

## **EUROPEER SME**

Peer-reviewing European Good Practices in Innovation Promotion for SME







## Table of Contents

Preface	3
Introduction	4
The Peer Review Methodology	6
Good Practice Instruments and Transfer Documents	14
Start-up Support for University Graduates Transfer Scheme Draft Proposal	14 21 22
INTER Get-up Transfer Scheme Draft Proposal	
Innovation Assistant Transfer Scheme Draft Proposal	53
INN-Act Transfer Scheme Draft Proposal	64 72 74
Metadistricts Transfer Scheme Draft Proposal	87
Competence Brokering Transfer Scheme Draft Proposal	103
Nanotechnology Transfer Scheme Draft Proposal	125
Thuringian Innovation Fund Transfer Scheme	
Early Stage Financing Transfer Scheme	
Young Researchers in Economy Transfer Scheme	
Main Outcomes of the EUROPEER SME Project	174
Lessons Learnt from EUROPEER SME Implementation Institutional Environment for Innovation Promotion Policy Recommendations	175
ELIDOREED CME Portogo	170

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## **Preface**

## The EUROPEER SME project in the European context

The Lisbon Strategy, decided by the EU Heads of States and Governments in March 2000, sets out to make the EU "the most competitive and dynamic knowledge-driven economy by 2010". The "Open Method of Coordination" (OMC) was introduced at the same time to help Member States progress jointly on their reforms. Subsequently, the EU Heads of State and Government decided in 2003 that EU investments in Research and Development (R&D) should approach 3% by 2010 (the Barcelona target), and that the OMC should be applied to reach this target. The Community's Committee for Scientific and Technical Research (CREST) was given the task to oversee the OMC process.

CREST has worked through a number of OMC expert groups in yearly cycles. To reinforce and complement the OMC application to investment in research, the European Commission launched the OMC-NET scheme in 2005. The scheme is implemented through calls for proposals for Coordination and Support Actions (CSA). It offers Member States or their regions the possibility to develop policy coordination activities on issues of their own interest with support from the European Commission.

EUROPEER SME is one of ten projects financed in the OMC-NET pilot call which was launched in 2005 under the Sixth Framework Programme (FP6). The EUROPEER SME project (a) fostered mutual learning and elaborated best practices on national and regional R&D support programs to Small and Medium Enterprises (SME), (b) optimised the exchange of best practices by identifying conditions for transferability and developing transfer schemes, and (c) diminished overlap and strengthened the coordination of R&D policies directed to SME. The EUROPEER SME project used peer reviews as its working method. The method of peer reviews implies that the partners present in the peer groups are equal, which is crucial for mutual learning. The project comprised 14 partners from ten European countries. Therefore, EUROPEER SME had and has an important transnational impact.

The impact of the project has been valuable on different levels. In particular the mutual learning and peer reviews have initiated a vivid exchange between project partners, and several partners are preparing the implementation of new instruments as a direct result of the project. However the impacts go far beyond the core group of project peers. The instruments themselves as well as the transfer method have met great interest from various actors in the field in European countries and beyond.

## Introduction

The EUROPEER SME project has brought together 14 partner organisations from ten different European countries between December 2006 and November 2008. The diversity in terms of nationalities was equalled by the diversity in terms of the institutional set up of partners. Policy makers and implementing organisations joined hands and brought together their experiences in innovation promotion. This was the basis for a most fruitful exchange of experiences and ideas which lead to the improvement of existing instruments, their transfer to other regions and the creation of new ideas and initiatives for further joint projects. The overall objective of EUROPEER SME was to make Research and Technological Development (RTD) policies directed to SMEs of EU Member States and acceding countries alike more effective. Through the promotion of innovation in Europe higher growth rates of Europe's future-oriented sectors of the economy are fostered.

EUROPEER SME fostered mutual learning, harnessed best practices and improved the impact of national and regional instruments of RTD promotion to SMEs.

Bringing those together who are engaged in promoting RTD instruments directed to SMEs has helped joining forces to provide common answers to common problems. EUROPEER SME comprised 14 partners from ten old and new EU Member States as well as Candidate Countries. The project consortium analyzed ten best practice instruments for innovation promotion of SME regarding their impact and their transferability to regions other than their region of origin. The continuous and dynamic process of mutual learning all along the project's implementation provided for a comprehensive understanding of the different instruments' strengths and their specific operational requirements.

# EUROPEER SME optimised the exchange of best practices in identifying conditions for transferability and in developing transfer schemes.

Impact and functioning of innovation promotion instruments for SME are contingent on the respective institutional and political environment in a specific region or country. Identifying the legal and regulatory factors favouring transferability at regional level, analyzing specific RTD policies to which a given instrument would have to contribute and clarifying the financial implications up- and downstream of its implementation were thus key issues of the transfer schemes being elaborated in the course of EURO-PEER SME's project activities. Moreover, the peer review methodology applied during the project's implementation provided a wide range of valuable hints and recommendations on how to adjust the 10 selected best practice instruments to further strengthen them both in impact and efficiency.



## EUROPEER SME diminished overlap and strengthened the co-ordination of RTD policies directed to SMEs.

In a relatively short period of two years of implementation, EUROPEER SME succeeded to make a tangible contribution to strengthen the regional research and innovation promotion capacities for SME in the project's 10 partner countries. The EUROPEER SME web-site (www.europeer-sme-rp6.org) will back up the consortium in its ambition to render the network of partners sustainable beyond the project's duration. Due to its openness to welcome new partners worldwide and constantly striving for a broad dissemination of EUROPEER SME's outcome, the network will continue to provide a vibrant platform for knowledge exchange on innovation promotion and RTD approaches at regional level.

#### This brochure presents central outcomes of the project.

A methodological chapter describes in detail the peer review method. In the following the ten peer reviewed instruments and the method to analyse the appropriateness of their transfer to another region are illustrated. Therefore each presentation of a peer reviewed instrument is followed by an example of a transfer scheme completed by one of the partners. In those cases where the transfer scheme has affirmed that the instrument is appropriate to be transferred the associated draft proposal for implementation of the instrument follows. The chapter on major outcomes of the projects resumes general lessons learned from the project implementation, findings on the institutional environment needed for innovation promotion as well as general policy recommendations. Additionally all project partners present themselves in the annex of the brochure.

Inquiries regarding further information on the instruments and the transfer can be addressed directly to the respective instrument owners or transferring regions. The EUROPEER SME Consortium partners kindly encourage all parties interested to join in and to harness the manifold results of the project.

## The Peer Review Methodology

#### **Background**

The EUROPEER SME project had to fulfil several goals:

- Identification and analysis of 10 transferable "Good Practice" instruments throughout Europe which promote R&D in SMEs
- Initiate a transfer of "Good Practice" instruments from donor regions to recipient regions
- Development of transfer schemes and proposals for implementation
- Exchange of experience

6

- Initiate a learning process between participating partners
- Help the transferring regions to improve their instruments

To fulfil these ambitious goals within a two-year project period, an efficient and straight forward-oriented methodology was needed. Time was short and 14 different partners from 10 European countries had to be coordinated. The Peer Review methodology emerged as the right result-driven approach to structure and deal with considerable volumes of information from several experts in a limited period of time.

### What exactly is a Peer Review?

A Peer Review is a well prepared and chaired discussion between experts (peers) on a specific topic. Its main objective is to form an opinion in a limited period of time and using a systematic and multi-level process.

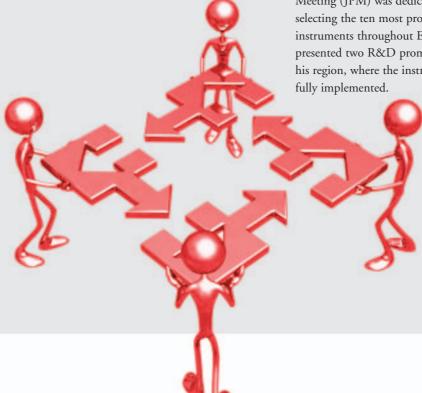
In the EUROPEER SME context, this meant that the Peer Review was more than just a listing of Good Practice examples. The approach had to:

- Ensure the exchange of experience
- Identify and select the most promising instruments, suitable for application in the partner regions
- Develop transfer schemes and draft proposals for implementation for the partner regions (transmission activities)
- Give concrete hints and recommendations for local actors (decision makers) and develop a sustainable learning process

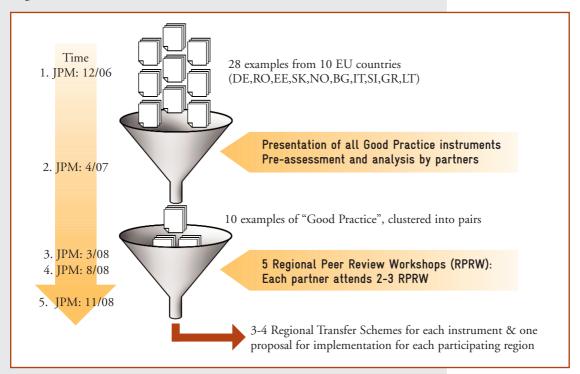
#### Peer Review in practice:

## 1. Identification and selection of promising instruments

Four months after the formal launch of the project at the Kick-off Meeting, the second Joint Partner Meeting (JPM) was dedicated to identifying and selecting the ten most promising R&D promotion instruments throughout Europe. Each project partner presented two R&D promotion instruments from his region, where the instrument was already successfully implemented.



The selection process is illustrated in the following diagram:



After short presentations of all 28 instruments, the partners voted for the ten most promising instruments from their point of view, taking into consideration cultural, legislative, financial and economic aspects. These ten instruments were clustered thematically into pairs. The instrument pairs were then analysed in detail in five Regional Peer Review Workshops. Each partner could attend up to three Regional Peer Review Workshops.

#### 2. Regional Peer Review Workshop

The Regional Peer Review Workshops each lasted two days. Ten to twelve policy makers and programme implementers from different EUROPEER SME partner countries and 1-2 external stakeholders (relevant to the instruments in focus) analysed two good practice instruments.

The workshop concept was developed by ZENIT and Mesopartner<sup>1</sup> and is based on the use of the META-PLAN methodology, a card-based participatory communication approach.

#### A. Workshop plan and timing:

- Day 1: Arrival of participants
- Day 2: Morning: Examination of Instrument 1
- Day 2: Afternoon: Examination of Instrument 2
- Day 3: Morning: Analysis of transformation needs, transfer scheme
- Day 3: Afternoon: Departure

#### B. Examination of the instrument (240 minutes):

- 20' Phase 1: Presentation of the instrument by the transferring region, participants note questions
- 20' Questions are pinned up, owner responds
- 30' Phase 2: Peer Assessment: How to make the instrument more effective and efficient? (writing of cards)
- 10' Owner comments on results of Peer Assessment
- 20' Phase 3: Participants describe the key features of the instruments on cards
- 20' Cards are pinned up and sorted
- 20' Owner prioritises cards
- 10' Plausibility check
- 20' Phase 4: Transformation analysis Transferability
- 70' Transformation analysis Pre-implementation and adaptation needs

### The work stages in detail:

### I. Phase: Detailed presentation of the instrument

- A) The transferring region presents in about 20 minutes the instrument in question:
- 1. Regional framework in which the instrument is implemented
- 2. Brief description of the instrument as such
- 3. Main goals of the instrument
- 4. Target group of the instrument
- 5. Initiator, implementer and partner of the instru-
- 6. Impact of the instrument (evaluation results)
- 7. Success factors
- 8. Bottlenecks
- 9. Adaptation requirements (how must the instrument be changed to be implemented in other regions)

In addition, the following questions are covered by the presenter:

- 1. Who suggested the instrument / tool, for instance
  - · Bottom-up: suggested by enterprises or technology institutions
  - · Bottom-up: emerged from earlier activities and ongoing discussion with enterprises and institutions
  - Top-down: inspired by experience in another
  - Top-down: suggestion by e.g. a strategy consul-
- 2. What is the underlying problem
  - Market failure?2
  - Network failure?3
- 3. What is the underlying approach
  - Temporary intervention: market or network work, exit strategy at the outset4
  - · Permanent intervention: market failure is perennial, intervention needs to be delivered permanently5
- 4. What are the tangible prerequisites
  - Existing structure of enterprises
  - Existing structure of innovation-related institutions
  - · Existing set of institutions, organisations and instruments without which this instrument or tool cannot work
- 5. What are the intangible prerequisites
  - Level of trust among enterprises
  - Credibility of the public sector (policy makers)
  - Credibility of innovation-related institutions
- 6. What was the biggest surprise during implementation of the instrument / tool?
- 7. What could have gone wrong, or almost went wrong, and how did you prevent /remedy it?

<sup>2</sup> Is there a market failure? For instance, is the underlying problem something that might well be addressed by businesses, but they hesitate to do so, for instance because the necessary investment is deemed too high, or they do not expect to be able to achieve a return on their investment ("external effect")?

3 Is there a network failure where businesses and/or other actors need to act collectively but nobody takes the lead?

<sup>4</sup> Is your instrument a temporary intervention that tries to make market or network work, and do you have an exit strategy at the outset?

<sup>5</sup> Is your instrument going to turn into a permanent intervention, since the market failure is perennial and the intervention needs to be delivered permanently?

- B. After the presentation, the Peers (workshop participants) write down their most urgent questions (red cards) which are grouped, if possible, by the facilitator (see picture)
- C. The presenter of the instrument comments on each question. The comments are documented and attached to the relevant question (yellow cards)



#### II. Phase: Improvement of the instrument's efficiency

- A. All Peers (participants of the workshop) are asked to write down ideas for improvements and changes to as well as remarks on the instrument presented (blue cards). (See picture 2).
- B. Afterwards, the comments are grouped and sorted into three categories:



1st category; meaning: yes, we have tried it (but we did not implement it for certain reasons)



2nd category; meaning: good idea, this might be successful



3rd category; this idea will not be successful

C. The presenter of the instrument comments on each remark. The comments are documented and attached to the relevant suggestion (yellow cards) Picture 2



## III. Phase: Identification of the success factors of the instrument

- A. All Peers (participants of the workshop) are asked to write down the critical success factors of the instrument on cards (green) as they have understood the instrument. The cards are collected and grouped according to the Balanced Scorecard System (BSC) (see picture 3).
  - Economic and financial factors
  - Knowledge and learning
  - External relationships
  - Internal processes

If some categories of the BSC are not considered enough, then the exercise is repeated.

B. In order to assess the importance of the comments, the presenter (owner of the instrument) and the workshop participants evaluate the remarks. Each pins red dots on the most important success factor in each category of the Balanced Scorecard. The number of dots for each category depends on the number of remarks in each category. The underlying rule is: number of dots = 20% of number of cards in each BSC category.

Picture 3:



## IV. Phase: Development of the transfer scheme for the instrument

This exercise has to be undertaken from the viewpoint of the recipient region. First there is the Transferability Check. This check is necessary to establish whether the instrument/practice under examination is – in principle – transferable to the recipient region or not. Only if all questions can be answered with **YES** can the detailed appraisal of adaptation needs commence. Questions might also be answered with "Action needed" in the sense of "Yes, but". In this case, the action needed has to be explained in detail under "II. Pre-implementation needs".

