes financing. Burgenland is covered by a special “phasing-out” regions from the now Convergence objective.

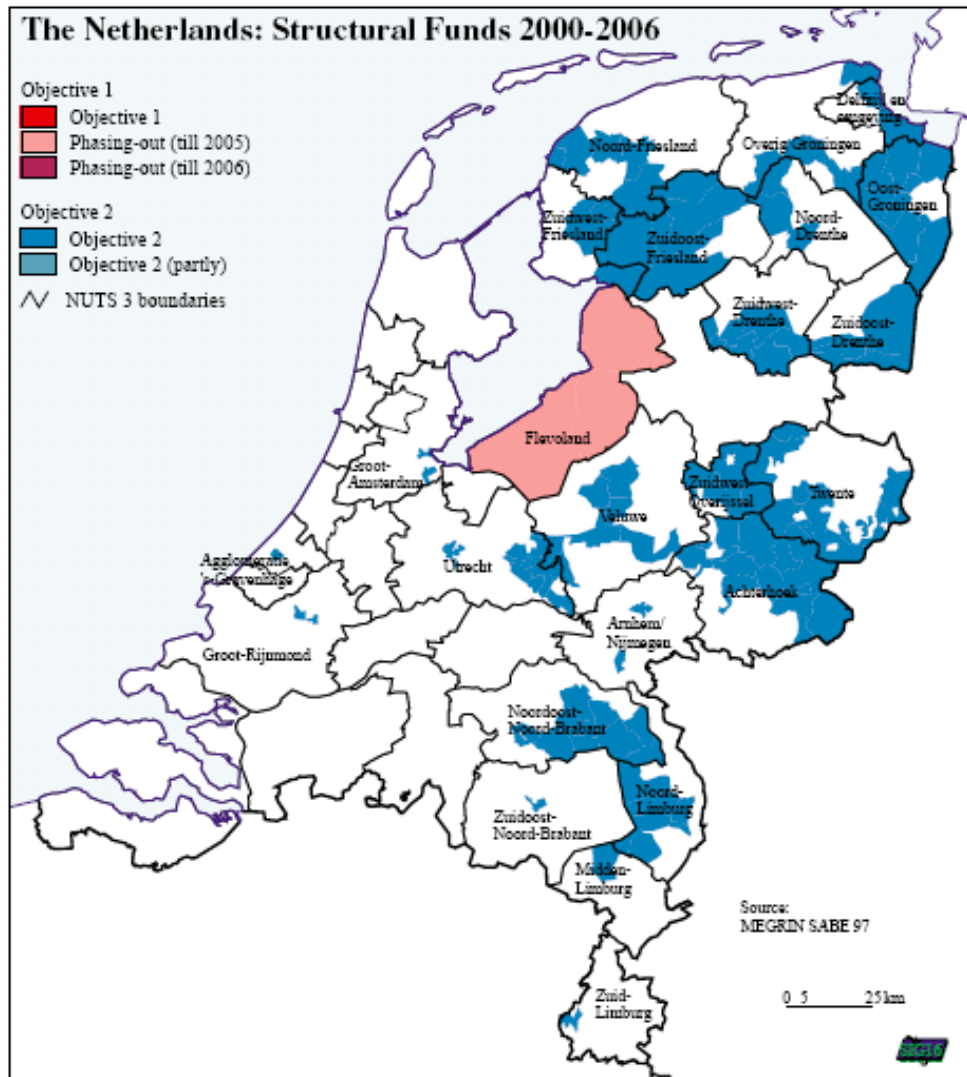
Figure 11



Source: European Commission, DG REGIO

The Netherlands had for the current period a similar picture as Austria. There was a phasing-out from Objective 1 region- Flevoland. But different to Austria, a smaller percentage of the dutch territory was covered by a “spotted” Objective 2. The areas receiving funds from the Objective 2 were mainly located in the north and east of the country.

Figure 12



Source: European Commission, DG REGIO

For the next period the changes in funds allocation coverage are great. The entire territory is covered by the Competitiveness and Employment Objective. The programmes subsidized by the EU Structural Funds are, thus, more likely to be found also in more dynamic regions.

**Figure 13**



Source: European Commission, DG REGIO

But as we have seen in chapter three, the amount of money that is reserved for each country has declined. With greater area coverage the total of funds allocated for each region and priority is much reduced.

During the 2000-2006 period, Austria receives over 2.07 billion euros of aid from European funds so that its lagging regions can catch up and to reconvert its regions with structural difficulties. But as we can see from the table, the Structural Funds support is especially relevant for Vienna, largely because the funds coming from the national level are not high, making the weight of the EU support more impressive. Burgenland is the second great beneficiary from the EU support. Steiermark's receives the largest amount of funds (both public and EU) due to its larger size.



**Table 12: Regional programmes 2000-06 (without Community initiative programmes)**

Programmes	Total cost	EU Contribution	EU Contribution %
Objective 1 programme for Burgenland	889 251 238	<b>282 906 141</b>	<b>31,8</b>
Objective 2 programme for Carinthia	511 988 619	<b>89 039 000</b>	<b>17,4</b>
Objective 2 programme for Niederösterreich	940 059 000	<b>184 967 000</b>	<b>19,7</b>
Objective 2 programme for Upper Austria	723 244 737	<b>127 164 000</b>	<b>17,6</b>
Objective 2 programme for Salzburg	101 628 312	<b>18 533 000</b>	<b>18,2</b>
Objective 2 programme for Vorarlberg	155 048 000	<b>23 695 000</b>	<b>15,3</b>
Objective 2 programme for Steiermark	1 164 646 049	<b>224 589 487</b>	<b>19,3</b>
Objective 2 programme for Tirol	215 857 844	<b>46 654 000</b>	<b>21,6</b>
Objective 2 programme for Vienna	45 793 099	<b>18 888 000</b>	<b>41,2</b>
<b>TOTAL</b>	<b>4 747 516 898</b>	<b>1 016 435 628</b>	

*Source: European Commission, DG REGIO*

As for The Netherlands, the programme that receives the largest amount of financial support is for North-Holland, not because of the larger share of population, but because it's the less dynamic region. For the period here presented, the national funds are still supporting in greater share regions that are lagging behind. The Structural Funds support follows the same reasoning.

**Table 13: Regional programmes 2000-06 (without Community initiative programmes)**

Programmes	Total cost	EU Contribution	EU Contribution %
Objective 1 programme of transitional support for Fleveland	491 551 484	<b>131 928 242</b>	26,8
Objective 2 Programme "Urban Areas Netherlands"	615 613 212	<b>208 170 000</b>	33,8
Objective 2 Programme for East Netherlands	417 609 152	<b>147 960 000</b>	35,4
Objective 2 Programme for the North of the Netherlands	1 252 150 000	<b>356 600 000</b>	28,5
Objective 2 Programme for South Netherlands	402 291 000	<b>146 270 000</b>	36,3
<b>TOTAL</b>	<b>3 179 214 848</b>	<b>990 928 242</b>	

*Source: European Commission, DG REGIO*

The programme where the Structural Funds have a larger representation from the total of funds received is South Holland, due to the existence of regions that are facing economic and social reconversion. If we compare with the map for the same period, the Structural Funds importance for the region is best accessed.

Urban areas also receive an important contribution from the Structural Funds, on relative terms. The fact that Netherlands is a high urbanized country justifies the total amount of funds allocated, especially when compared with the total for the regions independently.

For the 2000-2006 period, the Netherlands is benefiting from nearly EUR 3.7 billion in aid from European funds for regions lagging behind in economic development. The differences in totals between Austria and are high, but reflect the total population benefiting from this support.

**Table 14: Structural aid in the, 2000-2006 (in millions of EUR, at 2004 prices)\***

	Objective 1	Objective 2	Objective 3	Fisheries	INTERREG	URBAN	EQUAL	LEADER	Total
Austria	300	771	608.79	0.3	202.05	8.53	105.99	78.39	<b>2 075.50</b>
Netherlands	132	897	1 941.96	34.1	385.32	30.25	216.40	86.12	<b>3 723.15</b>

\* includes the additional amounts allocated from the performance reserve

Source: European Commission, DG REGIO

The more relevant funds for these two countries originate from Objective 2 and 3. The URBAN programme is especially relevant for the Netherlands which, as was said, has a larger developed urban structure. The INTERREG initiative is important for both countries, due to the large number of neighbouring countries.

As for the next period, the Netherlands is the greater loser from the two countries, when it comes to the money allocated for the three objectives (when comparing the funds allocated to objective 1, 2 and 3, fisheries and INTERREG from the current period).

**Table 15: Structural aid in the, 2007-2013 (in millions of EUR, at 2004 prices)**

	Convergence	Competitiveness and Employment	Territorial cooperation	Total	Variation to 2000-2006 period
Austria	159	914	228	<b>1301</b>	<b>- 30,8%</b>
Netherlands		1477	220	<b>1696</b>	<b>- 50%</b>

Source: European Commission, DG REGIO

The higher variation can be explained by the fact that Austria still retains a region under the Convergence priority and that it has a large share of funds being allocated to territorial cooperation. The neighbouring position to the new EU Member States guarantee the support for the territorial cooperation funds.

### 4.3.2 Regional allocation for the Structural funds

The Objective 2 programme is intended to help attract companies and establish new enterprises as well as strengthen the tourism sector. It has three main areas of emphasis:

- trade, industry and production-related services to develop existing businesses and encourage young entrepreneurs in their endeavours;
- tourism and regional development (emphasis will be put on the development of innovative infrastructure, tourist facilities, and managerial training);
- further training in industry to provide the necessary training programmes for adapting the skills of employees to the needs of the regional companies.

**Table 16: Carinthia – EU contribution 2000-06**

	1 Trade, Industry and productive services	2 Tourism and regional development	3 Training and economy	Technical Assistance	Total
Objective 2 programme	66 255 000	17 523 000	3 855 000	1 406 000	89 039 000
INTERREG III A - Austria / Slovenia	-	-	-	-	33 446 827
INTERREG III A - Italy / Austria	-	-	-	-	33 627 000
Total	-	-	-	-	156 112 827

*Source: European Commission, DG REGIO*

In Carinthia, the objective 2 programme with larger share of EU funds is the one connected with trade, industry and productive services. Nevertheless, the INTERREG initiatives combined also receive an important share of the money, comparable to the one allocated to the productive sector. This highlights the importance of the inter-regional cooperation with the neighbouring countries for Carinthia.

Styria receives around EUR 215.5 million from the EU Structural Funds via the Objective 2 programme, while the programme total amounts to EUR 1 139 million.

The programme has four main priorities:

- Promotion of the production and service sectors;
- Competitive locations and information society;
- Integrated regional development, tourism and culture;

- Employment and workforce potential.

The programme gives a greater emphasis to one of the characteristic aspects of Styrian economy: the presence of clusters that we will later address. Especially the existence of a special programme that covers competitive locations and the information society mirrors the concern for the development of the regional clusters. This concern was not clearly show in Carinthia.

**Table 17: Steiermark – EU contribution 2000-06**

	1 Promotion of the production and service sectors	2 The information society	3 Promotion of development potential in the context of integrated regional development, tourism and	4 Promotion of employment and human resources	Technical Assistance	Total
Objective 2 programme	95 076 157	88 777 842	18 299 170	19 877 881	2 558 437	224 589 487
URBAN II Graz-West	-	-	-	-	-	4 326 975
INTERREG III A - Austria / Slovenia	-	-	-	-	-	33 446 827
Total	-	-	-	-	-	262 363 289

Source: European Commission, DG REGIO

The area of Arnhem-Nijmegen and rural areas of Gelderland, together with parts of the other Dutch provinces of Utrecht and Overijssel, are eligible for the “Objective 2 programme for East Netherlands” to which the Structural Funds contribute EUR 141.560 million (toward a total budget of EUR 391.437 million).

The programme focuses on three priority areas:

- > Land-use planning (revitalisation of economic sites, development of knowledge-based infrastructures, strengthening of the tourism industry, creation of natural reserves, enrichment of cultural and historic sites).
- > Economic competitiveness of SMEs and the tourism sector (improving the ability of SMEs to innovate, promoting transfer of knowledge and cooperation between companies).
- > Social cohesion (increasing human resource potential in local businesses, strengthening the cultural identity of the region).

**Table 18: East Netherlands - EU contribution 2000-06**

	1 Urban development	2 Fostering the economy	3 Social cohesion	Technical Assistance	Total
Objective 2 programme East Netherlands	88 942 728	36 245 584	17 194 887	5 576 801	147 960 000
Objective 2 Programme "Urban Areas Netherlands"	-	-	-	-	208 170 000
Total	-	-	-	-	356 130 000

*Source: European Commission, DG REGIO*

In addition, Arnhem (Kern) and Nijmegen (Kanaalgebied), together with seven other cities, are eligible for the "Urban Areas Netherlands" Objective 2 Programme which amounts to around EUR 588 million, of which the ERDF provides EUR 199.7 million.

The programme has three key priorities:

- Improvement of the urban economic environment
- Stimulation of economic activity
- Enforcement of the social economic potential.

Groningen, Friesland and Drenthe receive EUR 356.6 million from the EU Structural Funds via the "Objective 2 Programme for the North of the Netherlands".

The "Objective 2 Programme for the North of the Netherlands" revolves around three priorities:

- Consolidation of the private sector (attracting new businesses and consolidating those already present; promoting innovation and technology transfer)
- Development of urban centres (strengthening the presence of service companies in downtown areas, reducing poverty in urban neighbourhoods...)
- Improvement of the labour market (availability of skilled labour, projects aiming at balancing work and family life, adaptation of vocational training to business needs).

North Netherlands is also eligible for the three strands of the INTERREG III cooperation initiative. Like all Dutch regions, the province benefits from Objective 3 funding designed to support education, training and employment policies.

**Table 19: North Netherlands - EU contribution 2000-06**

	1 Reinforcement of the private sector	2 Development of urban centres	3 Operation of the employment market	Technical Assistance	Total
Objective 2 Programme for the North of the Netherlands DE NL Germany / Netherlands	212 142 000	81 500 000	58 283 000	4 675 000	356 600 000
INTERREG III A - Ems-Dollart Region (D-NL)	-	-	-	-	36 019 592
Total	-	-	-	-	392 619 592

Source: European Commission, DG REGIO

**Table 20: The regional allocation from ERDF in Netherlands for 2007-13**

Region	2007	2008	2009	2010	2011	2012	2013	2007-2013
Noord	28.931.562	28.931.562	28.931.562	28.931.562	12.203.859	12.203.859	12.203.859	€ 152.337.822
Oost	20.799.542	20.799.542	20.799.542	20.799.542	20.799.542	20.799.542	20.799.542	€ 145.596.795
West	34.703.019	34.703.019	34.703.019	34.703.019	45.167.304	45.167.304	45.167.304	€ 274.313.987
Zuid	20.771.556	20.771.556	20.771.556	20.771.556	27.034.974	27.034.974	27.034.974	€ 164.191.145
<b>Totaal</b>	<b>105.205.679</b>	<b>105.205.679</b>	<b>105.205.679</b>	<b>105.205.679</b>	<b>105.205.679</b>	<b>105.205.679</b>	<b>105.205.679</b>	€ 736.439.750

Source: NSRF Netherlands

**Table 21: The EU funds allocation from ESF in Netherlands for 2007-13**

	2007	2008	2009	2010	2011	2012	2013	2007-2013
Total	105.205.679	105.205.679	105.205.679	105.205.679	105.205.679	105.205.679	105.205.679	€736.439.750

Source: NSRF Netherlands

For the future period the allocation of SF is equally divided between ERDF and ESF. In the NSRF innovation is one of the main priorities while in the ERDF programmes it's one of the three priority axes. More than 50% of the funding will be spend on innovation and entrepreneurship.

In the Netherlands there are no special programmes for innovation in connection with the Structural Funds. For objective 2 ERDF will be developed 4 regional programmes. Fields of intervention are clusters, R&D facilities, venture capital, supporting start ups. The main aim is making money out of the knowledge which is available in the regions.

Looking at the fund allocation by years a clear shift can be observed after 2010. The Northern regions receive more money between 2007-10 and for 2010-13 the sum is reduced with 60%. This is caused by the initial agreement that EZ had with the Northern region valid until 2010. After 2010 the money are reallocated to the West and South regions according to the EZ's strategy to support "hot spots".

The main challenge for the next years is considered to be the cooperation between these programmes, the national regional policy and the national policy for innovation and entrepreneurship.

## **4.4 Austria and Netherlands: Planning and implementing innovation**

### **4.4.1 Introduction**

Austria and the Netherlands, together with Sweden were included in the "Gang of six"<sup>29</sup>, the group of countries, considered "net contributors", which had an important position in the fight on the EU-budget 2007-13. Their

<sup>29</sup> Odd Iglebaek, The fight for budget-size, Journal of Nordregio, no. 2 September 2006

purpose was to situate the EU budget not above 1% of the EU's Gross National Income (GNI). They have succeeded to modify the initial Commission's proposal from 1025 billions euros (1.26 % of GNI) to 863 billions euros (1.048% of GNI).

Continuing the association, as the following table reveals, the amount of money allocated by EU through the new Cohesion Policy is situated on a similar level. Also the Structural Fund implementation responsibilities (level of Managing Authority) are devolved / regionalised in the three countries, compared to other situations when the implementation of SF is centralised or intermediate<sup>30</sup>. Besides the similarities, the numbers for population and surfaces offers different images situating the three countries on different positions.