- 1. Are you at present battling with the same problem that is addressed by the instrument?<sup>6</sup>
- 2. Does the instrument fit into the given regional planning/national strategy?

- 3. Are the institutional prerequisites<sup>7</sup> fulfilled?
- 4. Are the prerequisites regarding knowledge structure<sup>8</sup> fulfilled?
- 5. Are the financial resources available<sup>9</sup>?
- 6. Is the instrument compatible with the overall incentive structure?
- 7. Is the instrument compatible with / additional to existing projects?
- 8. Are the requirements regarding social capital, credibility, reliability fulfilled<sup>10</sup>?

If the pre-check points towards an adaptation analysis of the instrument, the following categories must be examined by the potential recipient region, whereby in particular the most important success factors, as identified in Phase III, must be taken into consideration.

## II. Pre-implementation needs<sup>11</sup>

### III. Adaptation needs12 of the instrument on the level of

Content<sup>13</sup>

Infrastructure14

Institutions

Finance

Monitoring and evaluation

Process and implementation15

### V. Phase: Elaborate a draft proposal for implementation (desk research)

Once the transferability of a given instrument has been proven and the "transfer scheme" developed has tackled pre-implementation and adaptation needs of the instrument in question, a last but very important step must be implemented. The political decision maker has to be convinced that the instrument identified efficiently supports R&D activities in his own region. It must be taken into the account that the decision maker/policy maker might not have been involved in the Peer Review process. The instrument

<sup>6</sup> The instrument may focus on a specific problem that arose due to specific circumstances in the transferring region or it reflects a specific market failure in the specific regional setting in the transferring region. It may also be designed for a specific target group

<sup>7</sup> Experienced consultants and/or development agencies that can implement the instrument/multipliers are available Universities, R&D institutes, laboratories,...

<sup>8</sup> Available = flexible budget process rather than having every cent earmarked for the next period.

<sup>9</sup> Trust among the actors is essential; reliability of the institutions and persons involved is a prerequisite

<sup>10</sup> There may be the need to implement an awareness-raising campaign to sensitise the general public towards the underlying problem before implementing/promoting the instrument

<sup>11</sup> Once the preliminary adaptation check has proven the transferability of the instrument, the fine-tuning of the instrument to the specific regional settings can start.

<sup>12</sup> Adaptation does not mean copying: The instrument may have to be adapted to regional settings; project objectives or target groups might differ

<sup>13</sup> There may be the need to modernise existing infrastructure in terms of equipment and/or capacity

<sup>14</sup> Define the specific requirements of the grant (e.g. credit instead of grant; duration of funding); nominate people/institutions integrated in the advisory board, etc.

<sup>15</sup> Take informal decision about the method of delivery of the instrument. Deliver service through public institutions or make market service work; How to promote the instrument to potential beneficiaries; Is there a communication tool? It may be necessary to start with a pilot project.

must therefore be presented to him, including the adaptation needs identified. Ideally, the instrument presented and the transfer scheme developed will convince the policy maker that the instrument increases the R&D efforts of SMEs and strengthens their innovation capabilities. In this situation, a policy maker

needs a project description that gives a precise overview of objective, impact and cost of the instrument in question. Furthermore, the implementation strategy has to be outlined, including a detailed framework and cost calculation. The template is as follows:

#### Name of the Instrument

**Applying Institution** 

Managing Division in Institution, Address

I. Idea in a nutshell17

Overview of a) background, b) objective18, expected impact and total cost

- II. Rationale specified19
- III. Implementation strategy in detail<sup>20</sup>
- a) Project duration:
- b) Target group<sup>21</sup>
- c) Implementation activities<sup>22</sup>
- d) Description of the support facilities<sup>23</sup>
- e) Assumptions and risk assessment  $^{\!\!\!\!\!^{24}}$
- f) Success factors for implementation<sup>25</sup>
- g) Monitoring and evaluation26
- h) Sustainability<sup>27</sup>
- i) Costs<sup>28</sup>

#### **Appendix**

- I. Logical Framework of Implementation with Timetable
- II. Detailed Calculations
- 17 Details on the following pages.
- 17 Details on the pituoting pages.

  18 a) Country and sector background as mainstay argument for implementation of instruments should include: Problem/situation in the region; Put project into regional/international context; show EU programme coherence b) Objective: Explain why the project is important to problem solving (its added value, opens up new ideas...) in terms of: cutting-edge contribution to development of regional/national economic policy, point out strengths of the approach and its ability to draw on manifold experiences (e.g. application of the instrument in other regions, proven effective elsewhere); expected outcome. Add long-term perspective.
- 19 Add details to overall background and objective from footnote 2): Which demand from the private sector does the instrument meet? Mention coordination with activities of other programmes in the region and their key players.
- 20 More detailed description of the instrument.
- 21 Directly and positively affected by the project (SMEs, business associations, research institutes). Please state the specific segment of SMEs which will be targeted.
- 22 Short presentation with: a) Inception Phase with preparatory activities (e.g. mobilising institutions, establishing contacts, organising introductory workshop; institutional and capacity reassessment, inception report). b) Implementation Phase with several components listed. c) Marketing and Communication Strategy (e.g. awareness-raising programme for private sector, wrap-up event...). d) Other activities (such as reporting, working days of experts).
- programme for private sector, wrap-up event...). d) Other activities (such as reporting, working days of experts).

  23 a) National partners who will implement the instrument too and b) back-stopping that the implementation will have from the EU network and national institutions (calculate co-financing and equipment needed, consultancy/management expertise, policy and legal advice, support in public awareness building/visibility, training in monitoring and evaluation).
- 24 Explanation of the risks and assumptions affecting the implementation of instruments: Formulate aspects in a positive way, e.g.: "Reform of procedures successfully implemented".
- 25 Conducive environment for successful implementation of the instrument on several levels (referring to transfer scheme): a) embedded into regional planning and national plan b) institutional and regulative conditions c) institutional knowledge environment in terms of universities, R&D institutes, laboratories etc. d) financial resources available e) compatible with overall incentive structure in the region f) complementing activities of other programmes in the region g) given credibility and reliability in governance/administration of institutions.
- 26 Brief description of impact monitoring and evaluation system; clear definition of performance indicators and milestones; assessment on different levels of impact (enterprises, contribution to regional and national economic policy etc.).
- 27 Self-supporting after the end of the project as: a) external co-financing secured or b) implementing does not need any more funding. Specify possible revenues to be generated in applying the instrument
- 28 Overview of expected total costs; distinguish start-up and recurring costs, cost for material, training personnel/manpower etc. A detailed cost calculation will be presented in Appendix II.

## Start-Up NRW

North Rhine-Westphalia/Germany (ZENIT)



## **Promoting Technology Transfer from Universities to Industry**

## **Start-Up Support for University Graduates (PFAU)**

## Dr. Bernhard Iking

ZENIT - Centre for Innovation and Technology in North Rhine-Westphalia/Germany







1. Framework



- North-Rhine Westphalia: has a long tradition of innovation promotion measures & complex institutional system of technology promotion
- Population: 18,1 million inhabitants
- · Working market: 8,3 million employees
- R&D infrastructure: 63 technology centres and parks, 58 universities and technical colleges, 55 research institutes; 31 technology transfer agencies
- · Other: 450.000 students (of which 65.000 from abroad)









#### 1. Framework

#### The Problem:

- Just a small number of new innovative firms each year
- Less than 0,5% of university graduates set up a business on their own
- · Know-how and technology transfer from science to business is lacking

#### The Reason:

 Market failure: Young graduates are quite well educated and have good ideas, but they have no reputation, no securities and no track record to acquire financial resources to reasonable conditions in the market

#### The Consequence:

 Initiative to increase the number of start ups from universities in NRW (designed by the ministry of science and ZENIT in 1996) to overcome market failure









## 2. Brief description of the instrument

#### Start Up NRW: the most important points

- 1. Monthly paid financial grants help starters to concentrate on starting their business (1.000 Euros netto per month)
- 2. Innovative start ups get free access to university resources (labs, machinery)
  - → Universities act as an incubation centre
- 3. Professors support start ups as a mentor
- 4. Young graduates get personal training on business matters

These measures shall motivate graduates (up to three years after graduation or PhD) to consider starting a business on their own as a serious option (besides academic career or working in a firm)









## 2. Brief description of the instrument

### Main goals of Start Up NRW

- · Strengthen university-industry links
- · Accelerate transfer of new know-how into industry
- · Increase R&D activities in industry
- · Effectively support structural change in NRW
- · Increase the innovative potential of industry
- Increases the innovation ratio in industry
- Increase the number of competitive sustainable jobs
- Increase the economic competitiveness of industry
- Develop innovative product and service ideas into marketable products and services









## 2. Brief description of the instrument

#### 1. The most important measures

- Selection process of best ideas and entrepreneurs!
   Ranking business ideas (criteria: innovative potential, market potential, R&D-needs)
- Screen entrepreneurial spirit of the applicant (assessment centre)

#### 2. For winners:

- Monthly grant of 1.000 Euros to cover life expenses (1 year)
- 5.000 Euros for external expertise (Coaching, Personal Training,..)
- · Free access to university resources
- · Two training seminars free of charge
- Mentorship of university professors (giving advice, door opener, contacts)

### 3. Milestones:

- Presentation of business progress (after 8 month)
- · Eventually extension of grant for another year









## 2. Brief description of the instrument

### Initiator, Implementer and Partner

#### 1. Initiator:

 Ministry for Innovation, Science, Research and Technology affairs in North Rhine Westphalia (www.innovation.nrw.de)

### 2. Implementer:

 ZENIT GmbH – Centre for Innovation and Technology in NRW (www.zenit.de)

### 3. Partner:

Universities (are officially the applicant; graduate is beneficiary)
 Technology Transfer Agencies (31) at the universities
 Transfer Scouts at universities (planned)









## 2. Brief description of the instrument

### Sustainable Approach of "Start Up NRW"

Program was intended to last as long as

- 1. Market failures exist and
- 2. Input/output evaluation have positive results (survival rate of firms, new jobs, public money per new working place)

#### Prerequisites:

- Partners at the universities that communicate and promote the program in the universities
- Professors: university is more than teaching
- · Reliable public partners: money comes!
- Trust of universities and students/graduates in the public body!









## 3. Impacts/Results of "Start Up NRW"

#### Quantitative

- Assessment of 564 business plans (between 1996 and 2006)
- 244 graduates and doctorates have been selected for funding (43,3 %)
- 5,8 new employees per start up company in average
- Public investment of 10.000 Euros per new working place in average

#### Qualitative

- Majority of Start ups is innovative (Patents, R&D activity, R&D-intensity of products)
- More than 50% of start ups invest more than 75% of their time on R&D.
- 51 % of employees in start up companies have a university degree
- 61,8 % of all businesses are economically "successful" or "very successful"
- Majority of positive effects inside NRW (Turn over, Employment effects, location of business, etc.); improved entrepreneurial culture at university









### 4. Success factors

#### **Success factors**

- 1. Evaluation of ideas and persons with equal weight
- 2. Motivated partners in the universities: transfer agencies and/or
- 3. Transfer scouts that inform student and promote the program
- 4. Collaborative professors: reward professors for their additional engagement
- 5. Setting together tough milestones and control them
- 6. Absolute liability and trust in payment and in the involved institution









### 5. Bottlenecks

#### **Bottlenecks**

- Nearly 45% of funded persons would have started their business without funding
- Some people try to use the program to finance their PhD
- Professors may see in the program a competitor to require well educated scientific assistants
- Professors may see in the start up an additional assistant for their own interests
- · Social security system: employed or not?









### 6. Transformation needs

#### 1. Framework

- Enough university graduates available
- Entrepreneurial culture in school and university system integrated
- Infrastructure and institutional prerequisites are fulfilled! (check)
- Money for perennial period is guaranteed

#### 2. Implementation

- Monthly grant must be adapted to regional framework: it should be equal to half of a wage that a scientific assistant at universities gets
- The eligibility of applications must be clearly defined (last degree < 3 years); also: is a formally already incorporated business eligible or not
- · Clear rules to exclude people using the money for starting their PhD

### 3. Improvement

 There must be adequate incentives to motivate professors/universities to support start ups and get engaged into the programme









## 7. Surprises

 Between Start ups evolved something like an alumni spirit, there was trust between the actors and they started to create business among each other and developed together new products and services!

What could have gone wrong and how did we fix it:

 The accounting clerk at the university administration could not differ between contracts and duties of scientific assistants: Face to face argumentation and explanation









## 8. Revision and adjustments

The financing body, Ministry for Innovation, Science, Research and Technology in NRW, decided in 2007 to revise the program PFAU

In March 2008 the call for new program "Science to Business" was launched:

- Change of promotion focus: Promotion of excellent research quick transfer of research results into new applications (new) instead of promotion of the transfer of research results from universities into industry through start ups (old)
- Annually Contest driven promotion of best ideas: research teams rather than single persons are addressed
- Concentration of available 18 Million Euros until 2012 on the fields Nano- and micro technology, biotechnology, energy research, medical technologies, Life Sciences
- Eligible are also patent applications, the development of prototypes, start ups from universities, commercialisation of ideas







## Transfer Scheme

## Start-up NRW - Lombardy Region/Italy (RegLom)

Project name	Start-Up NRW						
Region of origin (transferring region)	NRW/Germany						
Region adapting the instrument (receiving region)	Lombardy/Italy						
I. Transferability Check List							
	Yes	Action needed	No				
1. Do you actually battle the same problem that is addressed by the instrument?							
<ol><li>Does the instrument fit into the given regional planning/national strategy?</li></ol>							
3. Are the institutional prerequisites fulfilled?							
4. Are the prerequisites regarding knowledge structure fulfilled?							
5. Are the financial resources available?							
6. Is the instrument compatible with the overall incent structure in your region/country?	ive						
7. Is the instrument compatible with/additional to exist projects in your region/country?	ting <b>T</b>						
<ol><li>Are the requirements regarding social capital, credibility, reliability fulfilled?</li></ol>							
II. Pre-implementation needs							
Signing up agreements between regional/ local governments, universities and R&D centres to allow the growth of a better cooperation on managing the financial instrument. In such agreement it is required to regulate, for example, the payment for university tutors or the cumulability with other grants. Moreover it may be very usefull to set up a business idea scouting.							
III. Adaptation needs of the instrument on the level	of						
Content: Substaining costs for buying know how, licens	ses, scientific tutors	hip.					
Infrastructure: Setting up of an information network b centres, with operating offices (local point in univeristi the best financial tool or support them in applying.	•						
Institutions: Regional government, universities, R&D ce	ntres and, science p	arks					
Finance: Establishing a mix on financial aids between financial voucher, grant and loan (for supporting new enterprises) tuned on the real need of the project and of the new idea financed. There should be a special attention to the cumulability of grants with, for instance, university grants or PhD grants.							
Monitoring and Evaluation: Building up and updating of a monitoring database on results obtained by the financed projects, filled up by all actors of the system (start-up financed, public administration, universities etc.) recording outputs produced considering the financial aids given.							
<b>Process and implementation:</b> Launching a pilot project good opportunity for analysing and developing the too each other. If the results of the prilot project are good to foresuit regional policies for enterprises.	l checking how and	if all actors will coo	perate with				

## **Draft Proposal**

Start-up NRW - Lombardy Region/Italy (RegLom)

#### Name of the instrument

START UP support for University graduates

#### **Applying Institution**

Lombardy Region - Italy

#### Managing Division in Institution, Address

Consortium involving: Lombardy Region, Finlombarda, Universities and research centres, and representatives of the local business community

#### I. Idea in a nutshell

Overview on a) background, b) objective, expected impact and total cost

#### Background

Lombardy Region is one of the most developed and competitive European regions. It has 12 universities, more than 200 research institutes, and more than 800.000 SMEs. See below some detailed information:

- Population: 9,4 million inhabitants
- Working market: 4,3 million employees
- Unemployment rate: 4,2 %
- GDP: 296,2 bn Euro in 2005
- R&D infrastructure: 12 universities, 225 centres public and private in the QuESTIO system (research and evaluation instrument of Research and Technological Transfer Centres -RTTCs-).
- R&D expenditures of industry: 2.273 million or 1,1 % of GDP
- Number of SMEs in region: more than 800.000
- Main industrial sectors: Machinery, Metal Industry, Textile and Fashion
- Main technology strength: genomic, biomedical, new material, ICT, nanotechnology
- Other: 240.000 students, more than 6.000 from abroad, 46.000 from other Italian regions. Each year 15.000 graduates (data form 2005) in the table presented in Annex I please find the different percentages of degrees in thr Lombardy Region

#### Objective

The focus is to help researchers or graduates to start their own business, as well as to help the individual initiative set up by a researcher who has not experience in the managing of enterprises. The researcher should receive: financial support, training in basic management skills like marketing, sales, cost calculations, taxes, legal forms of an enterprise: pros and cons....., and tutorial support.