**Table 22: Comparison between Austria, Netherlands and Sweden**

Country	Total sum received (billion €)	Per capita (€)	Populations (millions)	Surface (1000 sq km)
Austria	1.3	160	8.1	83.9
Netherlands	1.7	104	16.3	33.9
Sweden	1.68	187	9.0	410.9

*Source: European Commission*

For this reason, as mentioned before, the national development strategies for 2007-13 support in some cases different goals, focused on specific needs of the regions and countries. Specific strategic objectives encompass specific spatial problems in Sweden, while common objectives can be found on employment creation, territorial attractiveness and cooperation for Austria and Sweden or competitiveness pole strategy for Austria and Netherlands. Innovation, R&D, knowledge economy and also increased national/regional competitiveness are present in the strategies for all countries, in strong correlation with the Lisbon's objectives and according to EU's strategy and guidelines.

Borrowing an expression from Ron Lander, regional development and the strategies behind it are basically a "liquid process". The programmes and ideas flow from the former to the next period of regional development strategies or the former is already influenced by some of the ideas of the future one. Keeping this in mind, it is possible to clarify some of the major aspects that surround the regional development strategies in Austria and The Netherlands. The main focus will be the innovation perspectives employed.

<sup>30</sup> ESPON 2.2.1 The Territorial Effects of the Structural Funds, March 2005, Nordregio, Stockholm



The choice of the regions was not arbitrary. In Austria, the choice comes as a recommendation from Mr Huber, at the Ministry of Economic Affairs. In his perspective, both Carinthia and Styria have an interesting approach to the Lisbon targets and are trying to make the best of this new EU hot topic. In our perspective, both regions are interesting because they rest in until now peripheral areas of the EU15 and were among the less developed in the Austrian territory. Despite this, innovation and technological development are not new concepts. Thus we combine two non-central regions that are conquering their own space within the national and ultra-national arena at expenses of their creative approaches to regional development.

As for The Netherlands, we went in search of regions that possessed distinct features, to better exploit similarities and differences. The choice of the regions was based on the different situation encountered. The Eastern being a region used as example due to its increasing competitiveness and based on that a future important “receiver” of the regional funds, while the Northern region is a region previously considered “lagging behind” and now confronted with an important reduction of the regional support. In terms of innovation the first region can be considered as promoting innovation, while the other one is pushed in this direction. The selection of the regions tried to offer a complete perspective on the Dutch innovation and regional policies.

For the purpose of this study, we find it more relevant to address the specificities of the pertinent entities involved in the innovation process, how they co-operate and interact with each other and what their basic competencies in the field are.

We will then briefly address some of the features of the innovation system on the national level as an introduction to better understand how innovation is dealt with on the regional level.

The regions economical aspects are presented, together with the objectives and programmes that they developed during the period 2000-2006. The next period will also be target of an introduction to its priorities and expected programmes. Conclusions and reflections will be drawn as they seem pertinent.

#### **4.4.2 Austria**

Austria is a federal, [parliamentarian, democratic republic](#) since the [Federal Constitution](#) of 1920. On an administrative level, Austria is divided into nine [states](#), ([Bundesländer](#)). These states are divided into [districts](#) ([Bezirke](#)) and subdivided into municipalities ([Gemeinden](#)). Cities have the competencies otherwise granted to both districts and

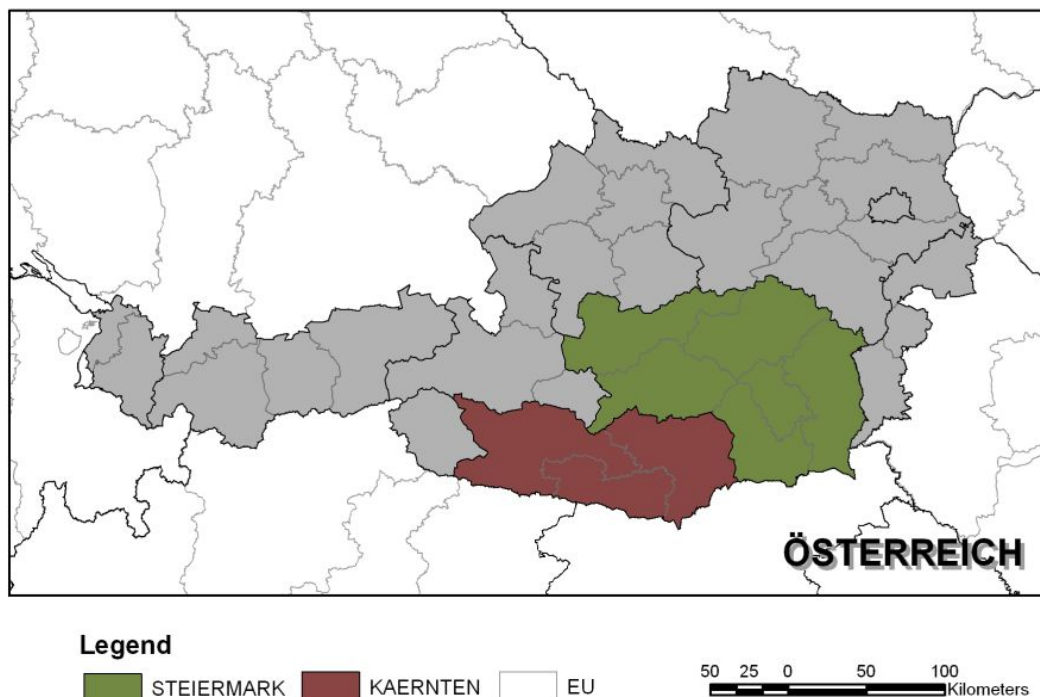
municipalities. The states are not mere administrative divisions, but have some distinct legislative authority separate from the federal government.

Traditionally, the best economic partner was Germany, but since joining the EU, in 1995, the Austrian market has opened up. The latest enlargement is seen as an prime opportunity to expand Austrian market further to the east, taking advantage of the country's geographical and historical tradition, on the cross-road between western and eastern Europe.

As the maps presents the Austrian regions selected to be furthered detailed in the project are Styria and Carinthia.

Figure 14

## THE REGIONS STUDIED IN THE PROJECT



### Organization level

To talk about Innovation and how it is promoted it is essential to understand how the different entities cooperate (or not) amongst themselves and how spatial planning and/or regional development is pursued.

“Spatial planning and spatial development are tasks carried out by the federal government, the Länder and the municipalities in Austria, involving the complex issue of the assignment of competencies. The federal government is the competent body for sectoral issues, the Länder have the general competence for development planning under the General Provisions

of the Austrian Constitution. The execution of local spatial planning is the competence of the municipalities according to the Provisions of the Austrian Constitution. Within the scope of private administration, local authorities may engage in planning activities and implement planning measures.”<sup>31</sup>

From the description above there is the clear perception that the planning process in Austria is set on a top-down approach, with the federal level responsible for the “umbrella-policies” and the remaining levels occupying their space and developing their strategies under it. This is not entirely the case. There is a beneficial coordination and dialogue running continuous throughout all the levels that allows for policies to be designed on the national level taking into consideration the regions and the municipalities’ main interests.

To co-ordinate spatial planning at the national level, the Bund, the Länder and Gemeinden have set-up an organisation - the Örok (Austrian Conference on Spatial Planning). Under the chairmanship of the Federal Chancellor the executive power at the political level involves the federal ministers, the state governors and the presidents of the Austrian Union of Towns and the Austrian Union of Communities. The presidents of the social and economic partners take part as advisors. However, this is mainly a coordinating body: “Austria’s constitution defines the legal framework for spatial planning: the federal government, the Länder, the municipalities and communities are the legitimate actors in the sphere of spatial planning in Austria, albeit with varying scopes of competence.(...) ÖROK coordinates the documentation and ensures the consistency of the reports, embedding these in an overall structure with additional analyses on the demographic, social and economic developments in Austria.”<sup>32</sup>

This entity has the advantage of working for a consensus generating concept on Spatial Planning. Keeping in mind that Austria is a Federal State, a national entity has the possibility of better co-ordinating the Länder options on spatial planning. Also relevant is the intermediary position that it holds between the Länder on one side and the national and EU level on the other. Essentially it is the combination of objectives and efforts on these three levels that is pursued.

One of Örok’s main tasks is to publish the “Austrian Spatial Development Concept”, which is revised each ten years. The most recent, from 2001, is seen as a “strategic document for supra-regional spatial planning. (...) The concept declares a commitment to the prudent and benign use of space and

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<sup>31</sup> “The Austrian Spatial Development Concept 2001”, ÖROK, [www.oerok.gv.at](http://www.oerok.gv.at)

<sup>32</sup> ÖROK report on Spatial Planning, 2001 – [www.oerok.gv.at](http://www.oerok.gv.at)

the environment, to strengthening a competitive economy, to a balanced social development across space, and to the principle of participation in planning processes. The priority themes are explicitly mentioned: The location of Austria in Europe, sustainable use of resources, spatial equalization and social integration, mobility and transport, urban regions and rural regions.”<sup>33</sup>

Within the context of European regional and spatial development policies, Örok plays a relevant role by co-ordinating the definition of areas eligible for Structural Funds for both financing periods, developing evaluations and serving as national contact point for both the ESPON programme and the INTERREG initiatives.

It was also involved, alongside with the regions, in preparing the NSRF. Workshops orientated by Örok, where the regional representatives took an active role, prepared the proposals that later moved up to the federal chancellery for approval.

We can thus observe a spatial planning and regional development processes being guided both by the Länder and by a national agency – Örok. The proposals put forward on these two complementary levels are then presented to the national level that is assuming a position closer to the EU: preparing the framework to serve as orientation to the regional initiatives.

On a more general regional development perspective, we can thus concluded that it is the regions that will take a greater role in defining the more concrete guidelines for the innovation process and how this will be conducted.

However, Innovation in Austria is a national ambition, as we have seen in the previous chapter and by the objectives from Örok. To better understand the Austrian perspective on innovation we have thus to look at the innovation system, its own modus operandis and internal structures that dictate how the actions and consequences that arise take place. The Austrian innovation system consists of three main components: a research oriented segment, a strategic and/or operative part and the public in general.<sup>34</sup>

The research oriented part includes publicly funded institutions like universities, the “Austrian Research Centres” and research dominated enterprises. Universities are important stakeholders in the whole process. In 2002, the University Act established University Councils for each

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<sup>33</sup> “Raumordnungsbericht - Analysen und Berichte zur räumlichen Entwicklung Österreichs 2002-2004”, ÖROK Wien 2005

<sup>34</sup> “European Innovation Scoreboard – country report Austria” European Commission, DG Enterprise 2005

university. This council has supervisory functions including the appointment of rectors, together with the Ministry. Current practice shows that the ministry tries to involve perceived costumers of the universities, trying to strengthen the link between the later and important external stakeholders.

The second branch of the Austrian innovation system includes the Council for Research and Technological Development, the ministries responsible for innovation policy and the agencies executing specific programmes.

The three most important ministries for innovation policy are:

- the Ministry for Education, Science and Culture (BMBWK), (universities, polytechnics and the academy of science);
- the Ministry for Transport, Infrastructure and Technology (BMVIT), (responsible for the major non-university research organisations and most technology programmes);
- the Ministry for Economics and Labour (BMWA), (supports a range of organisations of the Austrian innovation support infrastructure for SMEs and has set up several programmes in support of technology transfer, innovation management and mobilisation of equity capital for high-tech start-ups).

The Ministry of Finance (BMF) is not directly involved in financing the innovation policy. Nevertheless, it plays an important role within the policy system because it governs the allocation of financial resources and implicitly can set the standards in designing and monitoring new programmes.

In the Austrian Council for Research and Technological Development, members are appointed by the ministries and currently there is a strong industry representation (especially among the Austrian innovation champions). This results on the industries increase influence over the Austrian innovation policy.

Also in the two main funding agencies on the national level, FWF and FFG, the beneficiaries are dominating the steering boards and having a strong role in the strategic decisions that are taken.

With the first two branches of the innovative system in Austria progressively being influenced by the enterprises and big external stakeholders, we can expect strategies and policies more guided towards the applied research and greater emphasis on the connections between research/knowledge and enterprises. A general policy more focused on the economical aspects of innovation and on the active role played by SMEs and big enterprises alike is thus expected. These two branches are progressively acquiring greater relevance.

We could conclude that the third branch of the Austrian innovation system, the public or the society in general, is losing influential power. However this is not the case. Stakeholders in the other two branches recognize the importance of public awareness and of a broad understanding of innovation and its meaning. Several publicity campaigns have been raised in order to reach the public in general and bring it towards the goals and perspectives shared by the remaining branches.

The dialogue with the “general public” started with an awareness campaign entitled “Innovatives Österreich / Innovative Austria”. This campaign was administrated by the Council for Research and Technology Development, the Ministry for Education, Science and Culture, the Ministry for Transport, Infrastructure and Technology and the Ministry for Economics and Labour. The campaign supports magazines, citizens’ conferences on specific issues and an advertising campaign for innovation as a generally relevant topic. Evaluations show, however, that the goal of communicating science was not reached. This means that more is needed than just advertising measures.

To sum up, on the national level what has been happening is that “opinion leaders”, directly appointed by the ministries, have been gaining representation in the various councils and board, while other interest groups, particularly the social partners, have been losing effect.

Turning our attention to the funding agencies, we found several relevant entities both on the national and the regional level. On the National level we contacted FFG, in Styria the SFG (Styrian Development Agency) and in Carinthia the KWF (Carinthia Economic Promotion Fund).

The FFG is an agency directly under the ministries of Transport, Infrastructure and Technology (BMVIT) and for Economics and Labour (BMWA). The Structural Funds’ contribution to the agency is around 7%.

Together with the regions, the FFG was involved with the drafting of the Operational Programmes, revealing this agencies active role in the regional development strategies and in the achievement of the EU goals.

FFG sees the achievement of the Lisbon targets as essential for the Austrian economy, for similar reasons as the ones presented by other national as regional entities (see ÖROK’s objectives). The opening of the EU to the east, the emergence of new competitors on the European and global level, a national economy very focused on SMEs with low levels of R&D, the ageing population and the urgency to adopt Gothenburg’s goals and pursue a more environmentally friendly development.

Nonetheless, Lisbon has the greater role in the FFG’s proposed programmes. In the Objective 1 region (Burgenland) for the current period,

50% of funds allocated were for projects related to the Lisbon Agenda. The share for Objective 2 regions was 75%.

To address this challenges the national agency offered programmes in four distinct areas: the general programmes (with a great thematic flexibility), the Structural Programmes (where we find projects for the development of competence centres and research institutes), the thematical programmes (focusing in specific technological fields) and the Aeronautics and Space programme (Austria doesn't have an important sector in this field but it is one of the areas receiving greater attention and considered as a potential, due to its prospects of future development and to the country's geographical situation, centrally located and close to countries where the aeronautics sector is already important, such as Germany and the south of France).

The Structural Funds support is present in the majority of the programmes offered by FFG. For Mr Harald Polak<sup>35</sup> it is relevant that this happens because the EU's instructions "force" companies and agencies to work together and the cooperation that emerges from the continuous dialogue is considered important for the success of the projects and ultimately, the programmes.

In Styria, a science park was created under the support of the ffg's Structural Programmes. The Science Park Graz serves as a think-tank for start-up companies and combines the efforts of the regional universities. The building itself is made from an innovative and patented wood composite material. It is produced with an entirely new approach in manufacturing technology<sup>36</sup> and a good example of the Styrian wood clusters working for a wider and more competitive market.

In Carinthia, FFG and KWF are working together in a programme for research and development projects that aims to strengthen the competitiveness through the promotion of R&D, new technologies, products and services.

The Styria Development Agency (SFG) and the Carinthia Economic Promotion Fund (KWF) are, similarly to FFG, regional agencies that offer funding and programmes to the regional enterprises. The current regional perspective sees innovation as a key word for the regional development and the grants, loans and programmes offered follow this perspective.

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<sup>35</sup> Ing. Mag. Harald Polak, responsible for the Structural Funds in the General Programmes at FFG – Österreichische Forschungsförderungsgesellschaft mbH  
Interviewed on the 27<sup>th</sup> September 2006, at FFG, Vienna

<sup>36</sup> [www.sciencepark.at](http://www.sciencepark.at)

KWF and SFG also receive their funds from the Ministry of Economics and Labour and Transports, Infrastructure and Technology. The FFG has a cooperation agreement with the regions in the form of lost grants for both the competitive sector (enterprises) as for the non-competitive one (universities and research institutes). The SFG and KWF funding schemes are mainly in the form of loans.

This is a form of cooperation between the national and the regional agencies. As for the allocation of the Structural Funds, the Federal Chancellery is responsible for coordinating the funds. The Paying Authority receives the funds from the EU and transfers them to the regions, according to pre-defined criteria. The discussion and definition of these criteria are a sensitive subject that involved lobbying and discussions at the regional and national levels alike.

For the next period of Structural Funds, the Austrian regions have seen their funding reduced in almost 40%, as it is the case of Styria. The union of two or more regions was presented as a possibility to join funding and overcome this decrease in the financing. The advantages of this union were the opportunity to think and develop regional development strategies with a wider geographical range, thus optimizing the investments required. For example, one single programme for the incentive and cooperation between SME and creation of clusters would be developed for two or more regions. The investment required would be shared among these regions and not multiplied by them. This solution was followed by The Netherlands, for example. However in Austria, the strong regional tradition resulted in a political decision to not go forth with this union. The proposition was turned down.