#### Expected impact and total costs

The project aims at:

- increasing the number of existing and technology based SMEs
- improving cooperation and technological transfer among university and industry
- covering the gaps between research and the SMEs sector

#### Total costs

It is foreseen to start with a first year pilot project (16 month) and, in case of successful experience, a longer time project (max 3 years more).

For the first year pilot project, the indicative budget should include:

- Start up costs: (12% management cost in the first year, afterwards decreasing)
- Internal personnel
- External personnel
- Web site-Press
- Monitoring
- Training for personnel

#### 400.000 Euro

### Facilities for appliers:

 $30.000 \; \text{Euro X } 100 \; \text{appliers} = 3.000.000 \; \text{Euro}$  (30.000 Euros are given monthly with direct payment to the individual start up . Every three months the beneficiary will provide the monitoring report. If he does not provide it, the funding will be stopped)

#### Total Budget for the first Year: 3.400.000 Euro

If the first year will be successful, every year should have a dedicated call. The amount for the call could increase, depending of the number of pilot appliers.

### I. Rationale specified

The main aim of the instrument is to reduce the informative and collaborative gaps among R&D and SMEs sector, helping young researchers to create enterprises.

In Lombardy Region, in fact, there are lots of researchers than could "do enterprise", but they necessitate of some elements:

- 1. the technology driver approach
- 2. contacts with SMEs
- 3. favourable environment
- 4. management skills

This instrument foresees to support researchers and their research projects by providing different facilities (grants, training voucher, tutorship, training visits). The proposed projects will have to involve both university or R&D sectors, at this scope a joint "declaration of interests" between the beneficiary researcher, the University/Research Centres and the identified SME's will have to be signed at priori.

The facilities are the following:

**Grants:** for supporting researchers and to guarantee them a minimum of financial support during the realisation of their own projects;

**Training voucher:** to provide the necessary bakkground for a model of a research made by themselves that can be replied in other context.

**Tutorship:** for supporting the beneficiary in the scientific contents of the research. The tutors will also lead the beneficiary in administrative steps for creating enterprises. They will be located in Transfer Technology Offices at the university.

**Training visits:** for study or training visits in others companies or universities in subjects concerning the research project financed.

## II. Implementation strategy in details

Planning for the implementation: month 1 to 4. After the realization of the draft instrument, it is foreseen to widely diffuse information about the project via a press launch and with media campaigns focussiong

on the local press as well as informative road shows in universities.

## a) Project duration: 16 month (1 year of grants for projects execution).

After the evaluation process made "in itinerary" and "at the end", the policy makers could decide a possible extension up to 3 more years.

#### b) Target group

Researchers get salary and the other facilities, University and SMEs provide the approval of the proposal and the manifestation of their interest in the project. Moreover they provide the necessary environment like knowledge, laboratories, etc...

## c) Implementation activities

**Phase 1:** start up of the project, set up of the management body, training of the staff, detailed definition of the instrument and press presentation and pushing. Moreover, in this phase it will set up an informative network, with information points in universities and research centres.

This phase is expected to be 4 month long (1-4) because for the realization of the project needs the involvement of different actors. (overview of activities Phase I to phase IV) in II.)

**Phase 2:** implementation of the instrument, with an open call for appliers. Can apply: researchers, or everyone who has a degree.

Participation requirements: a) Coherence and added value among the following elements: Curriculum Vitae and Start-up Project Proposal; b) the researcher in its proposal should have already identified both University/ Research Center and the SME where TT will be implemented.

This phase will regard also the evaluation made by a team of external and independent expertise. It is foreseen to be 12 month long (5-16) as explained in Phase 3.

**Phase 3:** feedback analysis and monitoring "in itinerary", at the end of the period of execution of projects financed. The analysis in itinerary (every 3 month) will be realised by the internal staff regarding the correct state of art, respecting the draft proposal of the appliers. At the end of the one year project activity, the external and independent expertise team, will evaluate again the results. Month 14-16.

#### d) Description of the support facilities

The instrument foresees the following facilities:

**Grants:** for supporting researchers and to guarantee them a minimum economic independence during the realisation of their own projects; The grant will be directly transferred to the researchers beneficiaries.

**Training voucher:** to provide the necessary bakkground for a model of a research made by oneself that can be exported in other contests. After a training course the researcher should keep a good knowledge in managing SME creation.

**Tutorship:** the tutor supports the beneficiary in the scientific content of the research to be implemented in order to satisfy the specific needs of the research project.

**Training visits:** for study or training visits in others enterprises or universities or research institutes, in subjects concerning the research project financed. This period could allow an effective exchange of different experience.

#### e) Assumptions and risk assessment

Political commitment and political stability is fundamental for programme implementation; The involvement and the cohesion of the overall consortium in strategic decision making is also one of the keys for the implementation of the programme.

#### f) Success factors for implementation

- Correct implementation of the regional plan of support for R&D;
- Good press campaign;
- Success in attracting the interest of SMEs and universities;
- Success in reaching the target of more than 100 appliers;
- Motivated staff;
- High quality in draft projects;
- Added value in improving cooperation among R&D and SMEs.

#### g) Monitoring and Evaluation

Monitoring will involve the team during the whole duration of the instrument.

Every three months, the internal staff will check the correct implementation of the project according to the plan and the timetable defined in the proposal, as well as the milestones defined within the same project proposal.

Moreover at the end of the year the evaluation team will verify the results of singles projects activities, providing also a complete feedback on the instrument. So, the policy makers can evaluate the impact of "START UP SUPPORT FOR UNIVERSITY GRADUATES" on Lombardy Region.

#### h) Sustainability

The programme is strictly linked to the financial support from the Policy Makers.

#### i) Costs

Start up costs: 400.000 Euro

Grants for appliers:

30.000 Euro X 100 appliers = 3.000.000 Euro

Total: 3.400.000 Euro

### Annex

- I. Data on Graduates and degrees in Lombardy Region
- II. Implementation with Timetable
- III. Detailed calculations

ANNEX I: Data on Graduates and degrees in Lombardy region

Graduates in	2005.	degree studies b	etween Univ	ersities fro	m I omhardy	region	
University Degree		Old University Degree (4 and 5 years)		Second-lev Degree		Total	Total
Agro, Food, Zootechnical	1	426	334	34	1	796	1,6
Town planning and Territorial Architecture	-	1.685	1.689	264	-	3.638	7,4
Civil and Environmental Engineering	19	655	689	84	92	1.539	3,1
Electronic and Information Engineering	10	828	1.206	160	-	2.204	4,5
Industrial Engineering	14	1.042	1.164	181	-	2.401	4,9
Other Engineerings	-	46	214	14	-	274	0,6
Economic and Managerial  Managerial Engineering  Economic	7 - 7	4.646 453 4.193	5.620 795 4.825	381 245 136	- - -	10.654 1.493 9.161	21,8 3,0 18,8
Statistical	12	45	109	23	_	189	0,4
Legal	10	2.594	1.319	12	-	3.935	8,0
Political - social	12	1.498	3.988	230	-	5.728	11,7
Chemical - farmaceutical	5	380	249	31	182	847	1,7
Geology	-	300	279	35	_	614	1,3
Bio - biotechnological	-	466	847	231	_	1.544	3,2
Scientific - mathematical	15	370	853	129	-	1.367	2,8
Teaching and Training	-	1.084	1.070	18	-	2.172	4,4
Psychological	-	680	818	153	-	1.651	3,4
Arts, Philisophy, History	5	1.466	1.422	90	-	2.983	6,1
Linguistic	28	1.202	1.215	16	-	2.461	5,0
Medical and dental	-	575	9	4	597	1.185	2,4
Sanitary and paramedical	3	-	1.983	65	-	2.051	4,2
Physical Sciences	-	312	352	9	-	673	1,4
Defense and Security	-	-	54	-	-	54	0,1
Total	141	20.300	25.483	2.164	872	48.960	100,0
Total %	0,3	41,5	52,0	4,4	1,8	10	0,0

Annex II. Implementation with Timetable

"START UP" DRAFT PROPOSAL R.LOM – WORKPLAN -PILOT PHASE																
Year	1st Year							2nd Year								
Months	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Activities  PHASE 1: Need Analysis Staf Training; Detailed definition of the instrument; Media Involve- ment																
PHASE 2: Call for tender preparation; selection of the beneficiries and the pro- jects; contrac- tualization																
PHASE 3: feedback analysis and monitoring Every 3 month																
Final Evaluation Month 14-16.																

## Annex III: Detailed Calculations

PROPOSED BUDGET FOR THE FIRST 16 MONTH PILOT PROJECT									
1. FACILITIES FOR APPLIERS	Α	В	С	D	TOTAL				
	Monthly Salary for each researcher	Training visits	Tutorship (forfait)	Training voucher	A+B+C+D PER 100 BENEFICIARIES				
	1400	5000	4800	3400					
	12		4800	3400					
	16800	5000			3.000.000				
	A. Internal External pers		В		TOTAL A+B				
2. START UP COSTS:	Training; Web site-Press; Overheads								
	300.000	100.000		400.000					
TOTAL PROJECT 1ST YEAR					3.400.000				

## INTER GET-UP

Bratislava/Slovakia (BIC Bratislava)



## **INTER GET-UP**

Roman Linczényi
Business and Innovation Centre (BIC) Bratislava









## 1. Regional Setting and Framework conditions

Town: Bratislava

• Population: 600,000

· Working market: 395,000

• Unemployment rate: 5%

• GDP: per cap 105 (EU25=100)

· R&D infrastructure: obsolete

• R&D expenditures of industry: 0.9 % HDP

• Number of SMEs in region: 8.000 technology based (10%)

• Main industrial sectors: machinery, automotive, Electrotechnics,

· Main technology strength: new materials development, IT









## 2. Description of the instrument

## 2.1 Line out the most important points

- Regional tool focused on innovative businesses combining training, assistance in setting-up business, competition of business plans
- Business passport training and consultancy, access to finance ...
- Business competition regional + international
- Highlighting innovative start-ups, bringing public attention, matching interests of regional government with SME infrastructure and businesses









## 2. Description of the instrument

## 2.2. Main goals of the instrument

- To support selected innovative start-ups in their start-up activity
- To develop training and service modules adapted to the needs of the start-ups in the region
- · To turn public attention to innovative businesses
- To attract attention of financial institutions to innovative start-ups
- To start co-operation of business services providers with municipal authorities and to present this co-operation to the public
- To foster activities of researchers in the process of commercialization of their ideas









## 2. Description of the instrument

## 2.3. Initiator, implementer and partner

#### Initiator:

BIC Bratislava and regional government

## Implementers:

· BIC Bratislava and regional government

#### Partners:

 Financial institutions, large businesses, Microsoft, universities, University technology Incubator









## 2. Description of the instrument

## 2.4 The most important measures

- Training
- Due diligence of the business plans
- Business passport set of services + image
- Business competition regional
- International networking including international business competition
- · Support of the regional government









## 2. Description of the instrument

## 2.5 The most important results

## Quantitative

- 20 innovative businesses selected for training and business support award
- 30 participants in business competition

## Qualitative

• High quality business plans involved (energy, IT, tourism) ...

## Bottlenecks

· Fluctuation of interest of financial institutions and media







	spol. s r.o.	3. Assessment, App	rais
Analysis	Strength  •Partnership of the region and Business intermediaries •Presence of universities •Possibility to involve incubators	Opportunities  *Building a sustainable regional partnership for innovation support  *Awareness on innovation	External
Internal	Weaknesses  •Lack of interest of financial institutions •Lack of interest of media	Threats  •Lack of businesses involved •Too much interest in financial aspects of business	Analysis









## 4. Transfer recommendations

- Tool for regions with strong potential of research institutions and lack of services
- Use this tool to improve regional partnership for innovation support
- Research potential is a must tool does not mobilize research potential









## 5. Instrument improvement factors

- Indicated improvement factors were duly considered and evaluated as useful for further instrument implementation
- Instrument was implemented in co-operation with BIC Bratislava and the municipal government of Bratislava
- In 2008 was decided by the Bratislava government not to continue in support of SMEs in general (political decision on competences)
- It is aimed that the instrument will be implemented in co-operation with Ministry of Education/ Ministry of Economy. The planning will be carried out at the end of 2008 and improvement factors will be implemented







## Transfer Scheme

INTER GET-UP - Lithuania (EKT)

Project name	INTER GET-UP							
Region of origin (transferring region)	Bratislava/Slovakia							
Region adapting the instrument (receiving region)	Lithuania							
I. Transferability Check List								
	Yes	Action needed	No					
1. Do you actually battle the same problem that is addressed by the instrument?								
<ol><li>Does the instrument fit into the given regional planning/national strategy?</li></ol>								
3. Are the institutional prerequisites fulfilled?								
4. Are the prerequisites regarding knowledge structure fulfilled?								
5. Are the financial resources available?								
6. Is the instrument compatible with the overall incent structure in your region/country?	tive							
7. Is the instrument compatible with/additional to exis projects in your region/country?	ting							
<ol><li>Are the requirements regarding social capital, credibility, reliability fulfilled?</li></ol>								
II. Pre-implementation needs								
III. Adaptation needs of the instrument on the level	of							
Content: The need for selecting certain important sect development. Those sectors might be IT, biotech, touris		onal strategy for	theeconomic					
<b>Infrastructure:</b> Exisiting infrastructure of business inc equipment for IT or biotech training.	ubators and BIC's in Lit	huania do not hav	ve special					
Institutions: The need of selecting good partners and instrument might be also related with microcrediting i		holders as munic	ipality. This					
Finance: Business incubators and BIC's in Lithuania ha private banking institutions might solve this and might								
Monitoring and Evaluation: Monitored by Lithuanian Business Support Agency who is administrating EU Structural Funds in Lithuania								
Process and implementation: Hopefully, this should hincubators and BIC's in Lithuania probably with the ce providers. Municipalities and financial institutions might by providing access to capital and access to facilities	rtain help from private nt be involved as well. S	sector professiona Sustainability mig	al service ht be ensured					

## Draft Proposal

INTER GET-UP - Lithuania (EKT)

#### Name of the instrument

**INTER GET-UP** 

## **Applying Institution**

**EKT** 

#### Managing Division in Institution, Address

EKT (UAB "Ekonominés konsultacijos ir tyrimai") J. Jasinskio g.16, LT-01112 Vilnius, Lithuania

#### I. Idea in a nutshell

Overview on a) background, b) objective, expected impact and total cost

#### Background

Instrument will be implemented as a means of complementary services within Business information centres (BIC's) and Business incubators (BI's) in Lithuania. This part of public services to business community could be characterised as follows: BIC's and BI's in Lithuania are the business support infrastructure developed by the state to promote setting-up and development of SMEs as well as to ensure accessibility of high-quality of business services provided on preferential terms to businessmen from all regions in Lithuania. At present, 42 business information centres and 6 business incubators are functioning in Lithuania. These establishments are public enterprises, where the state is one of the stakeholders. The rights and duties of the latter are realized by the Ministry of Economy of the Republic of Lithuania. In 2007, business information centres and business incubators provided over 20 000 hours of consultation and training, gave responses to more than 49 000 inquiries, organised 748 business information dissemination events with more than 16 000 participants. More than 70 new enterprises were admitted to business incubators and 444 new jobs were created in 2007.