### **Steiermark (Styria)**

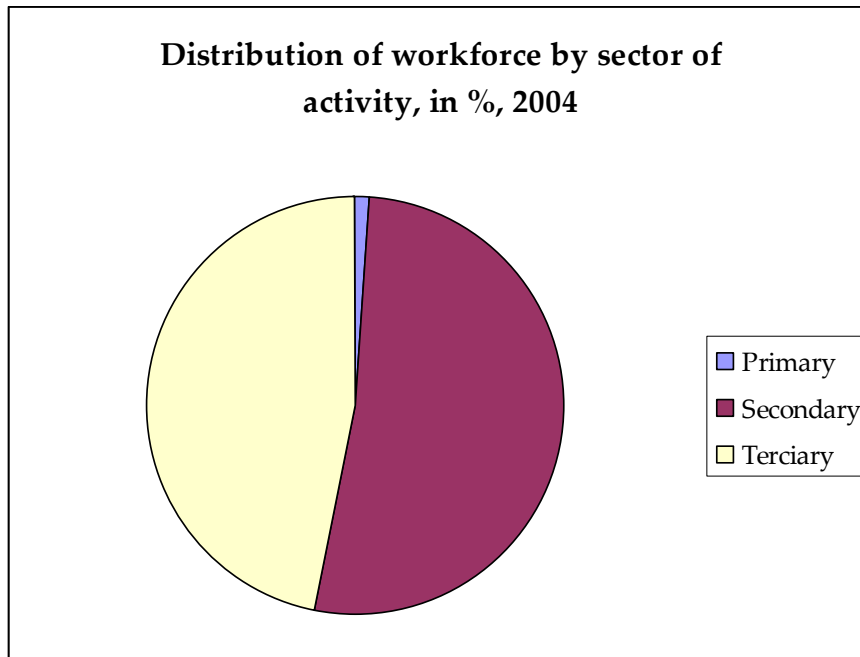
Steiermark is located in the south-eastern Austria alongside the Slovenian border. The city of Graz is the regional capital.

For 2000-2006, part of this NTU2 region was included in the Objective 2, with a target population of over 660 000 people. Over 178 000 people live in areas from objective 2 phasing-out. The total population for the region is 1 204 000 inhabitants.

Steiermark has largely been an industrial region. The restructuring of the economy began two decades ago with new modern companies settling in and older ones modernizing themselves. A high rate of business start-ups, the creation of business clusters and investments in research infrastructures and R&D have contributed to the sound economic growth. Nevertheless, the GDP per capita is only 91% of the EU average.



**Figure 15**



Source: European Commission Regional Policy- Inforegio – Austria,  
[http://ec.europa.eu/regional\\_policy/country/prordn/details](http://ec.europa.eu/regional_policy/country/prordn/details)

As we can observe in the graphic above, the industrial sector employs the majority of the region's workforce. The service lags behind the national average (47% against 64% average).

Unemployment reaches 5%, which is above the national average of 4.7%. However, young, old and long-term unemployment have been decreasing in the last few years.

For the period 2000-2006, the city of Graz received support under the URBAN II initiative, which intended to develop the industrial belt in eastern Graz with a view to the information society, in a future-oriented urban sector with a dense texture of urban functions.

The programme for the period 2000-2006 revolved along 5 priority areas:

- Priority 1: The manufacturing and the service sectors

With the overall aim of strengthening the economic base of the regions, this priority focus on encouraging innovative business start-ups and attracting new companies to the area. Other measures also include schemes for modernizing existing companies and to improve the structure of the small business sector.

- Priority 2: The information society

Preparing the region's businesses for the information society requires, according to this priority's measures, promoting cooperation between companies in the fields of R&D and innovation while encouraging the

consultation and transfers of know-how. To facilitate this process, innovative business parks (“Impulszentren”) were set-up or reinforced.

- Priority 3: Integrated regional development, tourism and culture

Measures essentially promote infrastructure creation and other commercial investments to promote cultural projects and tourism.

- Priority 4: Technical assistance
- Priority 5: Employment and human resources

The region’s labour force is facing the challenges of the restructuring of the national economy and of globalization and the free-market. Measures under this priority aim to promote innovative training programmes in the areas of business and other programmes aimed at those who are at risk of being excluded from the labour market.

The actions undertaken during this period by the regional government were strongly focused on the economical restructuring and promotion of the region. We will briefly present the ones that were financed and managed by the Styrian agency of regional development, the SFG (Steirische Wirtschaftsförderungs-gesmbH), presented at the ZIEL2 programme for Steiermark 2000-2006.

Under the objective of promoting the manufacturing and service sector, two measures gain special relevance for this particular study: setting up innovative companies and promoting the manufacturing and service sectors.

The first measure is intended for both private investors and companies that want to locate production operations in the industrial or trade sector and/or innovation focused production in the region. The support of initial investments is intended to increase the stimulus of the foundation of enterprises. Strengthening the entrepreneurial potential and broadening the trade sector variety is envisioned as a path to increase the innovation capacity within the region and reduce susceptibility in crisis situations. The programme was especially targeted for young entrepreneurs and the financial support related to buildings, machinery, equipment and other intangible costs related to the project. The EU’s Structural Funds was also used in this programme, but its financial support was not superior to 15% of the total costs.

Within the programme to attract new companies to the area the beneficiaries and the fields financed were the same as in the previous programme. The EU’s Structural Funds also accounted for 15% of the total costs. However this programme especially privileged the clusters in Styria. It concentrated on the location of innovatory business-related services enterprises in the industry and trade sector, in particular in the trade sectors of motor-vehicle engines and suppliers, materials and metals, wood, electronics and medical technology, fields in which the region has been developing small clusters.

The concern underlying this programme was that existing gaps in the existing value-added chains and fields of competence was closed. Also, the programme was seen as a mean to attract research and development and distribution and marketing to the area. Another main objective was the support of innovatory service businesses in the information and communication sector.

We consider that also pertinent for this study is the programmes developed within the objective of promoting competitive.

A specific programme was designed in Styria, targeting R&D and innovation in firms. The target group was very wide, including industrial companies, joint research institutions and other academic institutions, industrial organisations, individual researchers and joint ventures. The financial support was granted to industrial research and pre-competition development projects that created information that could be used for the development of new products, processes and services and to implement substantial improvements in existing products, processes and services. The Structural Funds were strongly present in this programme, supporting up to 50% of the total costs.

Also in the same theme of cooperation between researchers and enterprises was the programme “Networking, consultation and knowledge transfer”. This programme concerned the creation of a climate of co-operation and overcoming of mental barriers in supra-business collaboration. The intention was to achieve synergy effects (knowledge transfer) and promote the formation of cluster and network projects, the main attention being on the promotion of external consulting, the identification of products and intangible investments (industrial design, marketing innovation). The Structural Funds supported up to 50% of the total costs.

Finally, still within the promotion of competitive locations and the promotion for the information society it was created a programme for advisory services for small businesses. The scope of the support included any trade and industry enterprise located in the promotion region. The financial support was granted to business consulting services provided by the WK-Steiermark-Unternehmerservice (Institute for the Promotion of the Economy of the Styrian Chamber of Industry and Commerce), in particular to provide assistance to SMEs in the analysis of their internal business processes. It also offered support in the early detection of any future development opportunities and provided possible solutions in case of any undesirable developments.

In the field of employment and human resources promotion, we would like to highlight the programme for innovative training in firms, also developed

by the SFG. This measure was intended to promote in particular the qualification contents and consulting services necessary for the successful implementation of the Objective 2 programme and the contribution of the Structural Funds was 33% of the total costs or 50% of the total public expenditure. Additionally, the aim was to promote and make use of the women's potential as workforce, in a country that has one of the lowest rates of women participation in the labour market, within the EU. The general was the qualification of business founders and acquires of businesses or persons employed in business.

Innovation is not an entirely new concept for the regional development strategies in Styria. For the period 2000-2006 there was a technology policy, with a special emphasis put on the clusters that were taking shape in the region. The oldest of these clusters is the Automobile cluster.

For the period 2007-2013 the strategy and the connected concepts were updated and the concept of innovation is adopted. The clusters promotion and development still have a predominant underlying concern in all the programmes presented. However there is not a consensus of what the region means by innovation. This abstraction is also shared by other Austrian regions and the EU itself. It has the advantage of allowing the region to classify a wider diversity of strategies to fall under the concept of innovation and thus contribute to both the Lisbon targets and the use of the Structural Funds.

As with other countries and regions, innovation and R&D in Styria are mainly promoted by a few big enterprises. However the region is trying to broaden this field to reach an increasing number of SMEs. For this purpose, the region developed during the period 2002 to 2004, the Technofit programme.

The Technofit was managed by two regional SMEs and two technology centres. In an interview with Dr Gerd Gratzner<sup>37</sup>, head of Unity of EU Regional Policy and New Technologies at the Provincial Government of Styria, he considered this programme as the most innovative element of regional development strategy for the current period. The funding scheme in the field of knowledge transfer was described as unique. The programme enabled the development of new projects, processes, methods and services

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<sup>37</sup> Dr Gerd Gratzner, Head of Unit EU Regional Policy and New Technologies, Offices of the Provincial Government of Styria  
Interviewed on the 25<sup>th</sup> of September, in Graz

in Styria and involved universities, extra-universities research institutes and SMEs.<sup>38</sup>

The general goal was enhancing the competitiveness of Styrian business and to foster technological innovation in structurally weak regions. Therefore the Objective 2 regions in Styria were the main target. During the two years that it was in operation, Technofit financed 29 projects in the framework of two packages of measures: finding and evaluating ideas and selecting and implementing them.

The programme was subsidized with a total of €4 million, of which €2,8 million were ERDF.

The national government decided that the programme would not run for the next period. However, some of the most successful projects tried out during the Technofit are going to be generalized. For the next period, the NANONET- Styria will continue as a follow up project, with the financing of the Austrian Ministry of Economic Affairs and Labour and the Styrian Future Fund.

The national level and the competence centres are taking over the innovative actions that have, so far, being tried and implemented in the regions.

A particular aspect of Styria that is worth mentioning is the clusters that are settling and developing in the region. As a small economy, Austria has a limited domestic market. However, by taking part in the European Single Market area and by neighbouring the eastern (and economically dynamic) regions to the Eastern Europe, Austria has been able to overcome this initial disadvantage. The regions that face the eastern border are now taking advantage of the close historical geographical closeness to the new EU Member States and the ones that are soon to join in.

Styria and Carinthia are two of these regions. Styria was one of the Austrian regions that were particularly hit by the economical structural change and the decline of the state-owned metal industry, due to its dependence on this sector. On the other hand, Styria held a high level of expertise in the automotive sector. Together with the presence of renowned firms like Steyr-Daimler-Puch (current Magna Steyr) the decline was slowly reversed in the 1990's. The automotive industry led this recovery. The ACStyria Automobile Cluster was established in 1995 to help boost the region's economy. This was the first cluster to be created in Austria and has since served as a model of "cluster creation" worldwide. The declined region came back as the "Detroit of the Alps" as it is often called. The region now

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<sup>38</sup> Technofit- [www.technofit.at](http://www.technofit.at)

enjoys from a globally successful car and engine manufacturing position. The formula for success was, according to ACStyria managing director Uwe Galler: “Carefully plan the linkage between business, research and public institutions and determine and promote strengths and synergies involved. “We bundled the forces already existent in the automotive value-added chain in Styria to increase our power of innovation and international competitiveness”. According to Galler, the major drives in the process were lead enterprises that were strong in research and that were willing to cooperate<sup>39</sup>.

Nowadays, the 190 partner enterprises in the ACStyria automobile cluster employ over 44 000 people and generate sales of 9.3 billion € This alone is enough to make the cluster into a main driving force of the regional economy. But additionally to this cluster, the region is now developing other major initiatives such as the Wood Cluster Styria, Human Technology Styria and Materials Cluster Styria. All of these have been nourished by the financial support of the EU’s Structural Funds and the regional SFG among others, like we have seen earlier. Programmes developed and promoted by the regional authorities serve the objective of cherishing the new and older clusters.

Styria is currently exploring new possibilities and fields of strengths in nanotechnology, food technology, computer simulation and mathematical modelling.

Structural Funds support in the field of Cross-border cooperation will gain a new relevance in the next period. As Galler points out, “The high pressure area for automotive business has shifted to the countries of South-eastern Europe. ACStyria cannot stop this migration to the Southeast. However, it can do everything in its power to optimally adapt domestic enterprises to this trend”<sup>40</sup>

Styria is, therefore, developing its cross-border cooperation models, showcase projects for multilateral cooperation, and financing possibilities. The first eastern targets are neighbouring Slovenia and Slovakia and Croatia. But it’s not only competition coming from the East. Austria (and Styria) has its eyes put on the economic stimuli and new business opportunities that the opening up of the eastern markets means.

As a concluding remark, we would like to highlight that in Styria the regional development perspective is greatly based on the existing and

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<sup>39</sup> Quoted in Business location Austria- “Austria Land of Clusters”, article by Alfred Bankhamer, 2006- <http://www.business-location-austria.com>

<sup>40</sup> idem

expected clusters. The Structural Funds for the current period were financing mainly deprived regions, where the most relevant entities and enterprises that compose these clusters were not found. As a consequence, the contribution of the Structural Funds to what is perceived as the driving-force of the Styrian economy (the clusters) was not as significant. For the next the geographical distribution of the Structural Funds was homogenised allowing for the programmes directed for the promotion and development of the regional clusters to be financed by the EU. This poses a new opportunity that SFG is eager to take.

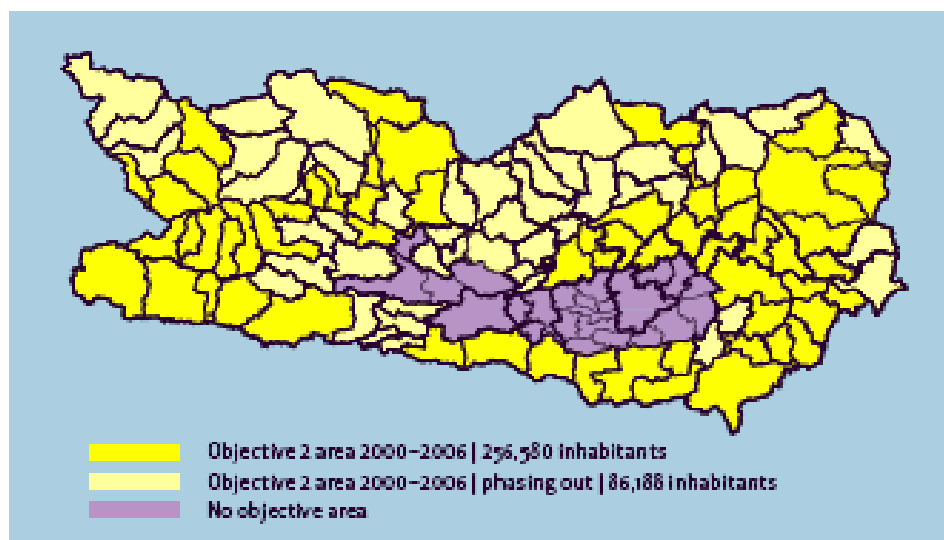
### **Kärnten (Carinthia)**

Carinthia is located along the Italian and Slovenian borders, in the South of Austria. It is a mountainous area with more than half of the region at 1000 m or higher above the sea-level.

The fairly difficult access, the location in the periphery of Austria and the European centres and the lack of a large city centre are important disadvantages of the region. Communication was improved by the construction of the Tauern and the southern motorways.

Trade, industry, agriculture, forestry and tourism are undergoing a restructuring process and, consequently, facing some problems. For the period 2000-2006, the region received around 85.25 million € from the EU Structural Funds via Objective 2. More than 256 000 people benefited from this support. 86000 are living in phasing-out areas. This represents a little less than half the total population for the area.

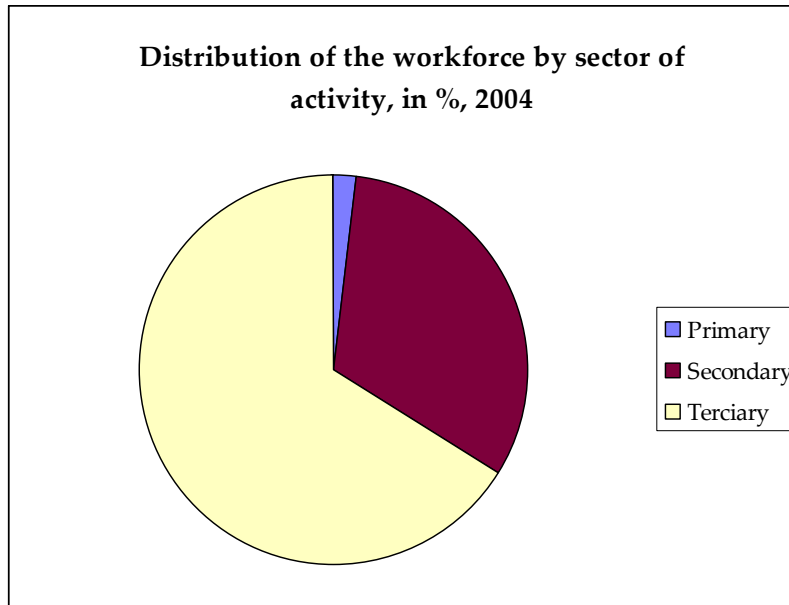
**Figure 16: Carinthia- Structural Funds support in the regions, 2000- 2006**



Source: KWF, [http://www.kwf.at/en/KWF\\_1\\_BasicInfo\\_E3.pdf](http://www.kwf.at/en/KWF_1_BasicInfo_E3.pdf)

Carinthia has a GDP of 89% of the EU average. This is not only due to the restructuring process, but also to the high rate of seasonal unemployment. Unemployment stands at 5.6% (national average is 4.7%).

**Figure 17**



Source: European Commission Regional Policy- Inforegio – Austria,  
[http://ec.europa.eu/regional\\_policy/country/prordn/details](http://ec.europa.eu/regional_policy/country/prordn/details)

The services sector represents the highest share of employed population and is higher than the national average of 64%.

There is a lack of technical oriented universities in Carinthia. Some courses were created in technical colleges but these ones are all located outside the objective 2 areas.

The programme for 2000-2006 revolves around the following priorities:

- Priority 1: Commerce, industry and production related services

This priority aims at providing incentives for start-ups in the industrial sector, in related services and in the service sector. Emphasis was put on the development of existing business as well, and in encouraging young entrepreneurs in the region. Other measures stressed included the enhancement of regional business structures, development of appropriate locations, encouraging research and innovation and actions in the fields of water treatment, environment and energy.