#### R&D infrastructure:

- 7 technology centres and parks, 21 universities and 28 colleges;
- 105 institutions, performing science research;
- R&D expenditures of industry: 0,76 % of GDP
- Number of SMEs: 56 428 in 2005;
- 141 771 students at universities, 55 949 at colleges.

#### Objective

- To mainstream selected innovative start-up's in value-added sectors like biotech, mechatronics, lasers, IT, nanotechnlogies and electronics in their start-up activity;
- To develop training and service modules tailor made to the needs of the start-up's in the country;
- To bring public attention to innovative businesses;
- To attract attention of financial institutions to innovative start-up's;
- To increase co-operation of business services providers (BI's, BIC's, consultants) with local authorities (government, ministries, municipalities, associations, federations);
- To increase entrepreneurship culture.

Annual budget programmes implemented by existing BIC's and BI's in Lithuania are approved by the ministry of economy beforehand and therefore, BIC's and BI's have no additional financial resources to co-finance new measures and instruments initiated in ongoing year.

In addition to this, the knowledge capacities of BIC's and BI's employees have to be upgraded in order to provide relevant services to the clients.

To make an awareness raising public campaign to sensitise the public for the underlying problem before promoting and implementing the instrument would be necessary.

#### Brief summary:

- The instrument fits into relevant regional planning/national strategy;
- Experienced consultants are available for the implementation of the instrument;
- Financial resources are available as part of Structural funds grants;
- The instrument is compatible with the overall incentive structure in the country;
- The instrument is compatible with existing projects and programmes in the country;
- Requirements regarding social capital, credibility and reliability need to be fulfilled.

#### Expected impact:

- Selected innovative start-up's supported in their start-up activity;
- Training and service modules developed;
- Public attention to innovative businesses attracted;
- Attention of financial institutions to innovative start-up's attracted;
- Co-operation of business services providers (business incubators, BIC's, consultants) with local authorities (government, ministries, municipalities, associations, federations) increased;
- Entrepreneurship culture increased.

### Total cost:

Indicative budget of the instrument 85000 EUR, which corresponds to planning of structural funds.

#### I. Rationale specified

#### Main statements:

- Competitiveness of Lithuanian businesses is relatively low and insufficient, which is largely due to insufficient innovation activities. According to international innovativeness ratings Lithuania is considerably below the EU-15 average, being in the lowest position among the new EU Member States;
- The level of investment in research and development is low in Lithuania, in particular in terms of Lithuanian businesses' investments in R&D;
- Lithuania's public sector's expenditure for research is close to the EU average, however, both subjects and results of research conducted by universities and institutes do not match business needs; results suitable for commercialisation are lacking;
- Research facilities do not meet modern standards; insufficient capacities limit the performance results and effectiveness of research;
- Most investments made by businesses do not result in long-term advantages or technological dominance in the market;
- Underdevelopment of the system of financial support instruments, in particular for SMEs and higher-risk projects.

Not all start-up's could be supported in their start-up activities. Therefore, the idea is to select start-up's from value-added sectors like biotech, mechatronics, lasers, IT, nanotechnlogies and electronics which although compose a very small margin of Lithuanian GDP, but has potential to grow.

The above mentioned sectors are defined as important sectors as traditional ones in both national strategy for the economic development and National general strategy: the Lithuanian Strategy for the use of European Union Structural Assistance for 2007-2013 (approved by the European Commission on April 26, 2007).

The implementation of the instrument could be cofinanced by the financial support allocated for public services providers under the the Operational Programme for Economic Growth for 2007-2013. Exisiting infrastructure of business incubators and BIC's in Lithuania do not have special equipment for IT or biotech training.

There is a need to select good partners and involve relevant stakeholders such as municipalities. This instrument might be also related with microcrediting involving banks. Attraction of private banking institutions might provide more credibility to the instrument itself.

#### II. Implementation strategy in details

The implementation strategy could be executed in four different ways:

- 1) Direct approach of start-up's by emails, regular mail, telephone or fax using BIC's, BI's data bases of local companies;
- 2) Direct approach of BIC's, BI's for capacity reassessment to execute such an instrument;
- 3) Presentations of the instrument at BIC's, BI's to inform potential start-up's about the possibilities
- 4) Awareness raising campaign addressing all interested parties: start-up's, business incubators, business information centres, private consultants, government officials, ministries, municipalities, associations, federations, Chambers of commerce, mass media.

#### a) Project duration:

The overall duration of the programme is limited to 3 years.

#### b) Target group

Innovative start-up's in value-added sectors like biotech, mechatronics, lasers, IT, nanotechnlogies and electronics.

#### c) Implementation activities

#### 1. Inception Phase:

- Identification and selection of start-up's in valueadded sectors;
- Identification and institutional and capacity reassessment of implementing institutions;
- Kick-off meeting/ introductory workshop to introduce the new instrument and its main benefits for start-up's;
- Inception report.

#### 2. Implementation Phase:

- Development of training and service modules tailor made to the needs of the start-up's in the country training;
- Provision of training to the selected start-up's;
- Provision of services to the selected start-up's;

### 3. Marketing and Communication Strategy:

- Awareness raising campaign for financial institutions and public;
- Workshop for business services providers (BI's, BIC's, consultants) and local authorities (government, ministries, municipalities, associations, federations);
- Wrap-up event.

#### 4. Extra Activities:

• Final report

#### d) Description of the support facilities

The implementation of the instrument could be cofinanced by the financial support allocated for public services providers under the the Operational Programme for Economic Growth for 2007-2013. The ministry of economy has foreseen a number of measures for public sector, namely "Assistant 1" wich is dedicated for public business service providers, BIC's and BI's among them.

The financial support granted to the start-ups's is considered to be of de minimis nature., meaning that one start-up can get grants not exceeding 200.000 Euros within 3 consequtive years.

#### e) Assumptions and risk assessment

- Institutional framework is in place;
- Financial resources are available;
- Political support for the instrument;
- Willingness of start ups to use the support offered by the BIC's and BI's.

### f) Success factors for implementation

- Existing start up potential and increasing entrepreneurship culture
- strong regional partnership (experts, policy makers);
- Credibility of project organisations (who runs the project);
- High value of consultants, trainer & coaches;
- Deep understanding of regional innovation system, business culture, etc.;
- Embedding the INTER GET-UP programme into regional planning and national plan;
- Existence of relevant institutional knowledge environment;
- Appropriate financial resources available;
- Compatible with overall incentive structure in Lithuania;
- Complementing activities of other programmes in Lithuania.

## g) Monitoring and Evaluation

Monitored by Lithuanian Business Support Agency who is administrating EU Structural Funds in Lithuania.

BIC's and BI's at the end of the programme must submit a final report on the implementation of the instrument within their area/region.

#### h) Sustainability

Hopefully, this should help to develop capabilities within existing BIC's and BI's in Lithuania probably with the certain assistance from private sector professional service providers. Municipalities and financial institutions might be involved as well. Sustainability might be ensured providing access to capital and access to facilities for office and equipment at business incubators.

#### i) Costs

Indicative budget of the instrument 85000 EUR.

#### **Appendix**

- I. Timetable
- II. Detailed Cost Calculation

Appendix I: Timetable																								
PROJECT IMPLEMENTATION PHASES/MONTHS																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Inception Phase																								
Identification and selection of start-up's in value-added sectors																								
Identification and institutional and capacity reassessment of implementing institutions																								
Kick-off meeting/ introductory workshop to introduce the new instrument and its main benefits for start-up's																								
Inception report																								
Implementation Phase																								
Development of training and service modu- les tailor made to the needs of the start																								
Provision of training to the selected start-up's																								
Provision of services to the selected start-up's																								
Marketing and Communication Strategy																								
Awareness raising campaign for financial institutions and public																								
Workshop for business services providers (BI's, BIC's, consultants) and local authorities (government, ministries, municipalities, associations, federations)																								
Wrap-up event																								
Extra Activities																								
Final report																								

Appendix II: Detailed Cos	t Calculation
<ol> <li>Administrative personnel (at least 2 employees per BIC/BI for 2 years, Including all taxes)</li> </ol>	EUR 20.000
Implementation Phase:     Development of training and service modules for start-up's     Training for start-up's     Services for start-up's	EUR 51.000
Marketing events     (Kick-off meeting, awareness raising campaign,     workshop, wrap-up event)	EUR 14.000
TOTAL	EUR 85.000

## **Innovation Assistant**

Saxony/Germany (SMWA)



## **INNOVATION ASSISTANT**

## Peter Nothnagel

Saxony State Ministry for Economic Affairs and Labour (SMWA)









## 1. Framework

- Population: approx. 4,25 mio. (2006)
- Working market (population): 1.905.000
- GDP: 88,7 billions €
- R&D expenditures of industry: 901,5 mio. € (2005)
- Number of SME in region: approx. 135.000 (2004)
- R&D infrastructure: 4 universities, 5 technical colleges, 14 Fraunhofer-institutes/ institutions, 6 Max-Planck-Institutes, 7 Leibniz-Institutes, 1 Helmholtz-Institute, 2 non-profit research enterprises, 42 TT-centers +incubators
- Number of students: 106.800 (Wintersemester 2006/2007)









## 1. Framework

#### **Basic economic facts**



Economic growth: (real growth of the GDP)

4,0 % Saxony,

Ø 2,8 % new Länder with Berlin,

Ø 2,7 % Germany



**Unemployment:** 

14,2 % (October 2006: 15,3 %)

City of Dresden:12,5% City of Görlitz: 22,4 %

14,7 % new Länder with Berlin

8,8 % Germany



Industrial R&D-staff:

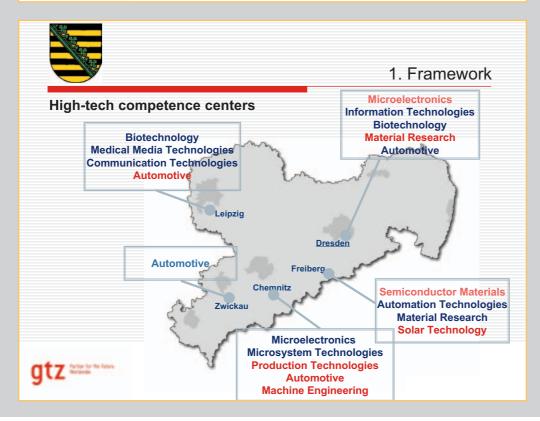
ca. 45,1 % of new Länder without

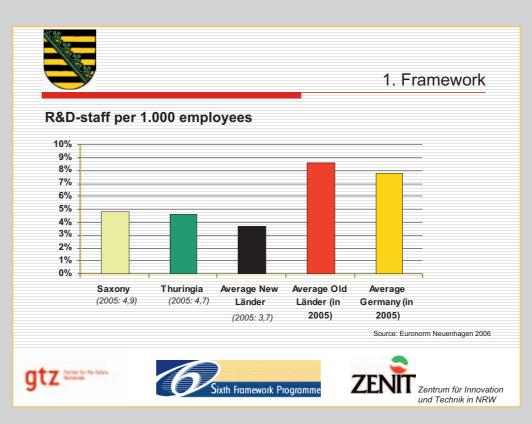
Berlin

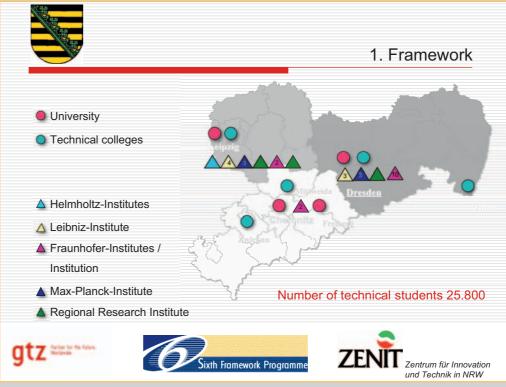


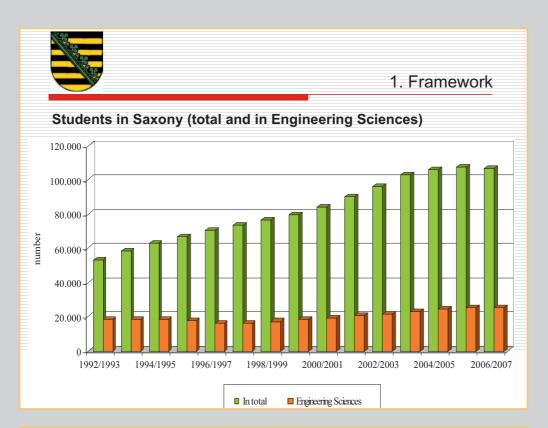














## 1. Framework

#### The Problem:

- · SME dominated economy
- a lot of small companies without (or with insufficient) own R&D-capacities
- lack in technology transfer into small companies
- · on the other hand: big number of (technical) students/year

#### The Reason:

 market failure: young graduates are quite well educated and have good chances all over Germany and European market. Wages in Saxony are lower than in western parts of Germany. A lot of the young high-potentials leave Saxony after education.

#### The Consequence:

 initiative to stimulate SME to hire young graduates (designed by the SMWA in 1995) to overcome market failure









## 2. Description of the instrument

- Support for the employment of graduates from esp.
   universities and technical colleges in SME without or with unsufficient R&D potentials
- Minimum duration of employment: 1 year (max. 2 years)
- Max. number of graduates per enterprise: 2
- Assistant has to have "fresh knowledge" (last degree < 1 year)</li>
- Assistant must not be a relative of the company-owner
- Assistant must not already be an employee of the company









## 2. Description of the instrument

More assistants per enterprise can be supported, if

- the previous assistants have got permanent jobs in the enterprises,
- at least two further jobs/ innovation assistants were created in the production departments of the enterprise,
- the proportion of R&D staff in the company is less than 30%









## 2. Description of the instrument

## The most important measures:

- Support for the employment is linked to the realisation of innovation and technology oriented projects (funded or nonfunded)
- Grant of up to 50% of assistant's gross salary (including employer's share)
- Limit of eligible costs (approx. 2.800 €/month corresponding to the current agreement on tariffs in the public sector)
- max. 2 assistants/company can be supported simultaneously
- more than 2 assistants only for companies with successful projects









## 2. Description of the instrument

## Main goals of the instrument:

- Strengthen the economic competitiveness of SME
- Increase the R&D activity of SME
- Improve the reception capacities of SME → thus enabling supported firms to realize joint projects with research institutes
- · Strengthen university-industry-links
- Support technology transfer from universities and technical colleges
- · Help to create highly qualified sustainable jobs
- Contribute to diminish regional brain drain
- Tool against the demographic problem in Saxony









## 2. Description of the instrument

#### Initiator:

 Saxony State Ministry for Economic Affairs and Labour - SMWA (www.smwa.sachsen.de)

## Implementer:

• SAB The Development Bank of Saxony (www.sab.sachsen.de)

#### Partner:

- Commercial enterprises (as beneficiaries)
- European Union (European Social Fund as co-financing instrument in the structural funding period 2007-2013, from 2000-2006: EFRE)
- · Chambers of Commerce and Industry, Chambers of Crafts,
- Technology consulting centres for communication purposes









## 3. Impact/ results of the instrument

## **Quantitative (1995 – 2006)**

- Number of supported innovation assistants: 592
- Project costs: appr. 46 Mio. €
- Grants: approx. 20 Mio. €
- New jobs (as of 12/06): 1.614

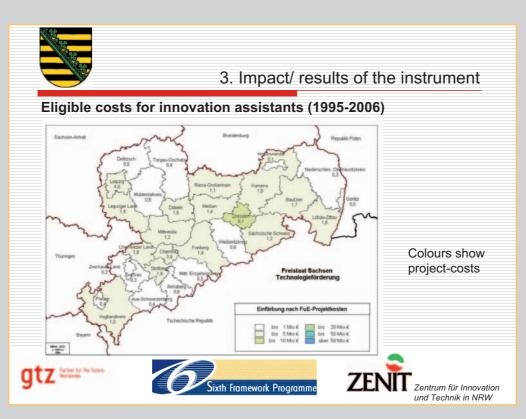
## Qualitative

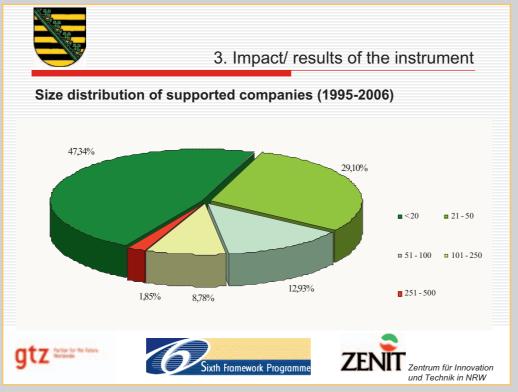
- Efficient instrument: good grant per 2 years/job ratio: approx.
   33.800 €/assistant (approx. 12.300 €/new job (including add. staff))
- · Strenghtening of innovation force of SME
- High percentage of satisfaction of employers with "their" assistants (87 %)

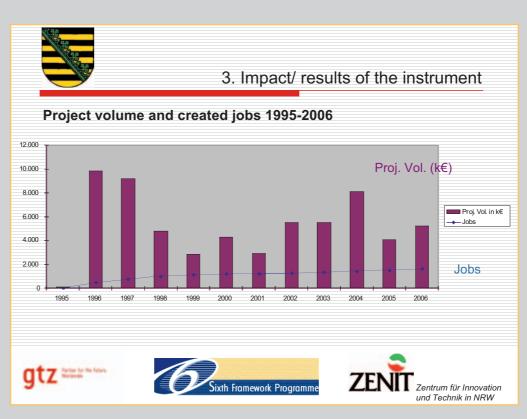


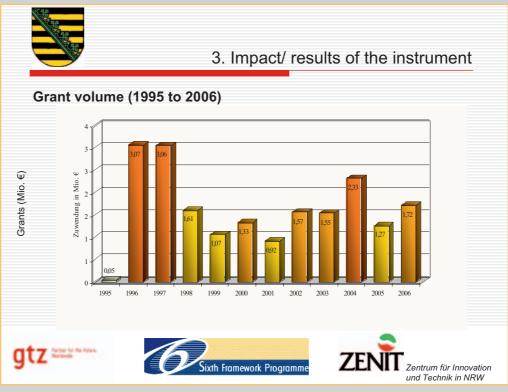


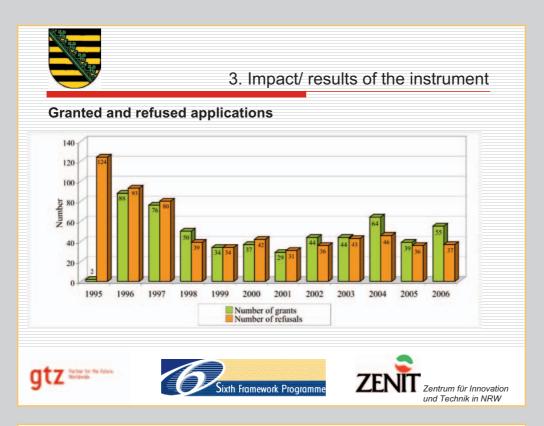














## 4. Success factors of the instrument

#### **Success factors**

- 1. Bringing the information about the program to the companies (PR, SMWA, Chambers of Commerce, ...)
- Motivating partners in the universities (transfer agencies and/ or experienced people that inform students and promote the program) - own interest should be to get company-contacts for later projects
- 3. Continuity in the program-availability and -administration
- 4. simple and transparent application procedure and treatment
- 5. Possibility for hire/test/fire or long-term-partnership for both sides









## 5. Bottleneck of the instrument

- · Identification of partners (company student)
- · Open the mind of the company, that R&D is necessary
- Competition with big companies for good graduates
- Low wages in SME (<< 50% than in big companies)</li>
- Tendency of graduates to seek employment in R&D departments of large enterprises (salary, career perspectives, reputation etc.)









## 6. Transformation needs

#### 1. Framework

- · Enough university graduates available
- Operating technology funding system, that shows SME the possibilities and advantages of (funded and non-funded) R&D-projects

## 2. Implementation

- · The grant must be adapted to the regional payment level
- Projects must be clearly defined both in quality and duration

#### 3. Possible Improvement

 There should be stronger incentives to motivate professors/ universities to bring their graduates into the programme.









## 7. Surprises

- · Change in the main-target of the program:
  - 1995 increase the R&D activity of SME and create jobs for our young people (to avoid unemployment)
  - 2000 increase the R&D activity of SME and keep the graduates in Saxony
- Exorbitant percentage of satisfaction of employers with "their" assistants > 80 % of assistants stay permanently in the company!
- Interesting: just now we start the 2nd external evaluation of the program









## 8. Revision and adjustments

- Internet-based contact forum for graduates and companies, that are interested in becoming or hiring Innovation Assistants
- Meetings for experience-exchange inside the groups of Innovation Assistants and Companies that employ those (separate meetings of both groups and a joint meeting)
- Combine the ideas and goals of Innovation Assistants (Saxony) and Competence Brokers (Norway)









## 9. Assessment/Appraisal

	Strength	Opportunities	
Analysis	<ul> <li>good grant/job ratio</li> <li>addresses specific R&amp;D deficits in Saxon SME</li> <li>widely accepted</li> <li>simple application</li> <li>simple prove of expenses</li> <li>easy to communicate</li> </ul>	possibility to enlarge innovative activities     creating an argument to work for a Saxon SME	External
Internal	Weaknesses  • Project success fully dependent on the assistant (sometimes too early an end e.g. due to pregnancy or notice of termination by the assistant himself)	Threats • depends on the sufficient availability of qualified staff - lack of graduates in some industrial sectors (e.g. textile)	Analysis







# Transfer Scheme

## Innovation Assistant - North Rhine-Westphalia/Germany (ZENIT)

Project name	IInnovation Assista	nt					
Region of origin (transferring region)	Saxony/Germany						
Region adapting the instrument (receiving region)	NRW/Germany						
I. Transferability Check List							
	Yes	Action needed	No				
1. Do you actually battle the same problem that is addressed by the instrument?							
<ol><li>Does the instrument fit into the given regional planning/national strategy?</li></ol>							
3. Are the institutional prerequisites fulfilled?							
4. Are the prerequisites regarding knowledge structure fulfilled?							
5. Are the financial resources available?							
6. Is the instrument compatible with the overall incen structure in your region/country?	tive						
<ol><li>Is the instrument compatible with/additional to exist projects in your region/country?</li></ol>	ting <b>I</b>						
Are the requirements regarding social capital,     credibility, reliability fulfilled?	-						
II. Pre-implementation needs							
The "Innovation Assistant" programme has been carried out in a similar form in NRW between 1986 and 2005. Several external evaluations have documented the excellent input/output ratio of the programme and its high R&D stimulating effects in SMEs. However, since the end of 2005 there were no more funds provided. The last elections in 2005 led to a move in the overall economic policy of the land NRW. The new conservative coalition of CDU and FDP gives much more emphasis on the improvement of existing framework conditions rather than on addressing existing problems by launching specific projects and promotion programmes. Existing public budgets are mainly reserved for branch contests.							
However, the addressed problem by the Innovation Ass performance of Germany and NRW has improved in 20 programme is even more necessary as in the years be and engineers but those upcoming innovators are being the south of Germany. Hence, it is urgently necessary t	06 and 2007, the exi fore. The SMEs are u absorbed by financial	stence of the Innov rgently looking for ly strong big firms,	ation Assistant young scientist especially from				
III. Adaptation needs of the instrument on the level	. of						
Content: Some NRW specific adaptations to the saxonian version of the "Innovation Assistant" programme should be proved:							
1) The funding limit for eligible personnel costs might	be lower than 2.800	₽/month.					
The funding scheme might include a financial incen would result in higher eligible cost for women migl		n (Gender Mainstre	aming). This				
<ol> <li>SMEs should also focus on internationalisation of t expand the funding scheme also to projects that he in SMES. Here the scheme would address especially disciplines with foreign language skills.</li> </ol>	lp the SME to assist	the internationalis	ation process				

4) Given the large number of eligible SMEs (800.000 in NRW) it may makes sense to limit the number of funded Innovation Assistants per SME. Alternatively it could be a solution to correlate the number of funded Innovation Assistants per firm with the employment policy of the applicant firm: If the firm has kept the Innovation Assistant after the funding had ended (after one year) for at least another two years than the firm might be eligible for another Innovation Assistant again.

Infrastructure: no adaptation needed. SMEs are the backbone of the NRW economy. There are 723,000 small and medium-sized companies in NRW (2007), which account for account for 99.7 % of all the companies in the state. SMEs provide jobs for 67.8 % of all employed people. However, just a small number of these companies do their own research and innovation activities although NRW offers plenty of opportunities to foster the own R&D capacities. More than 450,000 students in 59 universities and technical colleges are an excellent potential to employ innovative personnel.

**Institutions:** There are many institutions and organisations available that have experience with the organisation, management and implementation of such kind of programmes

Finance: Firstly, there must be the financial guarantee to run the program for at least four years. This includes the availability of money of the whole period. If the government in NRW had to appoint the necessary money for the programme in the national budget year by year again, there would be no acceptance of the program by SMEs. It also would bring technical problems for those Innovation Assistants who do not start on the first of January and who's funding period ends 31st of December. To make it short: It must be guaranteed that a funding is possible over the turn of the fiscal year. Secondly, the payment should be organised repercussive. This means that the SME gets every six month a payment. The last payment should be bound to the entry of the final report (see also monitoring and implementation) from the funded Innovation Assistant.

Monitoring and Evaluation: There should be a final report on the development of the innovative project the Innovation Assistant has been employed and funded for. The entry of the final report should be obligatory and the final payment should be bound to the report. In addition, there should be an obligation for the Innovation Assistant to report on the project and his status inside the firm six month after the funding has ended. This obligation should be signed by the Innovation assistant already in the beginning of the application process.

Process and implementation: The instrument can either be implemented by a private, a public or a private non-profit institution. The payment for the organisation and implementation service of the programme should depend on the number of applications monitored per year and the number of funded people as such. It is also possible to bound the service cost as a percentage of the overall funding per year (however, this can have unintended incentive effects). I propose, to launch a contest for the task (precise terms of reference needed) and select the best price/quality proposal.

## Draft Proposal

## Innovation Assistant - North Rhine-Westphalia/Germany (ZENIT)

#### Name of the instrument

Innovation Assistant

## **Applying Institution**

ZENIT GmbH Zentrum für Innovation und Technik in NRW, Mülheim an der Ruhr, North Rhine-Westphalia (Germany)

## Managing Division in Institution, Address Commissioning body

Ministry of Innovation, Science, Research and Technology of the State of North Rhine-Westphalia Völklinger Straße 49 40221 Düsseldorf

Ministry of Economic Affairs and Energy of the State of North Rhine-Westphalia Haroldstraße 4 40213 Düsseldorf

#### I. Idea in a nutshell

Overview on a) background, b) objective, expected impact and total cost

#### Background

NRW has an economy dominated by SMEs, most of them with no or else insufficient own R&D capacities. On average, the R&D expenditure of the manufacturing industry in NRW amounted in 2005 to just 5.32 billion Euros or 1.1% of GDP. Only 58% of SMEs performed their own innovation activities (ZEW News 11/2005). At the same time, SMEs in North Rhine-Westphalia face strong competition from larger enterprises (mainly from the south of Germany) when seeking young scientists and engineers, the backbone of innovation.

The "Innovation Assistant" programme links employment to the realisation of innovation and technology-oriented projects in small and medium-sized enterprises. SMEs with no or insufficient R&D potential are given a financial incentive to employ graduates from universities or technical colleges in order to start their own innovation activities. Additional positive (external) effects are the enhanced capacities, which enable the firms receiving support to implement joint projects with research institutes. This helps to create more highly qualified and sustainable employment and contributes to reducing regional brain drain.

At present, the programme is running in the German federal states of Saxony, Berlin, Brandenburg, Baden-Württemberg, Lower Saxony and abroad in Upper and Lower Austria and the Spanish region of Asturias. Saxony's approach is to award a grant covering up to 50% of an assistant's gross salary (including employer's contribution) as an incentive to the SME to start its own innovation activities and foster internal innovation capabilities.

SMEs are eligible which have less than 250 employees and whose percentage of R&D staff is under 30%. The minimum duration of employment is one year (max. 2 years). The Innovation Assistant's last university degree must have been completed no more than one year earlier. A maximum of 2 graduates can be funded as "Innovation Assistants" per enterprise. More assistants can be supported if the previous ones have obtained permanent employment in the enterprise or at least two further positions have been created in the production department of the enterprise.