- Priority 2: Tourism and regional development

In order to stimulate the tourism sector and promote regional development measures within this priority included strengthening individual companies and encouraging cooperation between the region's companies. Emphasis was put on the development of innovative infrastructures, tourist facilities and managerial training.



- Priority 3: Training and industry

Under this priority, measures were developed to provide the necessary training programmes to adapt the skills of employees to the needs of the regional companies. Measures also promoted the better use of the region's resources via collaboration and networking projects.

- Technical Assistance

The regional level in Austria has a great authority in both the programming and the managing fields. In Carinthia, the focus is unquestionably on the economic sphere. The policies are not as "clusters" orientated as in Styria, because the region has a much smaller industrial tradition. Comparing both regions' distribution of workforce by sector of activity we can see the preponderance of the service sector in Carinthia.

There are two main action fields for the current period: a classical economical approach that accounts for about 80% of the funds and a regional intervention on the tourism area, covered by the remaining 20% of the funds. As similarly with Styria, Carinthia takes advantage of the apparent abstraction that surrounds the concept of "innovation" on the EU level and introduces the idea of "innovative tourism". To be able to include actions taken in the tourism sector as connected to the Lisbon Agenda, Carinthia's tourism sector has new approaches: online booking and new forms of financing the sector can fall under the category of "innovative". This is one of the reasons that allow Carinthia to prioritize actions in the field of tourism, an area that is not considered relevant to Lisbon targets on the EU level.

In Carinthia there is an apparent division line between the policies directed towards the urbanized areas (where we will find a preponderance of programmes for industries and services) and the rural areas (where tourism is used as the sector that will contribute to the Lisbon's goals and seen as the rural areas' competitive advantage). It is worth remembering that Austria has a greater touristic potential in its rural areas than other European countries, concretely The Netherlands.

But it is with the remaining two priorities, in the field of commerce, industry and production related services and in training and industry, clearly "urban" fields that the programmes related to innovation and R&D are best assessed.

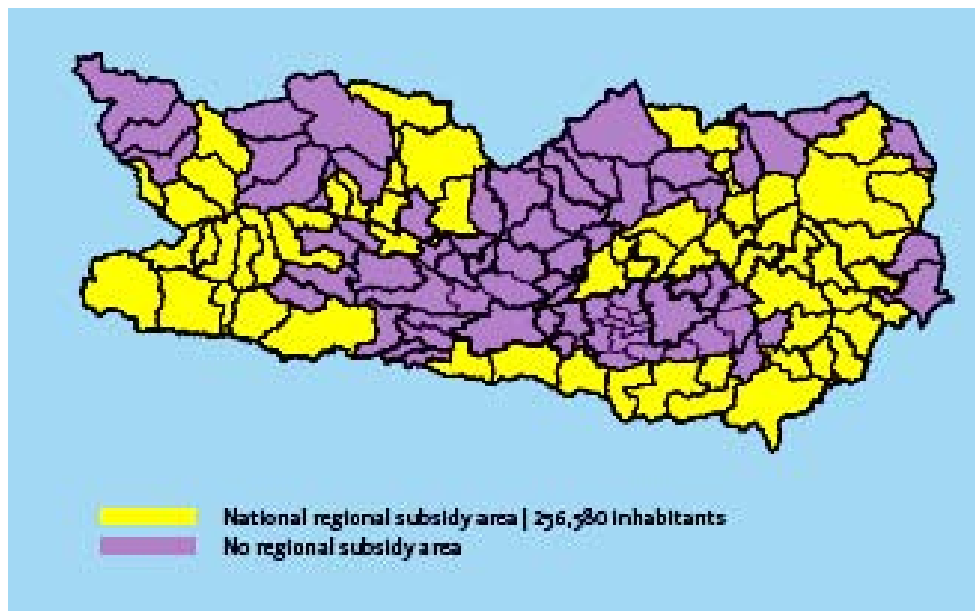
KWF (Kärnten Wirtschaftsförderungs Fonds) is one of the regional authorities that manage the funds allocated both by the national government and the EU. The provincial government of Carinthia assigns to the KWF the task of preparing an integrated regional strategy for Carinthia. In essence, the KWF is the sole economic promotion institution in Carinthia, charged with improving the innovation capability of SMEs, company and inter-

company business development and promoting high-tech projects and clusters.

The projects that are accepted by KWF for funding have to present their economic feasibility in the medium term. The enterprises have to finance part of their own project. As a rule, small companies have a higher financial support from KWF, contrarily to the bigger ones, that have to invest more.

For the period 2000-2006, KWF developed a number of programmes and incentive schemes that reveal the region's willingness to adopt innovation and R&D in the restructuring of its economic profile. This general aim falls under the EU priorities for objective 2 areas and hints to the importance that innovation has been assuming in the regional, national and European discourses, since the late 1990's.

**Figure 18: National regional subsidy areas, 2000-2006**



Source: KWF, [http://www.kwf.at/en/KWF\\_1\\_BasicInfo\\_E3.pdf](http://www.kwf.at/en/KWF_1_BasicInfo_E3.pdf)

Comparing the regions that received the Structural Funds support for the period 2000-2006 and the national regional subsidies areas for the same period, we can conclude that the Austrian government and the regional EU's support are complementary. Regions covered by Objective 2 are also eligible for national subsidies, while regions in phasing-out and the ones not covered by SF's support are left out of the national subsidy's scheme.

This situation might hint two different scenarios: one, the national and the European level have entered into an open dialogue, in which the regional needs have been accessed. The result is a complementarity of the measures, programmes and financial support attributed.

The second scenario is that the Austrian government, on a national level, is more concerned with pursuing the supra-national aims and recommendations. This means that regional needs are assessed and financial support distributed according to the instructions from Brussels and to fulfil the agendas on a European level.

From these two opposite scenarios, we believe that reality mirrors a combination of the two: on the one hand, there is willingness, from the national level, to comply with the EU's perspectives about what regional development policies should look like, what economic areas to develop, which kind of approaches to take. This leads to a formulation of general goals and agendas that reflect this inclination, like we saw when we analysed the NDRF and the NDP.

On the other hand, the regional government is aware that the funds that are coming from Brussels are important to subsidize several regional development actions. It is, therefore, equally relevant for the regions to accept and adopt criteria that reach them from the supra-national level.

We cannot forget that by formulating regional objectives that comply with the goals of the EU, simultaneously regions are thus encountering the national ambitions. The dialogue established at ÖROK workshops about the Austrian spatial planning perspectives finds a common ground. In the end, Austria is reaching towards the EU and the regions are quickly accepting this challenge and searching for ways to improve their position within this new reality.

Some of the strategies followed in Austria are, like we have seen with Styria, to place financial, management and evaluating responsibilities in regional structures. In Styria we meet SFG (Steirische Wirtschaftsförderungsgesellschaft), among others. In Carinthia, it is with the KWF. Both institutions mirror the regional level's ambition to perform well and according to EU (and national) guidance.

We can observe this compliance when we look at some of the projects that were underway during the now ceasing SF's period. For example, the Start-up Loan, a financing scheme for Technology oriented Enterprises. Its objective is to "promote the establishment and above-average growth of competitive, technology-oriented and/or innovative small enterprises".<sup>41</sup>

KWF has several of these programmes running, much focused on companies start-ups, continuous education, quality improvement in tourism,

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<sup>41</sup> Carinthia Economic Development Fund –Entrepreneurs: [www.kwf.at](http://www.kwf.at)

cooperation between businesses and industries and information, consulting and qualification programmes.

But we would like to highlight one interesting feature: KWF doesn't work on the classical regional development strategies but on the company level. Reinhard Schinner<sup>42</sup> believes that one of the strengths from the institution resides exactly in this ability to operate closely to its main costumers: the companies. KWF has existed for more than ten years. Its regional reputation assures it that most entrepreneurs and companies in Carinthia are aware of its presence and go to KWF when they have projects or ideas that they want to discuss or further develop. Also, KWF has regular contacts with its more frequent "costumers" and takes the initiative of going to them to discuss a new programme that is developing. It is essentially a relationship based on mutual conaissance and tradition. Other intermediary institutions, like banks or regional and national agencies are kept up-to-date with KWF programmes, to ensure a wider reach of its benefits.

Other ways of publicizing the agency's programmes are through workshops, meetings, webpage and a newsletter.

On the financing level, it also doesn't offer grants, only loans and venture capital as funding possibilities.

### **The monitoring and the evaluation processes**

In Styria there is a research institution that is responsible for the evaluation process. It does both the ongoing and the final evaluation, according to the EU's directives on the matter. One of the recommendations from the evaluations of the current period was the need to better combine the 2 EU funds: ERDF and the ESF.

In Carinthia a similar approach was taken. An external team of consultants proceeds to the evaluation according to EU regulations. For the next period the evaluation will also be ongoing and include both quantitative and qualitative indicators.

FFG has a similar set of indicators as shared by the other national and regional agencies. The data received from the regional bodies is assembled in a single data-base that allows for an easier assessment and consultation. The indicators that appear on this data base were set both by the EU and the national government.

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<sup>42</sup> Reinhard Schinner, responsible for Cooperation and EU affairs at KWF- Carinthian Economic Promotion Fund  
Interviewed on the 26<sup>th</sup> of September at KWF, in Klagenfurt

The monitoring and evaluation processes in Austria are thus taking advantage of the technological era to allow for a quick transference of information from one region or entity to another. The greater advantage is the readiness to which several regions have access to projects and programmes being operated by other regions. This facilitates the spread-out effect.

The negative side is that by simply filling-out a spread-sheet, some valuable, non-quantitative information is lost. This down-side can be counterbalanced by the promotion of workshops and meetings.

FFG has a relevant role in this aspect. Apart from its website, the members of the agency go twice a year to the regions where large meetings with relevant actors are held and the agencies programmes are presented. The agency has the opportunity to directly discuss with the region's companies. It's an attempt to establish a closer link, similar to the one that is privileged by KWF in Carinthia, for example.

Curiously enough it was on these operational aspects that Harald Polak, from FFG, saw the agency's main strengths and weaknesses. FFG has a quick time of response for the companies (6 to 8 weeks) and has a standardized evaluation activity. These are seen as advantages that the beneficiaries recognize and appreciate.

On the down-side, there is an increase in the number of programmes established by the ministries and that are administered by the FFG. This cause more confusion next to the costumers and is more time-consuming for FFG that has a wider variety of programmes to present and administrate.

As for the SFG and KWF strengths and weaknesses, Dr Gerd Gratzner described the main challenge for Styria the need for knowledge and innovation transfer, especially from the region's universities, technical schools and technology centres to its enterprises. The big question is how this can be done. How can new products, processes and ideas be brought to the market? The strategy followed until the current period was mainly focused on the allocation of money for the modernization of the production lines. A new trend that is now developing is the creation of innovation centres, regional bodies that unite the efforts of the actors in the field of research and technology and the needs pf the enterprises. These "clusters of innovation" are one of the next period's strong points.

These innovation centres will be coaching and counselling entities working to cut the barrier between production and diffusion of knowledge.

In Styria one of the most negative aspects pointed out of the current Regional Policy were the Structural Funds regulations. They were described

as being both complicated and open to interpretation. As we mentioned before, especially damaging for the region and its clusters was the imposition to allocate the funds into less developed regions within Styria, which often meant that projects covering more than one Nuts3 were partly financed by the ERDF and partly only by the national and regional governments. The result was a bureaucratic and complex financing situation.

Also damaging was the difficulty encountered by the regional level to finance the clusters development in the region. Since these clusters were pluri-regional on the Nuts3 level and often in areas outside the current Objective 2, programmes for their development were only partly financed and harder to justify.

For the next period, however, the region's eligibility for the Structural Funds has been homogenised. The whole Nuts2 region- Styria- is eligible for the ERDF. Hence it hints for an easier implementation and EU funding of the projects promoted by the regional and national levels.

In Carinthia, Reinhard Schinner shared his colleague's perspective for the limitations of the selection of the current Structural Funds eligibility areas.

He also described three programmes/projects that he considered as most innovative in the current regional development programme: BUILT, projects that deal with gender issues and wood-harvest projects.

The first is a publicly managed institute that supports start-up projects in the field of technology. The entrepreneurs interested can benefit from the coaching and counselling of BUILT while the financing of the project falls under the responsibility of the KWF.

This institute was created to help reach the objective of reaching between 400 and 500 companies with R&D projects by the end of the next funding period, high above the current 250 companies that have projects in this area.

The "gender projects" address one of the weaknesses of the Austrian innovation system: the lack of female researchers and of women in business. These projects focus mainly on the enterprise level and try to attract women to start-up their own companies, for example. The support offered by the projects ranges from consultancy and management level to other more "soft" interventions, such as promotion of networking among female entrepreneurs.

Finally the projects related to wood harvest try to take advantage of an endogenous resource. While it is too early to define the region as possessing a wood cluster, some steps are being taken in this direction: the projects in question try to promote networking amongst the existing companies in the field. Networking is seen as desirable to improve the raise in productivity,

research and development activities. Additionally, the projects are all being developed in cooperation with other EU projects, especially in the field of knowledge management. This was also seen as one of the positive sides of the initiative.

The small number of players and international relevance hinders a more open “cluster approach”.

### **The 2007-2013 period**

The Structural fund policy 2007-2013 has two elements that try to ensure the coherence of policies on the different levels: the “Community Strategic Guidelines“ at the European level and the “National Strategic Reference Framework“ at the level of the Member States. Both elements serve as guidelines to the regional development programmes.

Like we previously said, in Austria, the “National Strategic Reference Framework“ (strat.at 2007-13), was drafted in a dialogue process that included all the relevant partners at the Federal and the *Länder* level. According to the federalist structure of the country’s regional policy, the platform for this process has been provided by the Austrian Conference on Spatial Planning (Österreichische Raumordnungskonferenz, ÖROK).

The strat.at provides the goals and the basic strategic framework for the operational and regional programmes, under the EU Regional Policy and includes the links to the national programme for the development of rural areas, namely the priority three: diversification of the rural economy and quality of life in rural areas (ELLER programme).

Austria acknowledges that, given the intention and the need to provide a coherent overall development strategy for Austria and the declining in the EU’s financial support, several measures will be supported on a national basis<sup>43</sup>. Nonetheless, it is recognized the importance of co-ordinating an overall strategy, independently of where the funds originate from.

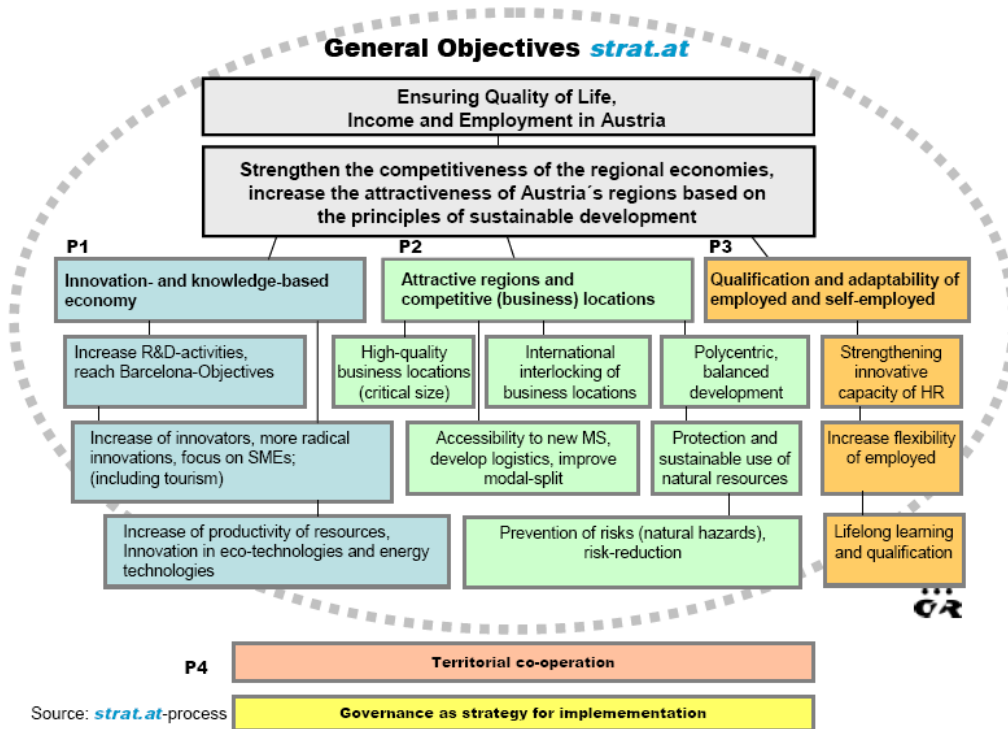
But on the matter of innovation and R&D there is a clear reflection on the importance of the Structural Funds to promote it: “Some of the SF-funded measures will clearly provide an innovative impulse for (infrastructure-) investment, as in planning and project development, managing tools, R&D etc.”<sup>44</sup>

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<sup>43</sup> Straat.at 2007-2013- final executive summary, Austrian Conference on Spatial Planning, version October 31<sup>st</sup> 2005

<sup>44</sup> Idem

Figure 19: General objectives for regional development in the strat.at



The regions are seen as having an important role in overcoming the challenges that emerge from the continuing rising pressure on productivity, wage level and energy costs. Austria wants to increase its regional competitiveness at a faster rate, simultaneously contributing for a balanced and sustainable regional development.

For Styria and Carinthia, it is especially relevant that the strategies outlined on the NSRF take into special consideration the role of Clusters, (see general objectives for regional development in strat.at) and include a specific reference to the rural areas and the importance of tourism.

Both regions also have specific programmes being developed on a cross-border level. The NSRF also has a specific reference to the relevance of maintaining cross-border programmes: “cross-border and trans-national co-operation must include cluster and network activities (more business-to-business), education, training and labour market policies (...)”. It is only expected when Austria has always valorised its presence in the border between the Western and Eastern Europe and now sees the enlargement to the east as an opportunity to increase its commercial markets and gain a more relevant part within the EU, as partner with the new countries. The priorities set in the NSRF reveal this strategy and, at the same time, try to prevent the threats that are posed by the proximity of the eastern economies, with its lower wages.



With the priority themes on the national level being the widespread regional foundation of an innovation and knowledge-based economy, the development of attractive regions and competitive enterprises locations and the increase adaptability and qualification of the workforce, the regions have a wide and reasonably vague, set of fields in which they can intervene.

In Styria, for the period 2007-2013 the operational programme sets a greater relevance for the priority field 1: Innovation and Knowledge-based economy, with 90% of the funds converging to this objective.

The fields of intervention under this priority are extremely orientated for the Lisbon agenda:

- Development of the research and training fields;
- Reinforcement of the role of innovation systems;
- Promotion of Business R&D;
- Support to innovation and R&D activities;
- Support to innovative offers and activities in Tourism;
- Promotion of the entrepreneurial activity;
- Qualify / promote Innovation.

The greater emphasis put on the subject of innovation and R&D can be explained by two aspects. Firstly, the knowledge-based economy is one of the main fields named to achieve the Lisbon Agenda. Since this strategy is at the central stage for the next Structural Funds period and the national and regional strategies are guided towards that goal, it is understandable (and expected) that regional objectives have a clear emphasis on R&D and innovation.

Secondly, we must keep in mind that Styria is developing its clusters-profile. With the opening of the EU to the east, the danger is that a lot of the factories will relocate to the new EU countries. The danger is real and is happening already, like Galler explained. The logical answer to this threat is ensuring that the higher-added value activities will remain in Austria. These added-value activities within the clusters presented are connected with research, products and processes development, marketing, among others. The way to improve these fields within the clusters is through the support to innovation and the reinforcement of the role of R&D to achieve the desired high-added-value economy.

But the regional strategy does not cease in a clear economical development approach. The Gothenburg strategy is especially relevant in the second priority field: reinforcement of the attractiveness of regions and cities. Although less relevant from a financial point of view (only 8% of the funds), this priority is guided towards the promotion of the quality of life in

cities, city-regions and regions. The reasoning is that attractive life conditions will encourage people to settle in. Companies and economical development will follow.

Under this priority, three fields are promoted:

- Integrated approach to sustainable development;
- Environmental research;
- And the Urban-plus programmes, aimed at the development of cities and its hinterland.

We could easily connect this priority as a side-priority to ensure the sustainability of the regions clusters.

Adding to these, there is the opportunity that now arises from the new rules concerning the allocation of the Structural Funds support. By including the whole of the region into the allocation of the financial support Styria has greater possibilities to develop projects in already dynamic areas. The money is no longer concentrated in the less developed styrian regions, like it has happened till now. This window of opportunity is undoubtedly recognized by the styrian authorities.

The third and last priority field is connected with Governance and Technical assistance. Only 2% of the funds are reserved for this priority. The relevant field within it is Governance, that in this context refers to the collaboration with other regions, the integration of key actors in the process of regional development and the contacts established with the bordering Slovenian regions<sup>45</sup>.

As for Carinthia, the challenge is to increase its economical competitiveness and ensure its position in the Alpine-Adriatic route, thus sustaining its effective growth in the long run.

Similar to Styria, the innovation-related objectives take the greater relevance in Carinthia. The EU and the national guidelines (and the funds associated) ensure that also in Carinthia the Lisbon Agenda is to be pursued.

Under the Innovation goal, the main fields of intervention will be:

- Promotion of the basic knowledge-structures;
- Obtain a new competitive advantage;
- Improvement of the framework conditions for the creation and development of enterprises;

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<sup>45</sup> "Regionale Wettbewerbsfähigkeit für die EU-Strukturfonds-Period 2007-2013", Operationelles Programm; Das Land Steiermark, version 31-Juli 2006

- Strengthening of the orientations for a sustainable economic development;
- Strengthening of the structures capable of promoting regional development (tourism and R&D) and internationalization of these structures;
- Promotion of inter-regional cooperation;
- Securing the access to knowledge for business networks and clusters.

All this programmes are running with the support of ERFD and of national and regional funds alike.

Contrarily to what we saw we Styria, there is a wider range of economic fields targeted with these programmes. Not only cluster promotion and development but also the creation of new enterprises in a region where the tertiary sector has great importance. Interesting is also the importance given to the promotion of tourism and R&D as the basis to promote regional development. On the one hand, tourism is a sector that was already privileged during the current period. The general abstraction of the concept of innovation is, as we have defended before, still being used to include this sector in the field of innovation and link it to the Lisbon Agenda. Adding up to this, is the acknowledgment that this sector has great opportunities to internationalize the role of Carinthia. It presents, this way, a double opportunity: regional access to EU funds and possibility to export Carinthia image.

R&D is a harder field to promote. Carinthia has no relevant university and its technical institutes are mainly located outside the less developed areas. Including R&D as a sector that can promote the regional competitiveness alerts to this fact, and secures investments in the infrastructures lacking in the region<sup>46</sup>.

In conclusion, these two regions have in common the clear orientation towards the Knowledge-based economy, following in the foot-steps of the EU guidelines and the *straat.at*. The difference resides in the fields of intervention that are highlighted. The more industrialized and cluster-orientated Styria chooses fields that can ensure that its clusters are promoted and that new ones can be developed.

The services and tourism- Carinthia has a wider range of measures that focus on an economical development that is set also in the innovative tourism and on the creation of new enterprises. Carinthia is eager to develop its own clusters, but the lack of tradition in this field makes it harder. The

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<sup>46</sup> “Regionale Wettbewerbsfähigkeit Kärnten 2007-2013”, Kärnten Wirtschaftsförderungs Fonds, September 2006

creation of framework conditions that will promote its development its thus undertaken by this OP: promotion of the basic knowledge-structures; obtain a new competitive advantage; improvement of the framework conditions for the creation and development of enterprises; and securing the access to knowledge for business networks and clusters.

### **Conclusions**

Austria has adopted a system to promote an equitable regional development, very much similar to the ideology that was behind the EU Cohesion Policy: every region has to take an active part in its development plan, with the national level emerging to guarantee that all the regions have the support to achieve its full development There is a co-ordination on the three levels (Regional, national and European), with a strong focus on the regions' priorities to design the national objectives.

The role of ÖROK is central for this co-ordination to function. This agency has the distinct feature of being an entity that combines and compliments efforts and ideas from the different levels involved in planning and regional development.

On the innovation system itself, we concluded that there have been attempts to bring the relevant actors on the enterprises side to relevant positions within the Universities' Councils, the Austrian Council for research and Technological Development, other public research institutes and the funding agencies. This emerging body of key players has the advantage of uniting the two branches that are traditionally separated within the innovation system: the research and the enterprise one. The intended knowledge-transfer and the flow of information are expected to be the winner in this process. However, there is always the danger that the number of actors within the innovation system might be reduced to a few numbers of key players, undermining the dialogue and transforming the sector into a niche.

Another feature of the Austrian innovation system is the complementarity of the funds provided by the national and regional agencies that are responsible for innovation. This complementarity reflects the complementarity of policies and priorities on the national and regional level.

Going down to the regions, from two economically orientated regional development approaches, the two Austrian regions take different paths: Styria is "clusters" orientated, reflecting the importance of the industrial sector in the region. Carinthia has a wider range of programmes that also cover, for example, the touristic potential. The importance of the tertiary sector for the regional economy helps to justify the more general focus of the programmes promoted by KWF.

Tourism is a relevant sector for the country. On the regions studied, especially in Carinthia, tourism is seen as a sector that will allow for the rural areas to take active part in the achievement of the Lisbon's targets and receive funding from the EU's Structural Funds. The international potential of the sector is not neglected.

R&D and knowledge-based economy are the key sectors both regions will be developing in the next period.

#### **4.4.3 The Netherlands**

One of the founding members of European Union, Netherlands is a country where the international orientation is considered to be an absolute necessity. This necessity relies on the fact that its economy is strongly directed towards other countries' economies, being in the same time dependent on them.

The relatively small economy of the Netherlands is considered one of the rich amongst Western Europe, being strong in terms of GDP per capita, but the GDP growth, in the last years, has been relatively low.

The Netherlands system of government is the constitutional monarchy forming a unified state with decentralised territorial and functional responsibilities. The governmental structure has three managerial levels: the central government, the provinces and the municipalities.

#### **The national policy**

In relation with the innovation and regional policies the central government plays an important role, the governance system being a complex system with multiple agencies and advisory bodies.

The coordinative roles in innovation policymaking are played by the Committee on Science, Technology and Information Policy (CWTI) at the level of the ministries and the Council for Science, Technology and Information Policy (RWTI) at the level of the Cabinet.

The second Balkenende cabinet, in office in the Netherlands from May 27, 2003, came in power after a period of economic recession and made clear from the beginning that "innovation would be one of the spearheads of the new government policy"<sup>47</sup>. A new type of national coordinating body was established through the Innovation Platform, which included various social groups and didn't operate as a classical advisory body. The organization followed the model of the Finnish Science and Technology Policy Council (STPC) and consisted in members originating from the

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<sup>47</sup> The Dutch Innovation Platform, Den Haag, Nederland, April 2006

business community (large and SME), knowledge institutions and the government.

The Innovation Platform underlines the Dutch point of view that “innovation is the engine for the growth of productivity and economic development. It is a requirement for an economy in which knowledge has become the central production factor”<sup>48</sup>. In conclusion the IP is seen as an **icebreaker** when it comes to finalizing subjects crucial to the knowledge economy that have been demanding a solution for years, as an **accelerator** of initiatives that have already been established, as an catalyst by helping establishing connections between companies, knowledge institutions and governments and as a **culture changer** through attacking taboos and supporting change.

At the governmental level two main actors are responsible for R&D and innovation policy: The Ministry of Economic Affairs (EZ) and the Ministry of Education, Culture and Science (OCW). Other ministries also have knowledge and innovation on their policy agendas, for example The Ministry of Agriculture, Nature and Food quality (LNV) which has identified innovation as an important instrument in the transition to sustainable agriculture, especially in connection with the agro-food sector.

The main innovation agencies in the Netherlands are SenterNovem and the national research council NWO (the Dutch Organisation for Scientific Research). Four key technologies (ICT, life science, nanotechnology, catalysis) have been identified and dedicated Temporary Task Forces have been established.

The public science and research community in the Netherlands includes Universities, Research Institutes involved in basic and strategic scientific research and Technological Institutes involved in applied research<sup>49</sup>. The scene is completed with TNO, the Dutch Organisation for Applied Research, which is the largest (semi-)public research organisation in the Netherlands with 5000 employees acting like an umbrella organisation with several research centres.

Similar to Sweden, the R&D business sector in the Netherlands is characterized by a limited number of large multinationals, so-called Big Seven: Philips (electronics), AkzoNobel (chemicals/pharmaceuticals), Shell (oil & gas), ASML (integrated circuits equipment), DSM (chemicals), Unilever (food, personal care) and Océ (copiers). In recent years, the share of the Big Seven from total R&D expenditure has declined in favour of

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<sup>48</sup> The Dutch Innovation Platform, Den Haag, Nederland, April 2006

<sup>49</sup> Annual Innovation Policy Trends and Appraisal Report, The Netherlands, 2004-2005

SMEs but the seven large firms continue to appoint for half of the total private R&D in the Netherlands.

The innovation policy acts as an umbrella policy for the regional policy, which is also coordinated by The Ministry of Economic Affairs (EZ). As in all other member states the funding from the European Structural Funds is received at the regional level. There are twelve provinces: Drenthe, Flevoland, Friesland, Gelderland, Groningen, Limburg, Noord-Brabant, Noord-Holland, Overijssel, Utrecht, Zeeland, and Zuid-Holland.

**Figure 20: Map of the Netherlands, with provinces and capital cities**



Source: Wikipedia

The provinces in the Netherlands have an ancient history as independent units of administration, dating back to the federation of the 'Dutch Republic' formed by the independent provinces, being older than the central government itself.

Nowadays the Netherlands provinces elect their own provincial parliament: the 'Provinciale Staten' (Provincial Council), which elects the 'Gedeputeerde Staten' (the Provincial Executive), responsible for the day-to-day running of the province. However, the powers that the provinces and the municipalities enjoy “are subject to different forms of control in order to ensure that the unity of the state is not disturbed by the decentralised system”<sup>50</sup>.

In its regional policy for the period 2000-06, The EZ distinguishes between six regions, which span across the provinces: the North, the East, North wing of the ‘Randstad’ and Utrecht; the South wing of the ‘Randstad’, the South-West and the South-East. For the new period 2007-13 EZ has simplified and formed 4 regions: the North, the East, the South and the West.

The four Regional Development Agencies (ROMs) are funded by the Ministry of Economic Affairs and their purpose is to initiate new economic investments in the regions, in collaboration with the business enterprise sector. The ROMs are located in the North (NOM), in North Brabant (BOM), in Limburg (LIOF), and one covering Gelderland and Overijssel (East NV). They have responsibilities related with regional economic development, investment promotion, innovation and participation.

Until 2004, the EZ’s regional economic policy mainly focused on helping deprived areas to catch up, for example the three Northern Provinces had available a special development fund for this region provided by the central government. After 2004 a clear shift, from “less favoured” areas to ‘backing winners’, is felt in the core philosophy behind the regional policy. The focus to capitalising existing strengths is presented on the policy paper “Peaks in the Delta” published in July 2004. The Dutch government considers that this type of policy is more effective in terms of contributions to economic growth.

It can be stated that this new regional policy was triggered and is now in line with the national innovation policy by focusing on the use of the comparative advantages of regions (“peaks”) and “(critical) mass instead of small-scale initiatives and fragmentation”<sup>51</sup>.

In other words, EZ does not want to automatically transfer funds to the less favoured regions, but instead challenges all regions to come with promising innovation strategies.

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<sup>50</sup> <http://www.snonline.nl/infotype/webpage/view.asp?objectID=282> - The Northern Netherlands Assembly website

<sup>51</sup> Peaks in the Delta, Regional Economic Perspectives, The Hague, September 2004



On the following map the Dutch's economic agenda for six Dutch regions can be studied. Four innovation regions (“hot spots”) are identified namely: Southeast Brabant, the Eastern Netherlands, and the North and South Wing of the Randstad. Only these innovative regions, considered to have the capacity to develop into internationally competitive innovation “hot spots”, are supported through regional and national incentives. The ‘hot spots’ are characterised by the presence of an above-average number of internationally competitive, innovative businesses, an increased level of organisation among all players connected with innovation, the presence of a high quality knowledge infrastructure<sup>52</sup>.

**Figure 21: Priorities for the Netherlands**



Source: *Peaks in the Delta*

At the level of the measures from the Innovation Policy few can be highlighted:

<sup>52</sup> Idem 7

Small Business Innovation Research (SBIR) launched by the ministry of Economic Affairs and modelled on the American SBIR. The aim of this initiative is to address the limited involvement of SMEs in research.

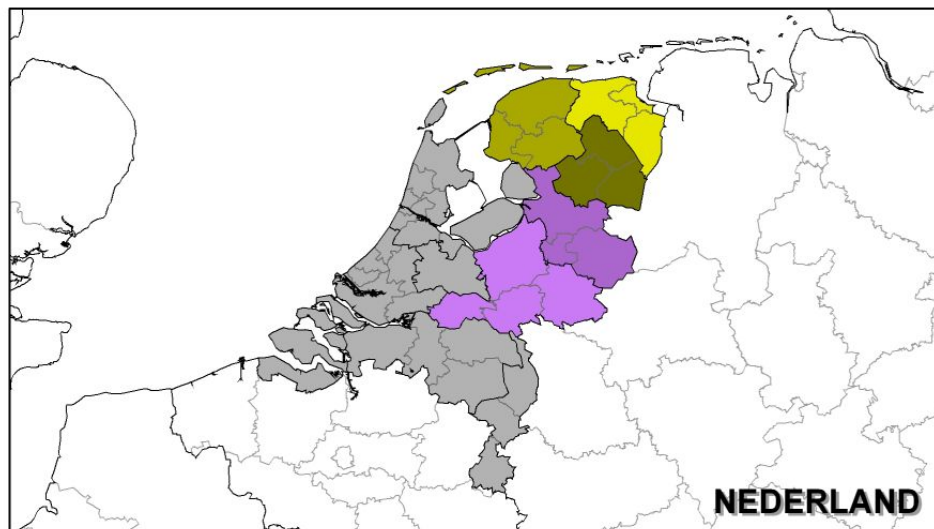
The pilot scheme “Innovation Vouchers”, also under EZ consists in an Innovation voucher, which enable SMEs to buy knowledge from knowledge institutes and thus to solve a specific problem encountered and also promote interaction and exchange between SMEs and public research institutes. The scheme is a success; the vouchers were so attractive that they were “sold out” within one day.

The Casimir experiments are a joint initiative of the EZ and the ministry of Education, Culture and Science (OCW) meant to promote public-private mobility of researchers and are the Dutch equivalent of the European Marie Curie initiative.







As the map presents the Dutch regions selected to be furthered detailed in the project are Northern Netherlands and Eastern Netherlands.

Figure 22

### THE REGIONS STUDIED IN THE PROJECT



#### Legend

OOST NEDERLAND		NOORD NEDERLAND		
	GELDERLAND		DRENTHE	 EU
	OVERIJSSSEL		FRIESLAND	
			GRONINGEN	

50 25 0 50 100  
Kilometers

## **Northern Netherlands: a link between the Randstad and Northeast Europe**

The Northern Netherlands comprises the provinces of Fryslân, Groningen and Drenthe and has a population of 1.6 million. 400.000 of these inhabitants live in the region's four largest urban centres: Groningen, Leeuwarden, Assen and Emmen while the rest of the population is spread across many smaller towns and villages. Groningen-Assen is a national urban network and an economic core area.