Several external evaluations have documented an excellent input/output ratio of the programme [the grant/employment ratio in Saxony is approximately 33.800 /assistant and 12.300 /new job (including assistants)] and a high level of R&D stimulation in SMEs. 87% of the employers were "highly satisfied" with "their" assistants, of which over 80% remained long-term in the enterprise.

#### Objective:

R&D activities are still the domain of large enterprises and multinationals. In Germany, just 13% of all R&D expenditure and 20% of all R&D personnel (Stifterverband 2008) can be attributed to enterprises with less than 500 employees. Since 2000, there has been a positive shift towards SMEs, but in the last three years there has been a period of stagnation which coincides with the improved economic performance of Germany and NRW in 2006 and 2007.

SMEs are searching desperately for young scientists and engineers! Besides the already known tendency of graduates to look for employment in the R&D departments of large enterprises (salary, career prospects, reputation etc.) or to pursue an academic or scientific career, in phases of economic upturn, earning perspectives become even more relevant. Hence aspiring innovators are being absorbed by financially strong large enterprises and economically more powerful regions, especially from the south of Germany!

A recent analysis of HIS4 documents revealed a very critical migration mismatch of university graduates within Germany. After graduation, a significant percentage of graduates leaves the regions "North" and "East" towards the south of Germany. With regard to the region "North", the chart on the left must be interpreted as follows: 67% of gainfully employed graduates stay in their federal state, 80% in the region "North". 4% of graduates migrate to another country. The imbalance occurs when looking at inner-German migration. 13% of all students that graduated at universities in the region "North" subsequently work in the region "South". On the other hand, only 6% of those who completed their studies in the south of Germany migrate afterwards to work in the North. The imbalance for the region "East" is even worse. In absolute numbers, the region "North" loses over 2.050 graduates (equivalent to 7% of total graduates) ("East" 6.500 graduates) each year to the "South" of Germany. Particularly dramatic is the loss of graduates



in the disciplines "engineering", "electrical engineering", "information technologies", "industrial engineering" "mathematics" and "natural sciences". For the region "North" the negative balance amounts to over 620 graduates or - 6% of all graduates in these disciplines in the respective region. This regional brain drain is worsening, despite the excellent starting position of NRW with the densest R&D infrastructure in Germany: 59 universities and technical colleges with around 450.000 students and 40.000 graduates every year [of which 16.500 persons complete their studies in science or engineering (ISCED 5 & 6)]. Intelligent solutions are needed to enable medium-sized enterprises with no or insufficient R&D potential to employ graduates from universities and technical colleges.

### Conclusion:

• From the point of view of small and medium-sized enterprises, the implementation of the Innovation Assistant programme is as necessary in economic boom phases with a simultaneous shortage of quali-

fied people as in phases of economic slowdown.

- The employment of an "Innovation Assistant" increases the R&D activity of SMEs and improves their receptiveness for additional R&D at the same time (thus enabling the firms receiving support to implement joint projects with research institutes). This strengthens the economic competitiveness of SMEs in the medium and long term.
- Overall, the "Innovation Assistant" instrument supports technology transfer from universities and technical colleges.
- The "Innovation Assistant" programme helps to create highly qualified and sustainable employment.
- The "Innovation Assistant" programme contributes to reducing regional brain drain.

## I. Rationale specified

NRW has around 723.000 SMEs (2007) which account for 96% of all enterprises. SMEs provide employment for 67.8 % of the working population. However, only a small number of these companies perform their own research and innovation activities, although NRW offers plenty of opportunities to foster R&D capacities.

The "Innovation Assistant" programme addresses enterprises in the manufacturing sector. Even if one considers enterprises with between 20 and 250 employees as the core group, as their funding promises the best innovation leverage effect, there is still a total number of 10.500 firms in NRW (2005) where the assignment of Innovation Assistants promises a disproportionate improvement of innovation capabilities. See following table:

Table: Firms, employees, Working hours, gross wages and turnover in manufacturing industries in North Rhine-Westphalia between 1991 and 2005									
Year	Firms	Employees	perfomed	Gross	Total Turnover*				
		in total	working hours	wages	total	of which foreign sales			
	monthly	average	1.000		in Mill. EUR				
1991	11.887	2.037.974	2.248.514	56.179	265.059	68.826			
1992	11.911	1.982.960	2.166.765	57.944	265.818	68.594			
1993	11.696	1.842.951	1.921.702	55.242	247.141	63.020			
1994	11.284	1.721.262	1.809.733	53.176	254.263	67.889			
1995	10.587	1.649.688	1.739.532	53.201	263.851	73.592			
1996	10.362	1.586.295	1.616.545	52.487	258.473	76.476			
1997	10.054	1.520.595	1.542.652	51.009	266.556	83.594			
1998	10.419	1.519.988	1.552.956	51.313	269.928	86.315			
1999	10.721	1.496.957	1.504.802	51.453	274.880	89.972			
2000	10.689	1.472.072	1.484.195	51.897	299.285	103.843			
2001	10.935	1.453.055	1.436.239	51.713	297.324	105.122			
2002	10.504	1.381.853	1.345.081	50.371	287.287	102.479			
2003	10.596	1.345.222	2.051.719	49.917	286.904	103.326			
2004	10.577	1.298.344	2.014.175	49.341	308.303	116.096			
2005	10.458	1.273.358	1.975.618	49.154	322.628	124.899			
* without va	lue added tax, So	urce: LDS NRW (2006	i), statistisches Jahrbuc	h Nordrhein-West	tfalen 2006, p. 327				

It should be a political goal to motivate at least an additional 100 SMEs per year to innovate. This is around 1% of the core group of SMEs.

In Saxony's approach, the costs for one "Innovation Assistant" amount to an average of 33.800 Euros per year. Hence an overall budget of 3.55 million Euros per year (including administration of the programme and excluding costs for marketing the programme) must be mobilised by the North Rhine-Westphalian government on an annual basis in order to re-launch the programme (see detailed calculations in Appendix 1).

An alternative could be a capped funding scheme, e.g. 25% of the salary but a maximum of 12.500 Euro per Innovation Assistant. In this case, the total cost per year would amount to approximately 1.5 million Euros (see detailed calculations in Appendix 1).

The programme can be co-financed with European Social Fund resources in the structural funding period 2007 - 2013, as is already the case in Saxony.

The programme officers should maintain close contact with the (federal) ProInno programme office (since July 2008 "ZIM Programme"). ZIM offers financial aid for technologically ambitious projects in SMEs. This also includes financial support for the R&D personnel involved. Some NRW-specific adaptations to the Saxon version of the "Innovation Assistant" programme should be taken into consideration:

- 1) The funding limit for eligible personnel costs might be lower than 2.800 /month.
- 2) The funding scheme might include a financial incentive to employ women (Gender Mainstreaming). This would result in higher eligible costs for women than for men.

- 3) SMEs should also focus on the internationalisation of their activities. For this reason it makes sense to expand the funding scheme to cover projects that assist the internationalisation process in SMEs. Here the scheme would in particular address young graduates in scientific/engineering disciplines with foreign language skills (EuroAssistant).
- 4) Given the large number of eligible SMEs in NRW, it may be useful to limit the number of Innovation Assistants funded per SME. Alternatively, a solution could be to correlate the number of Innovation Assistants funded per firm with the employment policy of the applicant firm: More Innovation Assistants can be supported if the previous Assistant obtained permanent employment or at least two additional positions in production have been created per Assistant.

#### II. Implementation strategy in detail

The implementation strategy should be based on four different pillars:

- Information campaign through the Programme
   Management Unit addressing all multipliers who
   offer services to the target group of SMEs:
   Chambers of commerce, chambers of crafts, sectoral
   associations, business development agencies, business
   consultants, cluster agencies, technology transfer
   units at universities, technology consultance.
- 2) An ongoing series of programme presentations at universities/universities of applied sciences to inform potential graduates about the programme's recruiting procedure and incentives (in cooperation with the technology transfer units, specific student bodies at the universities and/or AIESSEC); Presentation of the programme at career congresses for university graduates.
- 3) Direct information for SMEs via mail or email and telephone using the NRW.Europa Network (former IRC and EIC network); information via a specific homepage.
- 4) Information for the general public by means of media: newspapers, radio, television, articles in specific magazines.

#### a) Project duration:

The overall duration of the programme should be at least four years (plus phasing out period) as information campaign and public marketing of this new initiative need at least one year before they show effect

#### b) Target group

- SMEs (from manufacturing sector) with between 20 and 250 employees
- Graduates from universities/universities of applied sciences

#### c) Implementation activities

The instrument can either be implemented by a private, a public or a private non-profit institution. Payment for management of the programme should depend on the number of cases monitored per year and the number of persons funded. It is also possible to link the service cost as a percentage of the overall funding per year (this can however have unintended incentive effects). We propose that a competition for the task be launched (precise terms of reference needed) and the best price/quality proposal be selected.

Specific implementation details:

- a) Inception phase: Kick-off seminar for key players/multipliers to introduce the new instrument and its main benefits for SMEs
- b) Implementation phase: Road show at universities, SMEs, exhibitions
- c) Marketing & communication: See activities listed in Appendix I.

#### d) Description of support facilities

The instrument can be implemented in two ways:

- a) Using EU funds as a co-financing instrument: In this case, the instrument should be approved by the European Commission. This also implies additional monitoring and administration activities.
- b) Using only regional funds: The programme is then relevant in terms of de minimis and the beneficiary SME must sign a corresponding declaration. De minimis means that an enterprise may only receive public financial aid up to 200.000 Euros within a 2-year period. The Innovation Assistant programme amounts to 15.000 Euros of de minimis funds per year.

#### e) Assumptions and risk assessment

- The overall success of an innovation project for which the Innovation Assistant is employed cannot be guaranteed in advance.
- It may also occur that the Innovation Assistant seeks alternative employment before completing the innovation project in the firm.
- It may occur that the Innovation Assistant and the firm are not compatible.

#### f) Success factors for implementation

Essential preconditions for implementation are fulfilled since:

- The objective of the Innovation Assistant programme matches perfectly the political target of the NRW government to foster innovation capabilities in SMEs.
- Secondly, several institutions and organisations are available that are experienced in the organisation, management and implementation of this kind of programme.
- The knowledge environment in NRW in terms of universities is ideal: 59 universities and technical colleges produce over 40.000 graduates each year.
- The trust environment is optimal as the "Innovation Assistant" programme has already been carried out in a similar form in NRW between 1986 and 2005. Hence the programme is well known and was frequently used by still existing SMEs.

Several external evaluations have documented the
excellent input/output ratio of the programme
[12.300 Euro/new job (including assistants), Saxony
figures] and its high level of R&D stimulation in
SMEs. A renowned institution (ZENIT) implemented the programme on behalf of the Ministry of
Economic Affairs.

However, only limited financial resources are available. Existing public budgets are mainly reserved for sectoral competitions rather than for addressing existing problems by launching specific projects and programmes. Thus the grant must be adapted to the regional salary level and projects must be clearly defined both in quality and duration.

#### g) Monitoring and evaluation

There should be a final report on the innovative project for which the Innovation Assistant was employed and funded. Submission of the final report should be obligatory and the final payment should be dependent on the report. In addition, there should be an obligation for the Innovation Assistant to report on the project and his/her status in the enterprise six months after the funding has ended. This obligation should be signed by the Innovation Assistant at the beginning of the application process.

#### h) Sustainability

An initiative such as the "Innovation Assistant" programme is designed as a financial incentive on the basis of public funding. Hence the programme cannot develop a self-supporting character.

#### i) Costs

Firstly, there should be the guarantee to run the programme for at least four years. This includes the availability of funds for the whole period. If the government in NRW has to allocate the funds necessary for the programme in the national budget year by year, SMEs will not accept the programme. It also would lead to technical problems for those Innovation Assistants who do not start on 1st January and whose funding period ends after 31st December. In short: A guarantee is needed that funding is possible over the turn of the fiscal year.

Secondly, the payment should be sliding. This means that the SME receives a payment every six months. The last payment will be dependent on the submission of the final report (see also monitoring and implementation) by the Innovation Assistant.

#### **Appendix**

- I. Logical Framework of implementation with time schedule
- II. Detailed calculations

#### Appendix 1: Logical Framework of implementation

#### Selection of qualified Programme Management Unit via tender

Management Unit organises Information Day about "Innovation Assistant" programme for potential multipliers in the region: Regional development agencies, chambers of commerce, innovation consultants, other intermediary institutions which address SMEs

Qualified consultation (by telephone or direct contact)

Dissemination of application forms

Application not recommended

Submission of complete application to Programme Management Unit (forms, project description, annexes)

Assessment of the application:

(under economic, technological and formal aspects), if necessary contact to applicant enterprise)

Decision on the application

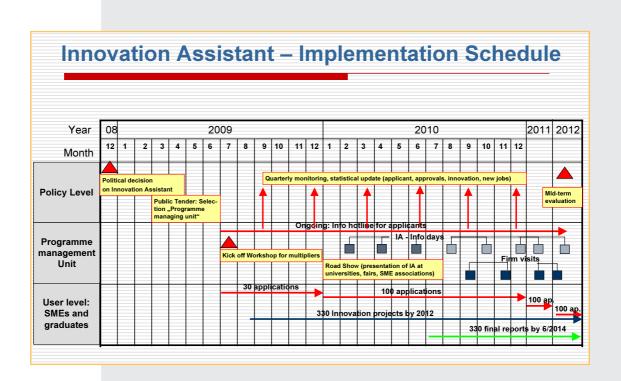
Approved by Programme Management Unit

Recommendation to reject the application

## Project support:

- Payment of grants
- Project monitoring/controlling (assessment of reports, if necessary on-the-spot visits)

Final report on project expenditure: Applicant compiles final report and reports about his employment status six months after the end of the project



#### Appendix 2: Detailed calculations

The goal in NRW should be to motivate at least 100 SMEs per year to commence additional innovation activities.

#### Calculation alternative 1 (approach in Saxony):

100 Innovation Assistants
 Average salary of Innovation Assistant: 45.000 Euro (plus 20%) = 54.000 Euro (gross employer cost) (engineer, diploma in natural sciences)
 50% funding from programme: 27.000 Euro grant per Innovation Assistant

2.700.000 Euro direct cost for Innovation Assistants per year

+ 7% for Programme Management Unit per year (175.000 )

Total 2.890.000 per year

### Total cost for a 4-year period:

11.832.000 Euro (policymaker's perspective)

#### Calculation alternative 2 (adjusted approach):

100 Innovation Assistants
Average salary of Innovation Assistant: 45.000
(plus 20%) = 54.000 (gross employer cost) (engineer, diploma in natural sciences)
25 % funding from programme with grant cap at
12.500 Euro per Innovation Assistant (15.000 Euro if Innovation Assistant is female)

1.250.000 Euro direct cost for Innovation Assistants per year

+ 7% for Programme Management Unit per year (87.500 )

Total 1.337.500 Euro per year

Total cost for a 4-year period: 5.350.000 Euro (policymaker's perspective)

#### Additional costs:

- a) Should the programme foresee integrating additional training sessions for the Innovation Assistants, these training costs must be calculated in addition [ca. 4.000 Euro per training (covers fee for trainer, catering, organisation, etc.)] (ca. 8.000 Euro per year).
- b) Marketing expenditure is not in the above budget: advertising the programme in newspapers, presentations of the programme at exhibitions (either for graduates or for SMEs), publications in professional journals, information sessions (ca. 25.000 Euro per year).
- c) At the beginning of the first year, it might be advantageous to organise a road show to all universities/universities of applied sciences (59 universities and technical colleges) which can be roughly calculated at 60.000 Euro including travel costs. In the subsequent years, presentations should be made only at selected universities (5-10 presentations p.a.).
- d) For a 4-year period, the total cost would amount to: 11.560.000 Euro (grant plus management cost) + 32.000 Euro (training for Innovation Assistants) + 100.000 Euro (PR, marketing) + 60.000 Euro (initial road show) +20.000 Euro (regular presentations).
- e) Should the Ministry plan an external evaluation after a four-year period, then the calculated cost for this would be 60.000 Euro.