In relation with the national level, Northern Netherlands accounts for 25% of the surface but only 10% of the population, for this reason the first statement of the regional strategy is "Fortunately, there is still sufficient space in the Northern Netherlands. Space to live and space to do business. Both now and in the future"<sup>53</sup>. In recent years this part of the country has been raising its profile as an area where there are many opportunities for economic growth.

The Northern Netherlands has an important centre of knowledge development in the form of Groningen University while Economic growth has been roughly equal to the national average in recent years showing that the economic dynamics in the North have substantially improved.

In 1992 the three provinces have initiated the Northern Netherlands Assembly (Samenwerkingsverband Noord-Nederland, abbreviated to SNN) in order to work in partnership for a common strategy and also protect their interests in The Hague and Brussels. In comparison with the case of Austria, where a similar initiative meant to combine regional forces failed, this case proved to be a success.

Regional policy for the Northern Netherlands involves four main aspects: **The Development Compass** and **the Structural Funds** which are dedicated to the narrowing of the gap between regions in terms of economic development, **the Investment Subsidy Scheme (IPR)** meant to promote acquisition and expansion projects for business and industry and **the Eems-Dollard Interreg programme** which is a Cross-border cooperation programme.

Only the first two aspects will be furthered addressed in this paper.

### **Northern Development Compass**

In 1998 the central government, preoccupied by the need to reduce the economic development gap between the Northern Netherlands and the rest of the country, has reached an agreement with SNN (the so-called Langman

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<sup>53</sup> Strategic Agenda for the Northern Netherlands 2007-2013, Groningen, 26 January 2005

Accord). The Northern Compass (Kompas voor het Noorden) was launched for the 2000-2006 policy periods and on investments in infrastructure up to and including 2010.

One of the important aspects of the Compass Programme is represented by the Zuiderzee line. Also indicated in the National Spatial Strategy, this line can play a crucial role being one of the main connecting axes. Decided in 2002, the cost were initial estimated at €1.4 billion but have increased to €1.8 billion and the whole project is delayed until 2013<sup>54</sup>.

The Northern Development Compass is co-funded by the Ministry of Economic Affairs, other government ministries and the European Union through the Structural Funds.

The mid-term review of the Compass programme over the 2000-2002 period concluded that a positive contribution to the economic structure in the Northern Netherlands has been achieved and that it would create an estimated 4,500 extra jobs. Based on this, The Compass programme was considered to be helpful in the reduction of the existing prosperity gap.

### **Relatively small prosperity gap**

The review was undermined by the IBO report<sup>55</sup> which stated that incomes in the North are 8.5% below the national average, and based on this conclusion and the government's new regional economic policy goals, EZ tried to review the policy actions. This created a negative reaction from SNN and, as Ron Lander mentioned in an interview, the relations with EZ "were frozen for a whole year". The main argument used by SNN was that the agreement was until 2010 and no change is possible. Using parliamentary lobby they managed to maintain financial allocation of 120 million € for the period 2007-2010 but the sum was severely reduced compared with 60 million €/ year in the period 2000-2006.

The IBO report conclusions were that the Economic disparities in the Netherlands are small compared with the rest of Europe and are linked to differences in age composition, education, labour participation and unemployment. The report also mentioned that these factors are difficult to influence through policy and to some extent the differences in economic performance between regions unavoidable.

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<sup>54</sup> Noord/Zuidlijn more expensive, delayed until 2013, The Times, Friday 29 September 2006

<sup>55</sup> Each year the Cabinet draws up a list of research tasks to be performed by interdepartmental working groups. The interdepartmental policy research studies (IBOs) are aimed at the development of policy options and their effects

## **Peaks in the Delta**

The policy paper of the government's economic strategy describes Northern Netherlands as a link between the Randstad and Northeast Europe.

Most of the aspects mentioned in this strategy have been adopted in the new Strategic Agenda for 2007-13 and will be later further detailed in this paper. Some aspects on the other hand didn't receive the same attention as in Peaks of the Delta and for this reason will be addressed here.

The most important is represented by the Eems Delta which is presented by the government's policy paper as the gateway to Northern and Eastern Europe.

The government consider that the "enlargement of the European Union will give the ports on the river Eems the chance to further develop their position in intra-European traffic flows"<sup>56</sup>. Recent statistics reveals that trade with the Baltic States, Poland, Scandinavia and Russia has risen substantially and this trend is expected to be strengthening in the future period. In relation with Germany which is currently upgrading its road, rail and inland waterway connections the paper suggest that the Eems Delta must develop as a single whole in order to benefit from its position as a logistics hub and improve its package of products. A parallel with Hamburg and Rotterdam, rivals ports, is made underlining that the ports from the Eems Delta are not (yet) affected by road congestion.

Another aspects is represented by the Wadden Sea, which is a valuable natural conservation area containing a number of economically vital gas reserves. The government has adopted an integrated strategy for the Wadden Sea: gas extraction will be allowed only under strict conditions, and also a € 500 million Wadden Sea Fund will be established for nature conservation and to encourage sustainable economic development.

Other possibilities for new economic spin-offs, highlighted in the paper are:

- the ability to exploit the region's special circumstances, such as positioning the Eems Delta to the new EU member states in Northeastern Europe;
- the recently laid Tyco cable;
- the concentration of energy-related activities.

## **Strategic Agenda for the Northern Netherlands 2007-2013**

With the Kompas programme coming to an end and the decreasing of the financial help from EZ, SNN dealt with the situation and has drowned up a

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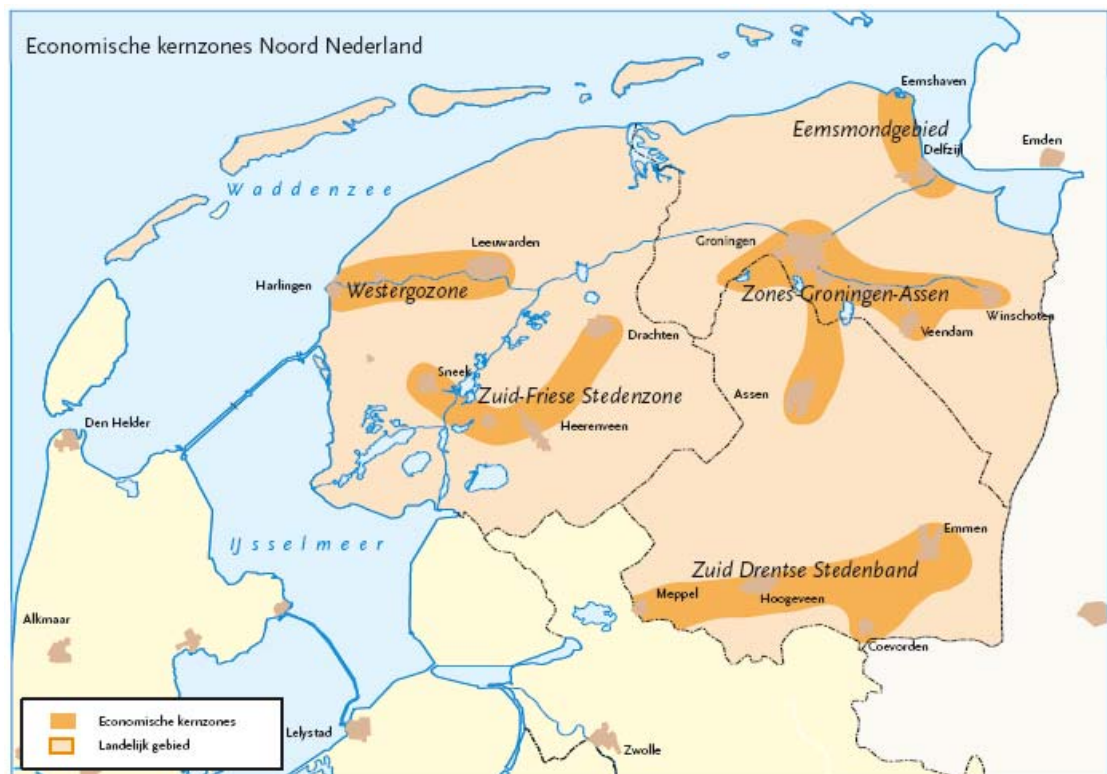
<sup>56</sup> Peaks in the Delta, Regional Economic Perspectives, The Hague, September 2004

Strategic Agenda for 2007-2013. The focus of the strategy is to build on the existing policy and to focusing more than ever on what the Northern Netherlands is best at.

The Agenda is very much influenced the government’s policy paper Peaks in the Delta. The important elements of the paper are in line with the prediction mentioned there.

The coexistence of strong cities and a vital countryside – of mould and countermould – represented an ambition already in the Compass Programme and remains an important aspect for the Strategic Agenda. The three provinces decided to combine living and working in core zones. In this way the countryside has the opportunity to maintain its identity and in the same time continue to develop.

**Figure 23: Economic key areas in North Holland**



Source: Strategic Agenda for the Northern Netherlands 2007-2013

Following this policy more than two-thirds of the economic activities in the Northern Netherlands are now concentrated in the core zones and these cities offer top quality amenities for education, culture, healthcare and welfare. As the maps reveals people live and work in the North mainly in the National Urban Network Groningen-Assen, Leeuwarden and Emmen.

In the same time the core zones and the cities are aware that their liveability depends on a vital countryside, a value determined by the nature and the agriculture together.

Strategic Agenda for the Northern Netherlands 2007-2013, has a three-track policy:

- working towards innovation and a knowledge economy
- bringing about a competitive establishment climate in the urban area
- retaining and strengthening a vital countryside

Also Northern Netherlands has three 'key areas' for knowledge and innovation: Energy Valley, the Water Alliance and Astron/Lofar.

#### *Energy Valley*

Identified also on the paper “Peaks in the Delta” as an example, the concentration of energy activities in the Energy Valley represents the main area of extracting, treating, transporting and researching natural gas in the Netherlands.

The Northern Netherlands has important, innovative sustainable energy projects and is continuing to extend its position in the areas of gas and sustainable energy. Initiatives intended to combine existing knowledge of energy are supported with accent put on partnership.

Initially concentrated on the Groningen giant gas field discovered in 1959 the activities from the Energy Valley have been furthered developed through the small fields policy development and now approximately two thirds of the total gas currently produced comes from small fields.

Innovative projects on alternative energies are more and more demanded due to the fact that the Groningen field will last until approximately 2030 and the lose of this important economic engine for the region can produce severe effects.

#### *Water Alliance*

One of the promising areas of research, together with the energy technology, is water purification. The national Innovation Platform mentioned that until now the Netherlands has adopted a rather indifferent approach to its knowledge and experience in the water sector and for this reason, the water sector can represent a major opportunity for the Northern Netherlands and its future perspectives. According to the platform, the process between innovation and the market is being pretty much neglected.

The Northern Netherlands have organised the Frisian Water Alliance, which wants to give support to the companies, the knowledge centres and the local

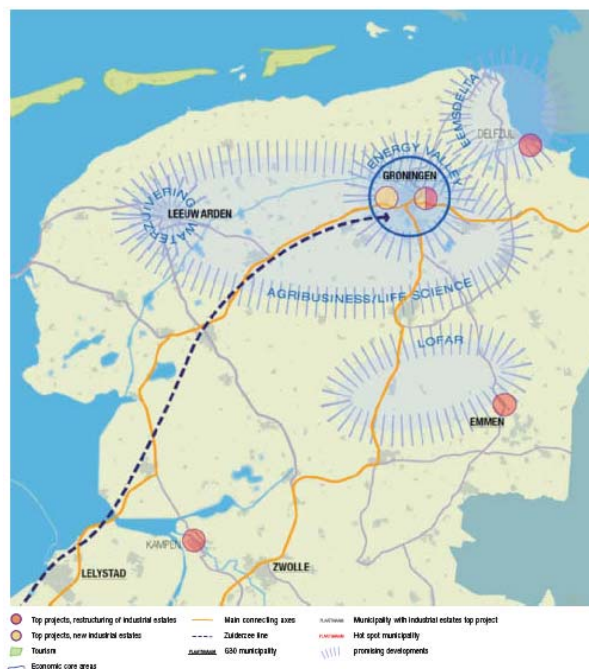


authorities and also boost the cooperation amongst them. The Northern Netherlands is becoming a pilot region and will thus gain a wide range of impressive water projects. The Frisian Water Alliance concentrates primarily on countries with a fast-growing economy and the new EU countries. The aim is to build a major knowledge position, a center of excellence for water management, through the combining of existing knowledge and expertise of businesses and research institutions.

### *Astron/Lofar*

Astron represents one of the leading institutions in the world of astronomical research. The new Lofar project has as objective the construction of a single huge radio telescope formed by twenty thousand radio sensors joined by a fibre-optic data network and a supercomputer. With the Lofar project, Astron will consolidate its leading scientific position. This project is also placing the Northern Netherlands under the microscope. Lofar will make new product-market combinations possible. The finely-meshed fiber-optic data network that Astron will need to lay for Lofar will also be used for countless other functions that are important to the North.

**Figure 24: Priorities for the Northern Netherlands**



Source: *Peaks in the Delta*

The economic dynamics in the North have improved and the economic prospects in the North lie in further strengthening the existing sectors, the preservation of unique landscape qualities and also in the support of new “promising” domains that may pay back huge dividends in the future. For



this reason the Northern Netherlands is also putting effort in the sectors with considerable growth potential:

- Agribusiness (especially the dairy industry and the potato starch sector). Also most of the Netherlands' sugar is produced in the North while Biogasification, biorefinery and other forms of green chemistry is expected to contribute to the growth of the northern agribusiness role.
- Chemistry. The chemistry complex in Delfzijl and Emmtec in Emmen represents opportunities in the chemicals sector for new, innovative products and for more processing industry. Delfzijl has a traditionally strong chemicals cluster and is also consolidating the existing steel cluster.
- Commercial care. Based on the fact that more elderly people will need care in the years to come, the Northern Netherlands wants to benefit from this extra demand for care and services, both for medical treatment and for nursing and accommodation.
- Life sciences. 20 per cent of the overall life sciences sector in the Netherlands is employed in Groningen and the region search to improve this position by concentrating on new medicines and medical technologies, cleaner processes and new foods. . Research here focuses on biomedical-, genetic- and nanotechnology.
- IT. The IT sector in Groningen and Leeuwarden are strong developed and together with the one in Amsterdam, the Groningen Internet Exchange is the Netherlands' only large international interconnection point. In combination with the Lofar fiber-optic data network – this will facilitate new opportunities for developments in the North.

Delfzijl, the Eemshaven and Emden together constitute a Euroregional hub of logistical networks serving Northern and Eastern Europe.

- Shipbuilding. The long tradition of shipbuilding in the Northern Netherlands, combined with the international reputation achieved represents the ideal background for a successful focus in the area of product and process innovation.
- Tourism. Tourism and recreation have traditionally been an important part of the northern economy. Representing an attractive area for tourists, this sector is looking for innovative tourism products and for new marketing forms meant promote this region as a success top tourist destination in North-western Europe.

In recent years, the Northern Netherlands has achieved a substantial economic performance. Furthermore, the differences in production structure with the rest of the country have diminished.

In contrast with the general background of innovation in Netherlands, innovation in Northern Netherlands is happening in small and medium-sized enterprise sector, which accounts for 75 % of jobs. This offer the advantages

of the faster decisions-making processes and greater flexibility which characterise the small scale enterprises but in the same time raise difficulties on the level of knowledge. For this reason in the Strategic Agenda focus is put on offering knowledge and skills to the small and medium-sized enterprise sector.

If the North will have enough capacity to be able to develop without special help from central government, by relying on its own intrinsic capacity, remains to be discovered in the future. With this a possible answer will be given to action taken in recent years, and the Compass programme period will be put in balance with the effectiveness of the current EZ policy.

If the region will be able to benefit from the development of the Netherlands as a whole is another question to be answered in the future. The case of North Netherlands can be expected to have relevance also at the level on the EU's regional future policy, acting as a good practice example or on the contrary as a warning.

### **Eastern Netherlands: utilising knowledge concentrations**

The Eastern Netherlands comprises the provinces of Gelderland and Overijssel. It accounts for 25% of the area and with a population of some 3 million for 19% of the total population of Netherlands.

Two regions are identified as economic core areas namely Central Gelderland (Arnhem-Nijmegen) and Twente. The Wageningen-Ede-Rhenen-Veenendaal (WERV) belt is an economic core area due to its relationship with the Arnhem-Nijmegen intersection, its strategic location on the East-West corridor and the innovative cluster based around Wageningen. Other important economic core areas are The Urban Triangle (Apeldoorn-Deventer-Zutphen) and the IJssel-Vecht (Zwolle-Kampen) region. Greater Zwolle forms a spatial and logistical pivot between the Randstad and the Northeastern Netherlands. Similar with Northern Netherlands but different when compared with the rest of the country, the Eastern Netherlands has valuable rural areas and attractive natural landscapes.

The regional policy for the Eastern Netherlands is different from the one for Northern Netherlands especially because it does not involve allocation of funds dedicated to the narrowing of the gap between regions and involves three main aspects: **Regional (phasing-out) programmes 2000-2006:** Arnhem/Nijmegen and Twente focused on the strengthening the economic structure, **urban programmes (urban component) 2000-2006:** Arnhem, Nijmegen and Enschede focused on strengthening the urban economy and **Interreg 3A programmes 2000-2006: Euregio and Rijn-Waal** which is a Cross-border cooperation programme.

### **Implementation Agenda for Europe 2007-2013**

The Eastern Netherlands choice of position reveals the regional strategy for the next 7 years. The strategy includes elements from the government's strategy Peaks in the Delta and also elements from EU guidelines and the Lisbon strategy.

Strategically the development of the Eastern Netherlands involves two major aspects:

On the one hand, **the towns and cities** are considered as “the ideal location for economic innovations, the magnet for shopping and leisure activities and the place where cultural and industrial heritage, often restored, can be visited and admired<sup>57</sup>”. As in most regions the towns in the Eastern Netherlands are the economic basis and motor for the region with more than half of all jobs based in towns.

The social problems in urban centres are also addressed. The feeling of insecurity has increased with some parts of the cities confronted with high levels of criminality and also low labour participation.

On the other hand, **the rural** Eastern Netherlands changes are addressed, previously an area dominated by farmers is now transforming into a ‘green space’ with mix function mainly in relation with landscape, nature and recreation but also with residential and employment. The fall in income faced in most rural areas with important agricultural sector is addressed here by a broadening of activities and also by future-oriented agricultural businesses with more attention towards the environment.

New employment opportunities are developed especially in retail, business services, industry and tourism in order to broaden the economic basis in rural areas. The problems connected with the social facilities in rural areas are addressed mainly medical care, education and child day being highlighted. At the same time, public transport represents one of the priorities.

Economic and social vitality, spatial quality and the quality of life are desired elements addressed in an integrated approach due to the increasing mutual dependency between rural and urban areas. The strategy calls for a development in the towns of the Eastern Netherlands which goes hand in

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<sup>57</sup> Implementation Agenda for Europe 2007-2013, Province of Gelderland and Overijssel, August 2005

hand with those of the countryside with the aim of “achieving a balance between green and red functions”<sup>58</sup>.

In order to achieve this vision the joint strategy of Gelderland and Overijssel support six priorities:

### **1. Knowledge economy and innovation**

The Eastern Netherlands is one of the four key innovation regions for the country as outlined in the policy paper ‘Peaks in the Delta’ from the Dutch Ministry of Economic Affairs. In this respect, the focus is put on is converting the knowledge into innovation.

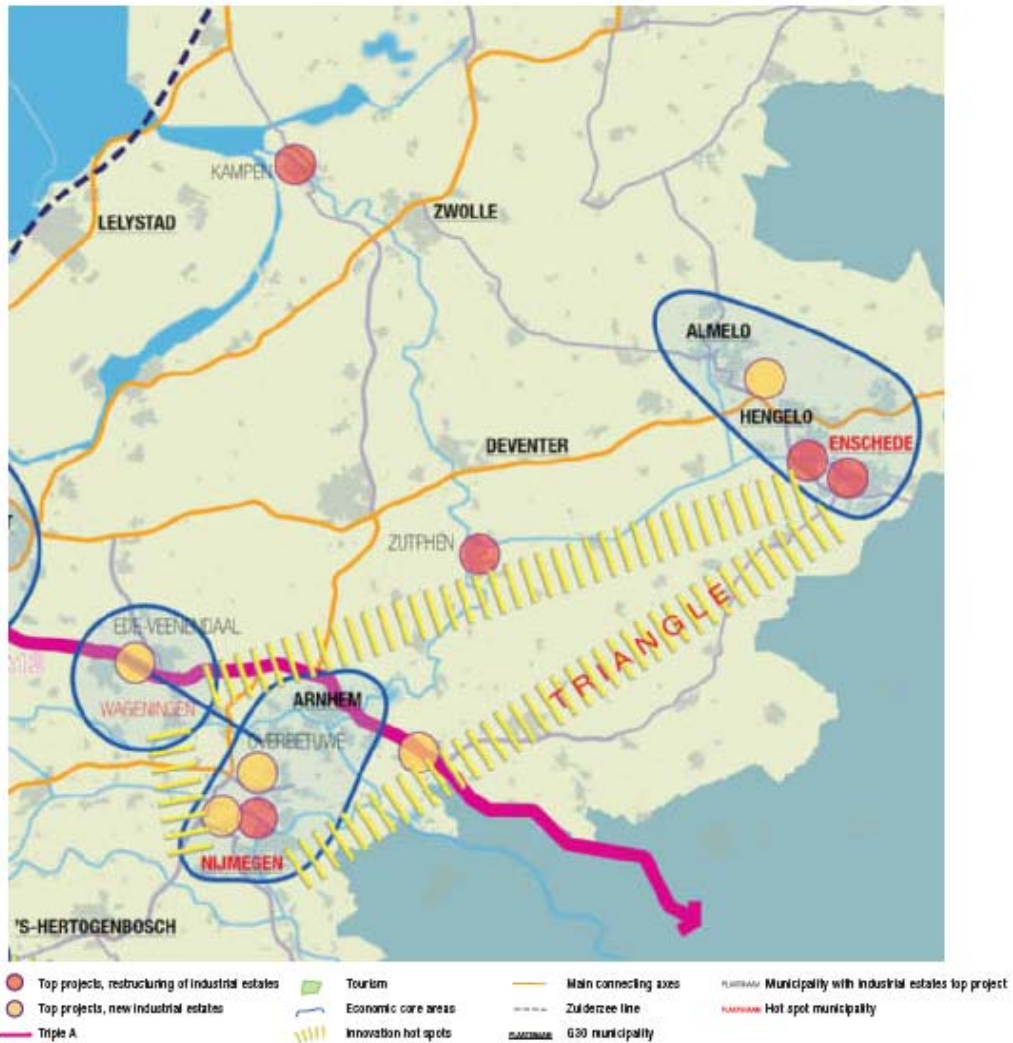
The Eastern Netherlands contains clusters of specialised knowledge-based services and institutions centring on three mutually complementary universities (Twente, Wageningen and Nijmegen), colleges of higher vocational education (HBO) and related research institutes such as MARIN, MESA+, CTIT, the Telematics Institute, TNO/MEP and the Max Planck Institute.

Three main fields can support Eastern Netherlands as one economic top region namely food, health and technology. A programme aimed at encouraging the utilisation and bundling of knowledge and opportunities within these domains stimulates innovation. In the so-called ‘Visie’ Triangle represented by Wageningen/Gelderse Vallei (Food Valley), Arnhem/Nijmegen (Health Valley) and Twente (Technology Valley), businesses and knowledge institutions interact, Wageningen, Nijmegen and Enschede being internationally-recognised centres of research and development, with universities specialising in these fields. The target is that in 2015, the Eastern Netherlands to be amongst the worldwide top five innovative regions, in the subject areas of food, health and technology.

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<sup>58</sup> Implementation Agenda for Europe 2007-2013, Province of Gelderland and Overijssel, August 2005

Figure 25: Priorities for the Eastern Netherlands



Source: Peaks in the Delta

Investments in top-quality research and in innovative projects are done also under the 7th Framework Programme for Research and under the so-called ‘Regions of knowledge’ programmes.

Eastern Netherlands intends to use structural funds for investments in ,ensuring that the SME sector ties in with the innovations in the region, the living and working climate, the infrastructure and ICT, the development and revitalisation of industrial estates and in collaboration with other European regions.

Besides strengthening economic hubs attention is put also on strengthening the social capital. Closer ties between education and the labour market are considered vital together with the improvement of labour mobility and achieving equal opportunities for everyone.

Under this priority action programmes are:

- Strengthening the knowledge infrastructure in the Valleys
- Strengthening physical infrastructure;
- Increasing innovation strength in the SME sector;
- Life-long learning: continuous education for employees;
- Encouraging and facilitating the creative industry and service sector;
- Silver Economy: deployment of older people on the labour market.

## **2. Agriculture and agribusiness**

With the agricultural sector influenced by the global market to produce in a more market and consumer oriented manner and also forced by reforms in European policy the central themes have become: cost savings, quality production and chain development. Also the importance of specialisation and the use of ICT are increasing.

This applies as well for crop production as animal husbandry. Over the last few years, a large number of initiatives have been taken in this field, assisted by funds from the European Union.

The new spatial plans include special areas appointed as agricultural development areas for intensive animal husbandry and market gardening (greenhouses) due to the increased scale in agricultural production needed more and more these days and affecting also the layout of the countryside.

One of the aims is to strengthen the agribusiness, on an international scale, good examples being the A1-corridor (animal husbandry) and the A15-corridor (market gardening). In these areas collaborative ventures are taken place between the primary sector and the knowledge institutions in from the Food, Health and Technology Valleys in order to promote the exchange of knowledge and innovation.

A good example for the development of space for farmers and market gardeners in the provinces of Gelderland and Overijssel is the merger between organic farms as in the case of the organic dairy farmers Bert Wagenvoort and Ben Lichtenberg on the Kieftskamp estate in Vorden (in the Achterhoek). They have combined their farms, moved to a new location, and relaunched the entire estate. The new cow stable it is a modern box stable, equipped for 150 cows, and with a milking stable where 24 cows can be milked simultaneously – all integrated attractively in the landscape. The importance of this project resides in the fact that in the future, this type of merger will turn out to become a usual practice for the countryside of the Eastern Netherlands and not only. Through this, both the agricultural activity and natural environment will receive a major boost.

Combinations between agriculture and recreation and tourism are supported in order to improve the economic strength of the rural areas. Young agricultural entrepreneurs are considered to be vital and they receive support in the difficult early stages of starting a business.

Under this priority action programmes are:

- Strengthening physical infrastructure;
- Strengthening knowledge infrastructure;
- Development of economic diversification;
- Support for young agricultural entrepreneurs.

### **3. Mobility**

The infrastructure, traffic and public transport are key themes in the Eastern Netherlands with investments on European level (Trans European Networks) and on a national scale (Mobility policy document).

The plans focus on building high-quality road, water and railway links. Consideration is being given to 'light trains' able to travel on the Dutch railway network, to intelligent traffic information systems able to provide a greater insight into the traffic situation for users.

Under this priority action programmes are:

- Improved connection between the Eastern Netherlands and main transport axes;
- Improved access to the various areas: investments in links and networks, and ensuring good public transport;
- Innovation in public transport.

### **4. Living environment and risk prevention Improved living environment and risk reduction**

The environmental policy in the last period has been successful with the soil, water and air in the Eastern Netherlands becoming cleaner and also the emission reduced. Environmental measures, such as the obligation to reduce manure levels or the focused cleanup of a large number of sources of discharge are based on similar measures from central government and the European Union.

Problems concern the greenhouse effect, with the heavy traffic in cities altering the quality of life in residential districts through severe air and noise pollution and also the cleaning of polluted soil and revitalisation of old industrial sites.

Landscapes (landscapes of national importance) with internationally unique values will be protected and also further developed. Initiatives on the

development of sustainable energy (biomass, wind energy) are also on the list of priorities.

Specific problems for Netherlands like the sea level rise and the decline of ground level are addressed through water management. Accent will be put on the rivers the IJssel, the Rhine, the Waal and the Meuse in order to protect the region against high water levels.

The management programmes at the provincial level focus on a healthier and safer environment (relocating companies involved with dangerous goods).

Under this priority action programmes are:

- Improved air quality;
- Improved biodiversity;
- Use of sustainable energy;
- Revitalisation of industrial estates;
- Strengthened water systems;
- Safe rivers;
- Safe living environment.

## **5. Social vitality and quality of life**

An internal migration on the region regards young people who are moving from the countryside to the towns due to the absence of cheap housing and a lack of employment and in the same time the elderly with more financial resources attracted by the space and the green environment offered by rural areas. This raises the demand for health care and other social services especially in the countryside. Innovation through new concepts for care and service provision is required and supported.

Attention is put on social integration and participation as essential in order to tackle the feeling of insecurity. Participation in society by following educational programmes and having paid employment is an important key.

A good example for the improvement of social vitality and quality of life in the provinces of Gelderland and Overijssel is the project for small centres to have their own Kulturhus (Cultural Centre). By this a new impulse to the small centres has been given with the Cultural Centre becoming a beating heart of the village community. The case of the Cultural Centre from Lemelerveld is interesting as a case where some two thousand residents, who over the last few years have experienced a major downturn in quality of life are now taking advantage of a new Cultural Centre, with large number of number of new facilities like child day care, child day nursery and welfare organisations for the elderly.



Under this priority action programmes are:

- Improved living environment and level of facilities;
- Development of new concepts in care and service provision;
- Improved social security: stimulation of small-scale business in urban districts and improved security for industrial estates.

## **6. International cooperation**

Through the removing of the barriers for the free flows of persons, goods, services and capital within the Union the importance of international cooperation has increased. This includes both the crossborder cooperation with Germany and the transnational cooperation with other Member States.

The cross-border cooperation within the Dutch/German Euregions is viewed as a role model within the European Union with a large number of programmes and projects implemented.

There cooperation with other European regions emphasizes the sharing of knowledge, the establishment of networks and the realisation of integrated projects.

Under this priority action programmes are:

- Promoting cooperation with Germany;
- Strengthening cooperation with other regions in Europe;

The economic performance of the Eastern Netherlands is on the national average level in the last years, with industry showing above average growth.

For the future 'push' factors are the congestion and lack of space in the Western Netherlands and 'pull' factors are the attractive living and working environment of this region. The strategic international location has played an important role in the development of the region and it is expected to increase in the next period with a positive knock-on effect on the regional economy.

The eastward expansion of the EU will offer the Northern Netherlands a higher prospect to further development due to the fact that the region and its Southern flank in particular, lie on the mega-corridor to the East.

The economic prospects are in connection with the use of the knowledge concentrations and promotion of clusters of knowledge institutes, knowledge-intensive businesses and innovative manufacturing everything projected on a high quality, green investment climate desired as a mark for the region Eastern Netherlands.

## **Conclusions**

A country where the international orientation is considered to be an absolute necessity, Netherlands is strongly directed towards others countries economies. For this reason both the strategies for Eastern Netherlands and also Northern Netherlands are accentuating the role of international cooperation but also national and intraregional.

In relation with the innovation and regional policies the central government plays an important role, the governance system being a complex system with multiple agencies and advisory bodies.

The second Balkenende cabinet, managed to promote innovation as a spearhead for the new government policy in strong relation with the Innovation Platform and the Peaks in the Delta policy paper. By this the innovation policy becomes an umbrella policy for the regional policy, with visible effects on all regional strategies.

Northern Netherlands and Eastern Netherlands make no exception and knowledge economy and innovation have become top priorities for regions. The background for the regions is different in the two cases. Northern Netherlands “forced” to reorient its policy from one focused on recovering the economic differences compared to other regions, a policy based on special support from national and EU level, to a policy based on its own resources and abilities. Eastern Netherlands a “hot spot” for innovation who gains now more financial support from national and EU level in order to improve its triangle hubs for innovation and reach its target of becoming in 2015 amongst the worldwide top five innovative regions, in the subject areas of food, health and technology.

Agriculture and agribusiness are in both regions highlighted in combination with the development of sustainable energy (biomass, wind energy) with the purpose of improving the economic strength of the urban and rural areas.

## 5 Conclusions

Three types of conclusion arise from the current study: conclusions in connection with EU's strategies and policies for the current period and for the future one, conclusions for the national strategies and policies and their application on regional levels and also conclusion related with the main focus of the study namely the use of Structural Funds to promote innovation.

### 5.1 Conclusions on EU's strategies and policies

With the re-launch of the Lisbon Strategy in March 2005, defining its goals as key goals for the EU, the Cohesion Policy and its financial instruments are thus integrated in the goals of promoting innovation and R&D. Additionally, among the strategic guidelines priorities is "encouraging innovation, entrepreneurship and growth in the knowledge economy"<sup>59</sup>. It goes on by defining the need to increase and improve investments in research and technological development (RTD), especially in the private sector, as essential for the accomplishment of this priority. The private sector's role is often highlighted and its participation through public-private partnerships, SME's networks or cooperation among companies is recommended.

In strategic terms for EU's future vision on innovation and regional development no major changes can be foreseen for the future period. The Lisbon Agenda is reaching its maturity in the close future period and the discussions on relation with it are focusing on the increased need of support required in the implementation of its policies. No other alternative economical agendas are addressed.

With the Cohesion Policy clearly stating that the aims of job creation and economic growth require the adoption of knowledge-based activities, it is secure to state that this is a new window of opportunity for Member States and regions to explore in their attempt to compete amongst themselves and with other world players.

For the future perspectives on innovation policies we can remind the new Commission's proposal from 13th September 2006 meant to establish "a

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<sup>59</sup> <http://www.europa.eu/scadplus/leg/en/lvb/g24230.htm> , 2006/07/05

broad-based innovation strategy for the European Union”<sup>60</sup>. The Communication proposes a 10 point programme for immediate action to make the business environment more innovation friendly with the aim of “translating investments in knowledge into innovative products and services”.

Through the proposed action can be highlighted the proposal for establishing a European Institute of Technology, the reform of R&D and innovation state aid rules or the actions connected with the orientation of the education systems towards innovation and the completion of a “single and attractive labour market for Researchers”. Related with the use of the structural funds to promote innovation appears of high importance the Action number 5 Foster regional innovation through the new cohesion policy.

## **5.2 Conclusions for the national strategies and policies and their application on regional levels**

In terms of eligibility for the SF of the six countries studied, the screening process revealed that all of them had Objective 1 regions but the objectives for these areas have been addressed in a different way. Austria, Finland and Netherlands were focused on bringing regions closer to national standards (At and NI) and to halt depopulation (F) and they were addressing this problem through the creation of SMEs, innovation, technology transfers and training human resources. Ireland was trying to pursue sustainable economic growth, employment and enhancing the countries international attractiveness through specific programmes for R&D and innovation. Portugal and Estonia are preparing the economy for growing competition, modify production profile, increasing skills among workforce, seizing opportunities from new technologies through a General plan stimulating business competitiveness in Estonia and through Sectorial Plan in Portugal.

For Objective 2 areas only Austria, Finland and Netherlands were eligible in the 2000-06 period. They were addressing the regions undergoing economical and social restructuring by focusing on all the three corners of sustainability, the support to SMEs and ”starters”, the improvement of companies innovative capacity and workforce skills and also by improving the local living conditions and the quality of the environment.