## **INN-ACT**

Western Greece (RWG)



## **INN-ACT**



## Dr. Stefanos Michos

Regional Development Fund of Region of Western Greece











1. Framework



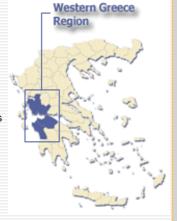
#### Region/country: Region of Western Greece/ Greece

- Population: 741.282 inhabitants
- Working population: 261.278 persons
- Unemployment rate: 8,41%
- GDP: 6.813 million Euro in 2001
- · R&D infrastructure: 3 technology centres and parks,
- · 4 universities and technical colleges, 5 research institutes
- · R&D expenditures of industry: 0,6% of GDP
- Number of SMEs in region: over 37.000
- · Main industrial sectors: Food-Beverages,
- · Metal Products, Construction
- · Main technology strength: ICT
- · Other: Approximately 38.000 students











#### 1. Framework

#### The Problem

- SME constitute 99,9% out of the total local firms
- insufficiency of many SME to ensure adequate funds
- many entrepreneurs are not willing to invest on R&D

#### The Reason

 market failure: many SME encounter serious problems in distributing and promoting their products in the markets; they cannot expand their businesses and are highly uncompetitive

#### The Consequence

 initiative to stimulate SME to invest on R&D in order to efficiently confront market failure









## 2. Brief description of the instrument

RWG managed to play a supplementary but crucial role to the application of state-of-the-art and emerging innovative mechanisms and processes to high priority regional sectors, such as competitiveness of SME, transition of SME to the new digital economy, health and safety of citizens and support of the traditional production sector.

**Initiator:** DG REGIO (Innovative Actions Programme)

Implementer: Regional Development Fund of Region Western Greece

**Duration:** 27 months (1/1/2002 – 31/03/2004)

**Structure:** 6 Actions → 12 Sub-Actions

**Budget:** 3.609.412 € (<u>ERDF</u>: 2.852.265 €, <u>National</u>: 113.251 €, <u>Private</u>:

643.895 €)

Partnership: Public and private sector of the region









## 2. Brief description of the instrument

<u>ACTION 1</u>: Promotion and implementation of innovations for strengthening SME competitiveness through recent technological advances

Sub-Action 1.1: Baseline projects for innovation and development

Sub-Action 1.2: Projects for incorporating innovation in the production process

- 1. Establishment of a supervising mechanism (Observatory) of mainly the production sectors, with the aim of assisting the associations between SME
- 2. Enhancement of the SME in RWG through projects of applied research and introduction of innovation

ACTION 2: SME support for easy transition to the new digital economy

**Sub-Action 2.1:** Creation of a basic structure for supporting e-business

Sub-Action 2.2: Development of the e-business

Sub-Action 2.3: Enhancement and reward of innovation in e-business









## 2. Brief description of the instrument

#### Main goals of the instrument in Actions 1 & 2

- Opening channels of fruitful communication between research organizations and SME in the region for the easy diffusion of the technological innovation
- Establishing constant and useful bridges of collaboration and exchange of know-how between public research institutions and private R&D companies of the region in order for the latter to smoothly incorporate innovative methods and techniques in their production
- Contributing to the creation of new funding means for the introduction of innovation in SME
- Helping the economical transformation of a number of SME into viable and prospective companies of the new digital economy









## 3. Impact/results of the instrument

**Sub-Action 1.2.2**: Enhancement of the SME in RWG through projects of applied research and introduction of innovation

**Result:** Establishment and pilot operation of an integrate mechanism for pre-selection, consultancy support, and final selection of companies willing to invest in innovative technologies

#### What does it include?

- a bank for financing (optionally) part of the total investment cost.
- intermediate organizations for promotion of innovation and entrepreneurship,
- · a complete programme for submission of proposals,
- specific evaluation and selection criteria for the proposals,
- creation of investment documentation, such as market research, business plan, prototyping of new products (if required), IPR protection (if required), etc., and
- · on-going and ex-post evaluation.

#### **Additional Info**

Responsible:
Achaia Chamber of
Commerce

Partners:

Aetoloakarnania & Ilia CoC, NEA, BIC WG, Achaia Cooperative Bank

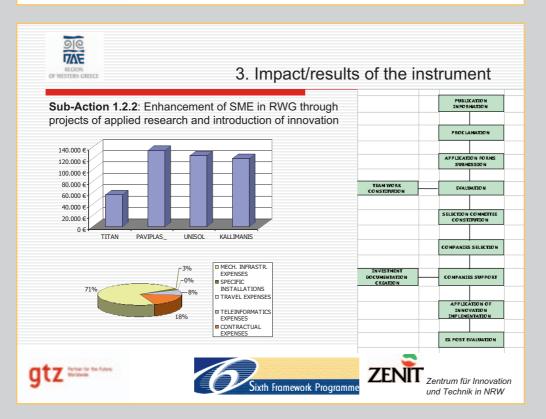
Number of companies funded: 4 Duration: 6 months (max.) Total cost of approved investments: 434.558 € ERDF funding: 205.429 €

Use of bank loans: **generally NO** (a special fund was created by the bank combining a mixture of loan + consulting support)











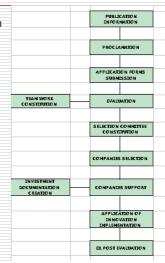
## 3. Impact/results of the instrument

Sub-Action 1.2.2: Enhancement of the SME in RWG through projects of applied research and introduction of innovation

- 1. From the funded companies' viewpoint
- further market penetration
- income increase
- reduction of production cost
- improvement of product quality
- exports' increase
- continuous technology transfer from academia

#### 2. From the regional authorities' viewpoint

- further utilisation of the tool in future programmes or initiatives (e.g., FANOS - Regional Innovation Pole of Western Greece, FILES - ESF Innovative Measures
- development of a local BAN to transform the present innovation fund into a real venture capital fund









Additional Info

Aetoloakarnania, Achaia &

**Ilia Chamber of Commerce** Number of companies

Total cost of the sub-action:

ERDF funding: 68.800 €

Responsible:

awarded: 14

86.000 €

**BIC WG** 

Partners:



## 3. Impact/results of the instrument

Sub-Action 2.3: Enhancement and reward of innovation in e-business

Result: Establishment and pilot operation of an integrated award mechanism for pre-selection, consultancy support, and final selection of companies investing in e-business

#### What does it include?

- intermediate organisations for promotion and support of innovation and e-business,
- a complete programme for submission of proposals,
- specific evaluation and selection criteria for proposals,
- creation of both moral and financial awards, and
- promotion of the awarded companies, through promotional events (awarding ceremony) and the relevant website









## 3. Impact/results of the instrument

#### Sub-Action 2.3: Enhancement and reward of innovation in e-business

#### Impact

- 1. From the awarded companies' viewpoint
- · good practice
- · encouragement to innovate
- incentive for competitiveness and extroversion
- 2. From the regional authorities' viewpoint
- further utilisation of the tool in future programmes or initiatives (e.g., FILES – ESF Innovative Measures Art.6)
- establishment of the award mechanism as an "institution" to promote and make known good or best practices in various sectors of regional development









## 4. Success factors

- Willingness of SMEs to invest in innovation
- Creation of a versatile mechanism (i.e., to select prospective new or existing entrepreneurs, to fund innovative business activities, to award best practise examples / success stories, etc.)
- Sharing a common view
- Professional management team
- · Wide dissemination of the results









#### 5. Bottlenecks

- Unwillingness of big private banks to undertake the cost of entrepreneurial risk through the creation of special funding means for SME
- Lack of innovation "culture" in local SME
- Distrust, generally, to investments
- · Insufficiency of cluster policies in RWG
- Bureaucracy and legislation sometimes do not favour technological upgrade and introduction of innovation in products, production processes & services









## 6. Transformation needs

#### 1. Framework

- Have a big number of uncompetitive, non-innovative SME
- · Find banks offering funding means for SME
- · Involve local actors who are willing to collaborate

#### 2. Implementation

- Form quickly and above all the appropriate committees, team works, etc. to prepare the corresponding mechanism
- · Determine costs to be spent

#### 3. Possible improvement

Strengthen the dissemination regarding the great capabilities of the mechanism









## 7. Surprises

Since the number of participating local actors was too high, someone would expect that many delays would emerge during the implementation of the 12 Sub-Actions.

However, everything went well according to the plan, and only a 3-months delay was required in the end. The most astonishing fact was the "indirect" competition among the partners to be consistent in the strict time frame and retain their good reputation.









## 8. Revision and adjustments

- Implementation on competitive basis
- Improvements of individual SME's to the linear business community
- · Simplification of procedures
- · More support of "soft" innovations with quick wins
- Involvement of training consultants (third party providers)
- Elaboration on the way to innovation and not on the innovation itself
- Increase of the number of SME's benefiting from the Programme







# Transfer Scheme

INN-ACT - Bratislava/Slovakia (BIC)

Project name	INN-ACT					
Region of origin (transferring region)	Western Greece					
Region adapting the instrument (receiving region)	Bratislava/Slovakia					
I. Transferability Check List						
	Yes	Action needed	No			
Do you actually battle the same problem that is addressed by the instrument?						
<ol><li>Does the instrument fit into the given regional planning/national strategy?</li></ol>						
3. Are the institutional prerequisites fulfilled?						
4. Are the prerequisites regarding knowledge structure fulfilled?						
5. Are the financial resources available?						
6. Is the instrument compatible with the overall incent structure in your region/country?	tive					
7. Is the instrument compatible with/additional to exist projects in your region/country?	sting					
Are the requirements regarding social capital,     credibility, reliability fulfilled?		-				
II. Pre-implementation needs						
An implementation strategy which will be included in all regional planning documents including sectoral operational programme is needed. This strategy should involve structural funds, local regional funds and national funds. The tools developed on national level should be harmonized with action taken within the programme. The awareness campaign should be organized to approach two focus groups: a/Owners/proponents of other compatible instruments and b/Potential users/companies						
III. Adaptation needs of the instrument on the level	of					
Content: An analysis of the needs of local focused growthe specific action lines. Most important, expected out b/ specific action lines, c/ needed measures of specific grants etc.	comes of this analysis	should be a/ rel	evant sectors,			
Infrastructure: The existing offer of relevant services vely used to exploit existing capacties of institutions i implement the programme, specifically in the area of tory equipment, and specific financial tools.	n place. Some new ca	pactities will be r	needed to			
Institutions: Several institutions are already in place and others). They should be involved in planning and i ces. Some action should be taken in order to prepare ded to carry out the instrument – specifically experts for specific action lines as they will be mostly part of should be created and capacity to build it (of NADSME). The Ministry of Economy should be involved in the present the institution accounts to the content of SMEs and	mplementing actions t NADSME for partnersh in due dilligence of pr f private institutions. P ) should be improved. paration process as ov	o prepare capacit ips with other ins ojects and consul ublic - private pa wner institution of	ies and resour- titutions nee- tants needed urtnership			
as the institution responsible for support of SMEs and	planning of Structural	. Iulius.				

**Finance:** There are some financial schemes available but they have to be tuned to accept opportunities of programme, and in addition to that, specific need of support of seed and start-up capital is needed. Questions of financing should be raised in the process of fine tuning of structural funds as they will be the most important resource for the instrument.

**Monitoring and Evaluation**: The process of monitoring and evaluation should be considered in the planning phase and should involve the Ministry of Economy as the institution responsible for SME development

**Process and implementation:** The implementation should be based on public-private partnership. Sustainable solutions involving private entities should be considered. The pilot project and success stories are suitable to support the implementation of the programme.

# Draft Proposal

INN-ACT - Bratislava/Slovakia (BIC)

#### Name of the instrument

Regional Innovation Center

#### **Applying Institution**

New created consortia for project implementation (by Slovak Technical University, Comenius University, Association of Industrial Research Institutes, Technology Institute of Slovak Academy of Sciences, BIC Bratislavy

# Managing Division in Institution, Address Will be justified

#### I. Idea in a nutshell

Overview on a) background, b) objective, expected impact and total cost

The instrument will be implemented in Slovakia in the Bratislava region. Bratislava region could be characterized as follows:

#### Governmental sphere and public administration

National governments in the new EU member states are still engaged in developing the market economy and harmonizing it with Western European standards, especially with regard to labor productivity. The low labour productivity is being counter-balanced with high labour intensity and low personnel costs. The main instrument in the catch-up process is investment not just into manufacturing but also into knowledge-based activities. Regional governments have been created just recently and they are in need to empower their know-how and skills in regional economic development in general and in knowledge-based economy support in particular. This applies also for Bratislava regional government.

#### R&D sphere

R&D expenses in new member states (NMS) are low compared to the EU-15; e. g. in Slovakia they constitute 0.8 % of the GDP. Manufacturing companies prefer to acquire solutions already developed elsewhere in lieu of cooperation with regional research stakeholders. On the other side, some of the NMS R&D universities and institutions are approaching European standards, having been taking an active part in European RTD programmes. However, they are encountering difficulties in marketing and transferring their research output to the local business community. The reasons are numerous: lack of resources, underdeveloped infrastructure (e. g. technology transfer and IPR infrastructure), underdeveloped interaction and communication among the R&D and industry spheres, etc. 65% of Slovak R&D is placed in Bratislava region.

Bratislava region is the region with high economic potential with strong need to enforce participation of local R&D capacities on innovation and to provide infrastructure to support participation of local companies on added value products. Until now no institution covering the area of innovation support is in place. This applies for both the regional and the national level. This fact is projected in the planning of structural funds, where in the Sectoral Operational Programme Competitiveness are planned funds to support Regional Innovation Centres with the task to initiate and manage action in the area of innovation support in individual regions.

The main objectives of the proposed project are:

- to analyse needs of local companies and to initiate specific instruments to support them in their innovation achievements
- to support technology transfer from local R&D resources to commercial companies
- to manage instruments for innovation support on regional level
- to bring specific financial instruments for support of innovation
- to network local innovation with international networks

The project is aiming to cover following gaps:

- communication between commerce and research
- need for specialized services to implement innovation
- · need for international networking
- need for specific financial instruments
- awareness

Indicative budget of tool is 1.700.000,- Euro Which corresponds to the planning of structural funds.