In relation with the national innovation system of the countries two main groups appear:

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<sup>60</sup> Ten priority actions to achieve a broad-based innovation strategy for the European Union. MEMO/06/325 Brussels, 13th September 2006

- a first group including Finland, Austria and the Netherlands which are all ranking well in innovation indicators, with Finland on top positions, The Netherlands as a great performer in the scientific and technological output and Austria as a newcomer with budget increase for R&D measures and willingness to adopt reforms to simplify the funding structures. The Netherlands has a more complex view and structure on innovation while Finland and Austria have a relative simplified innovation system.
- the second group includes the Cohesion countries which all rank very poorly in the innovation indicators. Ireland has a booming economy for the past ten years and is trying to invest in innovation and R&D (increased the level of funding, established an effective innovation structure and is supporting investments and stimulation programmes). Estonia is mainly applying measures and policies that are advised by the European Union while Portugal has an unstable innovation policy and lack of awareness, political commitment and coordination.

The National Innovation Agencies are all created by the national governments and are linked to one specific ministry. There is no general guideline from the EU in connection with the way that national agency should do their work or be structured. In general the customers are national enterprises, universities, research institutes and government officials.

Enterprise Estonia is also working with NGO's and development institutions and is one of the implementing institutions of the EU's SF in Estonia and the main provider of support and development programmes directed towards entrepreneurs.

Enterprise Ireland also has an important role in the attribution of SF. It is the authority that approves the funding for projects in the field of innovation and support to R&D.

Tekes also implements the SF while innovation and competitiveness are linked with Regional Development and included in one of the solutions to halt depopulation.

SenterNovem has assignments from 8 ministries, local governments and the EU and has control over the amount of funds allocated.

FFG is the link between the Federal Chancellery and the regions. It works alongside the regions in the support of innovation and regional development programmes and receives its funding from both national funds and from the EU.

In Portugal the SF are directed towards OP and from this programmes some funding is allocated to the ADI to help financing the agencies services.

The screening of the countries has resulted in the selection of Austria and Netherlands as countries to be studied in a more detailed approach.

Several conclusions can be drawn from the national strategies and the regions that we have just analysed.

Firstly, on the national level is clear that both the Netherlands and Austria are focusing on the coordination of the national and European funds allocated to the regions. This co-ordination serves the double purpose of focusing the regional strategies into specific highlighted themes and priorities cherished by the national government and the EU. Simultaneously, it ensures that all the regions share approaches and strategies, contributing to the coherence of the entire territory. The cohesion that is searched on the European level is also seek out by the national government.

On the regional development strategies, there is a group of key players that is emerging. Connected with important enterprises or research centers, this small community also has the advantage of allowing for a closer dialogue between enterprises, research and development institutions and public authorities. However, being innovation a complex system that gains its strength from the multitude of opinions and perspectives involved, simplifying its core structure might reduce its richness. The Netherlands has a major strength in its complex innovation system. Austria is now enjoying from a close connection between research institutions and enterprises. The key point will be to keep the system running with the same variety of perspectives.

On the regional development model adopted, both countries and all the regions have a similar approach: to distinguish between more dynamic and less dynamic regions. This is an approach also defended by the European Union and that is seen in the next period Structural Funds priorities. Although not entirely explicit, weaker regions are receiving less attention, by being almost automatically excluded from the quest for the knowledge-based and competitive society. This approach is clearer in the Netherlands, with the Peaks in the Delta strategy. Here the idea of “hot-spots” for the development is fully explored. In Austria the trend is to defend that every region can develop its own “hot-spot”. This derives, of course, from the fact that Austria is a federal state and the Netherlands have a more centralized government, with the regions losing political impact in the negotiation of policies and funds.

From this new approach to regional development emerge distinct policies for rural and urban areas. It's impossible to induce the same kind of dynamism throughout the entire region. The only possibility is to select specific sectors that can be promoted in the rural areas and that can help to

their sustainability. The sector selected is, for Carinthia, Styria and Nord-Holland, tourism. This is seen as a sector that will allow for the rural areas to take active part in the achievement of the Lisbon's targets and receive funding from the EU's Structural Funds. Nord-Holland is a particularly interesting case: the region was "forced" to reorient its policy when the national level turned its attention to the "peaks in the Delta". The division between rural and urban areas was created to ensure that at least some of the northern areas could be included in the programmes for more dynamic areas. It is easier to achieve this if the investment is concentrated into smaller areas. For the remaining territory the designation of rural areas ensures the connection with national tourism and leisure activities and open space. In the densely populated Holland, availability of space is a feature to take advantage of.

Eastern Netherlands is included in the other extreme of the policy, since it is already included in the "peaks of the Delta" group.

Agriculture and agribusiness are in both Dutch regions highlighted in combination with the development of sustainable energy (biomass, wind energy) with the purpose of improving the economic strength of urban and rural areas.

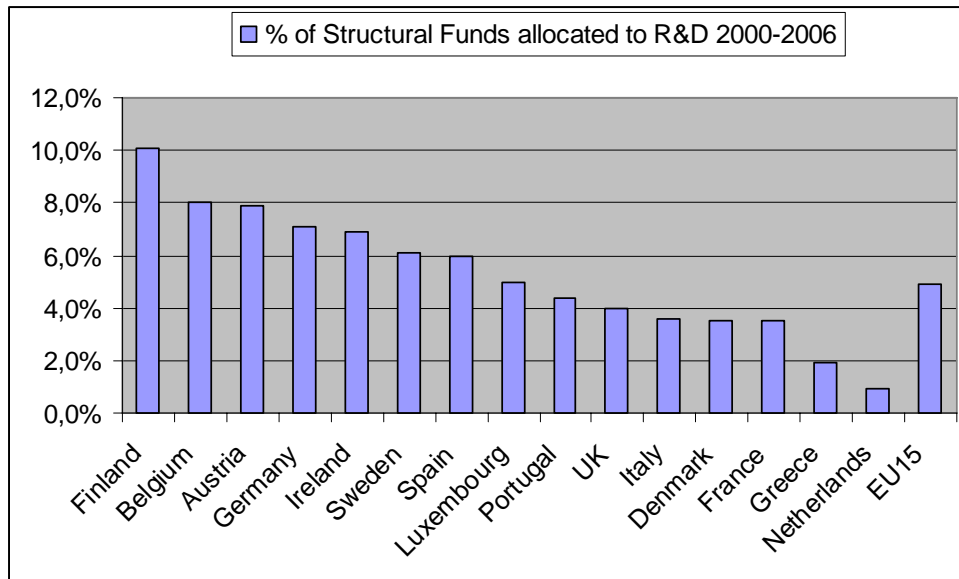
As a last remark, R&D and knowledge-based economy are the key sectors both countries will be developing in the next period.

### **5.3 Conclusions on the use of Structural Funds to promote innovation**

The Structural Funds and the Cohesion Fund can now be included in the list of financial instruments to support innovation due to a restructure of the strategic guidelines for the Cohesion Policy.

If in the period 2000-06 the use of Structural Funds to promote innovation as a share of expenditures of the Structural Funds allocated to R&D appears to be relatively low, the period 2007-13 the Structural Funds is expected to have a much better contribution to R&D and innovation. This is especially based on the fact that research, innovation and the knowledge economy are at the heart of the Lisbon strategy, the main strategy behind the future regional policy.

**Figure 26: Structural Funds allocation to R&D 2000-2006**



Source: DG Regio calculations

Even if not concentrated in promoting R&D and innovation, the SF 2000-06 were an important source of funds for these domains, for example the allocation from SF to R&D represents 60% of the money available under the Sixth Framework programme, the dedicated programme for research of the EU.

The study reveals a clear role for public support for innovation, including Cohesion Policy. Attention is required due to the fact that research calls for close interaction between players and is considered to be more efficiently if it is conducted through centres of excellence, and by this avoiding the dispersion of resources. As a strategy for the less developed Member States and regions, focus should be put on existing strengths and clusters and also on technology transfer.

In conclusion the study reveals that we are entitled to expect that in the future period the Structural Funds will make a solid contribution to R&D and innovation and by this will produce strong benefits for the regional and national economies of the EU Member States.

“Centres of excellence”, “hot-spots in innovation”, “peak-regions” are all emerging as the areas where important shares of the investment will happen and where the greater dynamism is expected to happen.



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<http://www.snnonline.nl/infotype/webpage/view.asp?objectID=282> - The Northern Netherlands Assembly website

<http:// gelderland.nl> – Provincie Gelderland

<http://www.oostnv.com/> The Development Agency East Netherlands (Oost NV)

<http://www.nom.nl> - The Development Agency North Netherlands NOM

<http://www.ez.nl/content.jsp?objectid=140519> - Pieken in de Delta

<http://www.ez.nl> – Ministry of Economic Affairs Netherlands

# VINNOVA's publications

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## VINNOVA Analysis

### VA 2007:

- 01 Nanoteknikens innovationssystem
- 02 Användningsdriven utveckling av IT i arbetslivet - Effektivvärdering av tjuugo års forskning och utveckling kring arbetslivets användning av IT. *For brief version see VA 2007:03*
- 03 Sammanfattning - Användningsdriven utveckling av IT i arbetslivet - Effektivvärdering av tjuugo års forskning och utveckling kring arbetslivets användning av IT. *Brief version of VA 2007:02*

### VA 2006:

- 01 End of an era? Governance of Swedish innovation policy. *For Swedish version see VA 2005:07*
- 02 Forskning och utveckling vid små och medelstora företag. *Only available as PDF*
- 03 Innovationsinriktad samverkan. *Only available as PDF*
- 04 Teknikbaserat nyföretagande i Sverige 1990 - 2003. *Only available as PDF*
- 05 Offentligt stöd till universitetens samverkansuppgift - en internationell kartläggning. *Only available as PDF*
- 06 Inkubatorer i Sverige - analys av indikatordimensioner och nyttoeffektivitet. *Only available as PDF*

### VA 2005:

- 01 Wood Manufacture - the innovation system that beats the system. *For Swedish version see VA 2004:02*
- 02 Nationella och regionala klusterprofiler - Företag inom bioteknik, läkemedel och medicinsk teknik i Sverige 2004
- 03 Innovation policies in South Korea and Taiwan. *Only available as PDF*
- 04 Effektanalys av nackskadeforskningen vid Chalmers - Sammanfattning. *Brief version of VA 2004:07, for brief version in English see VA 2005:05*
- 05 Impacts of neck injuries research at Chalmers University of Technology - Summary. *Brief version of VA 2004:07, for brief version in Swedish see VA 2005:04*
- 06 Forskningsverksamhet inom produktframtagning i Sverige - en ögonblicksbild år 2004
- 07 En lärande innovationspolitik - samordning och samverkan? *For English version see VA 2006:01*

- 08 Svensk trafiksäkerhetsforskning i tätposition - Framträdande forskare och forskningsmiljöer i statligt finansierad trafiksäkerhetsforskning 1949 - 2005

### VA 2004:

- 01 The Swedish National Innovation System 1970-2003 - a quantitative international benchmarking analysis
- 02 Trämanufaktur - det systembrytande innovationssystemet. *For English version see VA 2005:01*
- 03 Impacts of the Swedish Competence Centres Programme 1995-2003. *For brief versions in English and Swedish see VA 2004:05 and VA 2004:06*
- 04 Telecom Dynamics - History and State of the Swedish Telecom Sectors and its Innovation System 1970-2003. Final Report. *Only available as PDF*
- 05 Impacts of the Swedish Competence Centres Programme 1995-2003 - Summary Report. *Brief version of VA 2004:03. For brief version in Swedish see VA 2004:06*
- 06 Effekter av det svenska kompetenscentrumprogrammet 1995-2003 - Sammanfattande rapport. *Brief version in Swedish of VA 2004:03, for brief version in English see VA 2004:05*
- 07 Effektanalys av nackskadeforskningen vid Chalmers. *For brief versions in Swedish and English see VA 2005:04 and VA 2005:05*

## VINNOVA Forum

### VFI 2007:

- 01 Universitetet i kunskapsekonomin (*Innovation policy in Focus*)

### VFI 2004:

- 01 Informationssamhället - åter till framtiden (*Innovation policy in Focus*)
- 02 Svensk innovationskraft - visionen måste vara starkare än motståndet (*Innovation policy in Focus*)

## VINNOVA Information

### VI 2007:

- 01 Forska&Väx
- 02 MERA-programmet - Projektkatalog. *For English version see VI 2007:03*
- 03 The MERA-program - Projects. *For Swedish version see VI 2007:02*

- 04 DYNAMO 2 - Startkonferens & Projektbeskrivningar

### VI 2006:

- 01 VINNOVA's verksamhet inom Transporter. *For English version see VI 2006:07*
- 02 Årsredovisning 2005
- 03 Paving the Road. For Transport Innovation and Research
- 04 Drivkraft för tillväxt. VINNOVA 2005. *For English version see VI 2006:08*
- 06 VINNVÄXT - Ett program som sätter fart på Sverige! *For English version see VI 2006:15*
- 07 VINNOVA's activities within the Transport Sector. *For Swedish version see VI 2006:01*
- 08 A driving Force for Growth. VINNOVA 2005. *For Swedish version see VI 2006:04*
- 09 Komplexa sammansatta produkter - Projektkatalog 2006
- 10 VINNVINN - Mötesarena för nya affärsmöjligheter och arbetstillfällen
- 13 VINNOVA's Activities in Biotechnology.
- 14 Arbetslivsutveckling - VINNOVA's satsningar inom arbetslivsområdet
- 15 VINNVÄXT - A programme to get Sweden moving! *For Swedish version see VI 2006:06*
- 16 Competence Centres in Figures - Kompetenscentrum i siffror
- 17 E-tjänster i offentlig verksamhet. *For English version see VI 2006:18*
- 18 E-Services in Public Administration. *For Swedish version see VI 2006:17*
- 19 Effektiv Produktframtagning - Projektkatalog 2006
- 20 Forskning och innovation för hållbar tillväxt

### VI 2005:

- 02 Årsredovisning 2004
- 04 DYNAMO -Beskrivningar av de 18 projekt som ingår i programmet
- 05 Den dubbla vinsten. VINNOVA 2004
- 06 VINNOVA - For an innovative Sweden!
- 08 Swedish research for growth. A VINNOVA magazine
- 09 Kunskapsbildning och organisering - Ett program för förnyelse och innovation

- 10 Innovationsprocesser i Norden - Ett program för organisering av utvecklingsarbete med bred medverkan. *Only available as PDF*

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- 01 Årsredovisning 2003
- 04 VINN EXCELLENCE CENTER. *For English version see VI 2004:05*
- 05 VINN EXCELLENCE CENTRES. *For Swedish version see VI 2004:04*
- 08 The Swedish Competence Centres Programme. Third International Evaluation - Group 2-6 (19 Centres) and Overall Impressions and Programme-wide Issues.

### VINNOVA Policy

#### VP 2006:

- 01 På spaning efter innovationssystem. *For English version see VP 2006:02*
- 02 In search of innovation systems. *Swedish version see VP 2006:01*

#### VP 2005:

- 01 Kunskap för säkerhets skull. Förslag till en nationell strategi för säkerhetsforskning. *For English version see VP 2005:03*
- 02 Strategi för tillväxt - Bioteknik, en livsviktig industri i Sverige
- 03 Knowledge to safeguard security. Proposals for a national strategy for security research. *For Swedish version see VP 2005:01*
- 04 Produktionsteknik & Fordonstelematik. Förslag till FoU-program
- 05 VINNOVA's views on the European Commission's proposal for the Seventh Framework Programme on Research & Technological Development 2007 - 2013. Position paper

#### VP 2004:

- 01 Nationell strategi för transportrelaterad FUD

### VINNOVA Report

#### VR 2007:

- 01 Design of Functional Units for Products by a Total Cost Accounting Approach
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- 01 Det förbisedda jämställdhetsdirektivet. Text- och genusanalys av tre utlysningstexter från VINNOVA

- 02 VINNOVA's FoU-verksamhet ur ett jämställdhetsperspektiv. Yrkesverksamma disputerade kvinnor och män i VINNOVA's verksamhetsområde

- 03 ASCI: Improving the Agricultural Supply Chain - Case Studies in Uppsala Region. *Only available as PDF*

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- 13 IP-telefoni - En studie av den svenska privatmarknaden ur konsument- & operatörs perspektiv

- 14 The Innovation Imperative - Globalization and National Competitiveness. Conference Summary

- 15 Public e-services - A Value Model and Trends Based on a Survey

- 16 Utvärdering av forskningsprogrammet Wood Design And Technology - WDAT

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Technology in China. A general overview of the current Chinese initiatives and trends in the area of ICT.

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- 11 ICT-based Home Healthcare. *Only available as PDF*

- 12 Kompetensutveckling i små och medelstora företag - SMF. En kvalitativ studie av konferensdeltagares utsagor

- 13 The KTH Entrepreneurial Faculty Project

- 14 OLD@HOME Technical Support for Mobile Close Care. Final Report. *Only available as PDF*

- 15 Värdeskapande innovationsmiljöer

#### VR 2004:

- 01 Nya material och produkter från förnyelsebara råvaror. En framtidsbild och vägen dit. *For short version see VR 2004:02*

- 02 Nya material och produkter från förnyelsebara råvaror. *Short version of VR 2004:01.*

- 03 Evaluation of the NUTEK-VINNOVA programme in Complex Technical Systems 1997-2001. Utvärdering av ett FoU-program i Komplexa Tekniska System 1997-2001

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- 10 Forskning och Innovation i Småföretag.  
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Research. Ett amerikanskt program för  
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- 11 Arbetsgivarringar i Sverige - förekomst,  
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- 12 Evaluation of the Öresund contracts  
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between Denmark and Sweden
- 13 Det öppna svenska innovationssystemet  
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VINNOVA's mission is to promote sustainable growth  
by funding problem-oriented research  
and developing effective innovation systems

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