#### I.Rationale specified

The project will meet following needs

- better communication between R&D resources and commercial companies in order to focus applied research on the needs of industry
- specific services supporting technology transfer as:
- matching of offer and demand
- protection of IPR
- support of financing
- business planning
- due diligence
- triggering of private investment
- development/triggering of missing financial tools (seed capital, start-up phase financing)
- awareness of innovation (awards schemes, presentation of success stories)
- international networking

As no institution covering the area of innovation is in place the project is in addition to the provision of missing services is aiming also to co-ordinate existing activities in the region. The project will be directly supervised by the Ministry of Economy as the institution responsible for SOP Competitiveness.

The project will be in addition co-ordinated with activities of following ministeries

- Ministry of Education
- Ministry of Regional development
- Ministry of Finance

#### II. Implementation strategy in details

The implementation strategy will be carried out in following phases:

Inception phase: (Month 0-12)

In the inception phase following activities will be carried out:

- Institutional building of a Regional Innovation Centre
- · Acquiring of staff and equipment
- Detailed analysis of needs
- Tuning of services

Implementation phase: (Month 12-60)

- provision of the first set of services
- material infrastructure (spaces, incubators)
- consultancy
- technology transfer support
- financial awards
- triggering seed capital
- networking

Sustainability phase:

- initiation of new services (each has to have sustainable capacity)
- participation in projects
- co-ordinating regional innovation support infrastructure

Financing will be based on structural funds (Inception and implementation phase) within SOP Competitiveness

The tasks of individual partners will be:

- Mapping research and innovation capacity research institutions (Universities, Slovak Academy of Sciences, Research institutions)
- Detailed structure of services, staff training BIC Bratislava
- Contacts to companies BIC Bratislava
- Mapping the needs of companies BIC Bratislava

#### a) Project duration:

5 years with subsidies + sustainable activities of the Regional Innovation Center

#### b) Target group

Project will be targeted to SMEs with perspective to implement innovation and to bring product or technology innovation on the market.

Further institutions targeted and influenced by the project will be Slovak Academy of Sciences, Universities, Research institutions.

The sectoral focus of the project is following:

- Information technologies
- New materials

This focus will not limit participation of institutions or SMEs from other areas

The precision of the sectoral focus will be made in inception phase

#### c) Implementation activities

Following activities will be carried out:

Inception phase:

- Detailed analysis of needs
- Detailed planning of services
- Equipment
- Material infrastructure
- Training of staff
- · Networking with existing activities

Implementation phase

- Provision of services and infrastructure
- International networking
- Marketing
- Innovation of services
- Triggering missing financial instruments
- Co-ordinating complementary activities in the region
- Diversifying financial resources with final goal of sustainability of activities

#### d) Description of the support facilities

As the instrument is tailored to the specific planning by SOP Competitiveness of structural funds the financing - if approved - will be according to a specific call for the proposed instrument.

Further support and support facilities will be acquired through projects for appropriate funds (mostly FP and CIP, and national funds)

#### e) Assumptions and risk assessment

The instrument is based on existing experience of countries facing a similar situation as Slovakia. This fact minimizes the risks of implementation. However following risks could be envisaged:

- Lack of research capacities in terms of transferability to commerce
- Lack of experience to provide planned services
- Low sustainability of services

These risks are minimalized by the composition of the proposed consortium with a strong presence of R&D resources and experienced service providers with long-term contacts to enterpreneurial sphere.

#### f) Success factors for implementation

Success factors for implementation are the following:

- Success in acquiring structural funds
- Attracting R&D excellence to participate
- Attracting SMEs to use services
- Setting up services with high added value
- Success in triggering additional financial services
- Motivated staff
- · International networking

#### g) Monitoring and Evaluation

The project will be monitored and evaluated by specific rules applied by the implementing agency of structural funds involved. A detailed system of monitoring will be prepared after issuing of a specific call.

However following criteria will be monitored:

- number of companies supported
- financial funds distributed to SMEs
- success rate of participating companies
- technology transfer agreements
- others

#### h) Sustainability

The sustainability of the instrument will be based on:

- Funding of the start phase by public resources
- Development of high added value services with help of public resources
- Setting-up prices of material and non-material infrastructure (based on investment covered by public resources) which will make sustainable provision possible
- Participating in projects which will bring new services

#### i) Costs

Inception phase EUR 1,000,000,-Implementation phase EUR 700,000,-Total EUR 1,700,000

#### **Appendix**

I. Budget

II. Timeframe

#### Regional specificities

The draft proposal reflects specific requirements expected by the call within structural funds for Regional Innovation Centres.

### **Budget for Regional Innovation Centre**

#### Inception phase

Physical infrastructure 600000
Equipment 50000
Analytical activities 50000
Management
Training 100000
Acquisition
Other50000
Sub total

#### Implementation phase

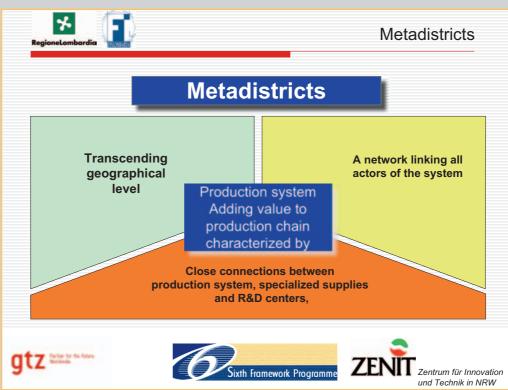
Marketing 100000
Management
Personnel
Other200000
Subtotal700000
Total

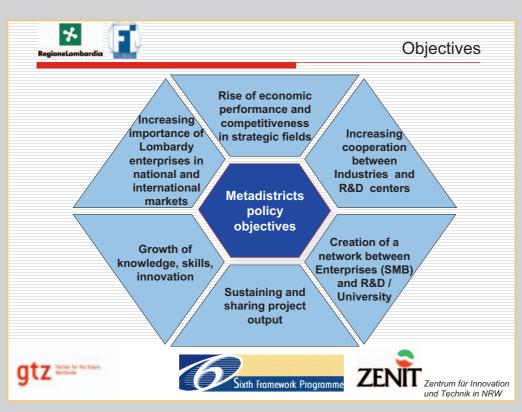
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Timeframe	e of KIC p	-	ear 1		
	1q	2q	3q	4q	
Inception phase	14		04	74	
Analytical activities					
Preparation					
Training					
Purchase of equipment					
Implementation phase					
Aquisition and marketing					
Provision of services					
1104151611 51 55141065					
Sustainable activity					
outlamable activity		Ve	ar 2		
	1q	2q	3q	4q	
Inception phase	14	-4		79	
Analytical activities					
Preparation					
Training					
Purchase of equipment					
Implementation phase					
Aquisition and marketing					
Provision of services					
Sustainable activity					
outlamable activity		Ve	ar 3		year 3-n
	1q	2q	3q	4q	Jour o
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Analytical activities					
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Training					
Purchase of equipment					
Implementation phase					
Aquisition and marketing					
Provision of services					

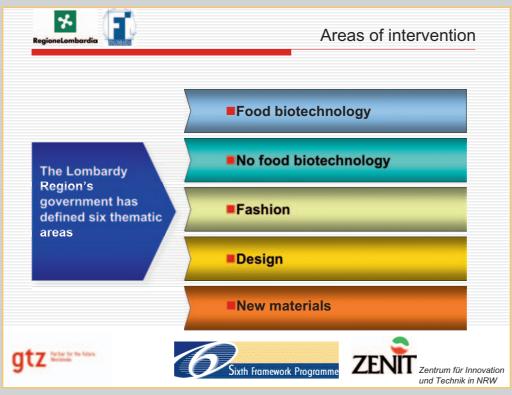
# **Metadistricts**

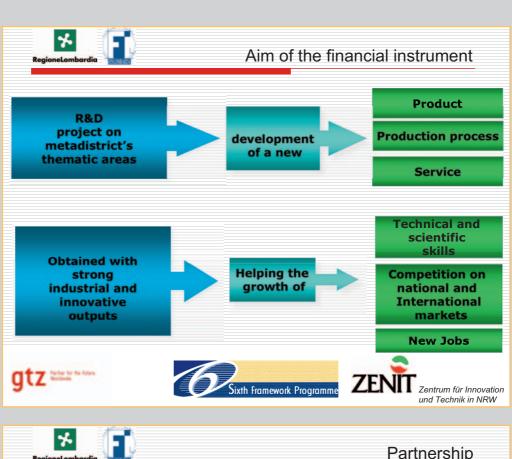
Lombardy Region/Italy (RegLom)

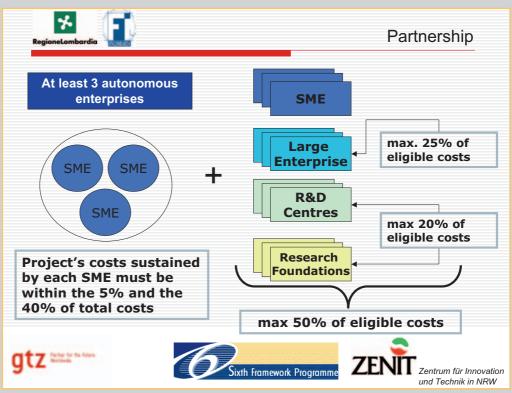


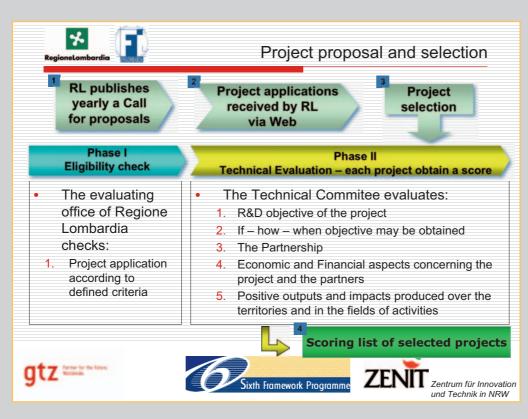


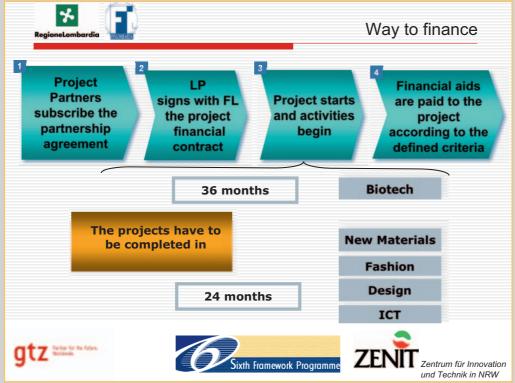


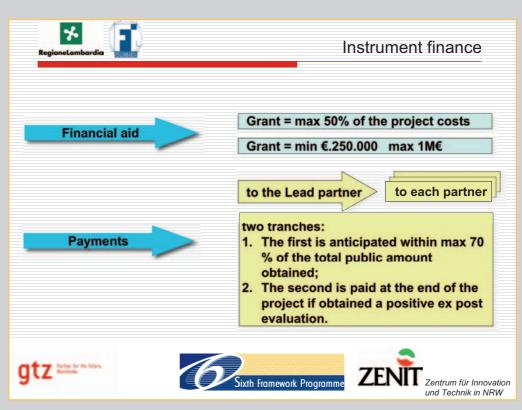


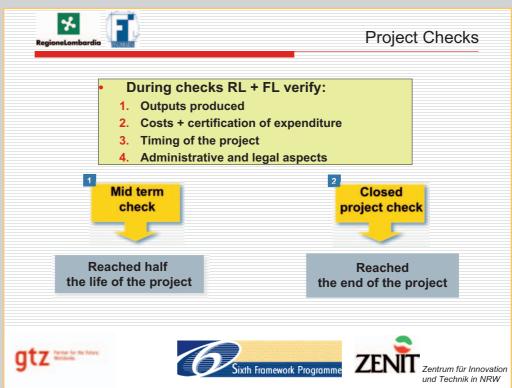














## IV Call Report

### IV° Call – report on project applications

1. Projects applying 192

2. Project partners 915 (788 enterprises)

3. Total project costs amount 311,4 M€. 4. Financial aids required 136,7 M€.

### IV° Call - report on projects selected and financed

1. Projects selected

2. Project Partners selected 275 (233 enterprises)

3. Projects financed 50

4. Project Partners financed 249 (211 enterprises)

5. Financial aids granted 32,3 M€.















# Report on financed projects

METADISTRICTS CALLS year	- REPORT ON I		JECTS -
METADISTRICT	No. of PROJECTS	PROJECT COSTS in €	PUBLIC AID in €
FOOD BIOTECH	10	11.488.237,60	6.781.262,05
NO FOOD BIOTECH	16	33.204.941,00	13.477.772,61
NEW MATERIALS	36	59.614.767,85	22.406.106,96
FASHION	15	24.886.184,00	10.362.778,22
DESIGN	09	17.260.308,08	6.281.120,11
ICT	19	31.705.706,36	14.500145,49
GRAND TOTAL	105	178.160.144,89	73.809.185,44









## ...Metadistricts in call 2009

After 5 years of field experience, Metadistricts programme will probably considerate some innovation.

A board of experts will discuss, to introduce some new elements such as:

- Abstract in english;
- Improve the support for the whole value chain by introducing "application at any time";
- · Request of a "long term strategy" for participants;
- To update the definition of each metadistrict (what is today "fashion"?)







# Transfer Scheme

Metadistricts - Bulgaria (MoEE)

Project name	Metadistricts		
Region of origin (transferring region)	Lombardy/Italy		
Region adapting the instrument (receiving region)	Bulgaria		
I. Transferability Check List		·	
	Yes	Action needed	No
1. Do you actually battle the same problem that is addressed by the instrument?			
2. Does the instrument fit into the given regional planning/national strategy?			
3. Are the institutional prerequisites fulfilled?			
4. Are the prerequisites regarding knowledge structure fulfilled?	re 📕		
5. Are the financial resources available?			
6. Is the instrument compatible with the overall ince structure in your region/country?	ntive		
7. Is the instrument compatible with/additional to ex projects in your region/country?	isting		
8. Are the requirements regarding social capital, credibility, reliability fulfilled?			
II. Pre-implementation needs			
Awareness and promotion campaign			
III. Adaptation needs of the instrument on the leve	el of		
Content: The programme will finance :			
<ol> <li>R&amp;D projects which include - R&amp;D activities, delive laboratories and necessary premisses</li> <li>Protection of IPR - assessment of patentability, elapatents or utility models;</li> <li>Elaboration of prototypes - consultancy, materials, Beneficiaries - SMEs ; partners - research organisa Bonuses for projects in Bio tech, Nanotech, ICT, New efficiency</li> </ol>	aboration of patent do rent of equipment, se tions and NGOs involv	ssier, Initial registrat rvices; ed in R&D	tion of
<b>Infrastructure</b> : Is generally available, although need equipment under the project for the project needs wi organisations and NGOs. Only amortization costs for	ll be an eligible activi	ty regarding the res	earch
Institutions: Ministry of economy and energy, Bulgari	an Agency for promoti	on of SMEs	
Finance: Available from Operational programme "Con R&D component will be financed up to 55%. 45% sh IPR component will be financed up to 55%. 45% sho Prototypes component will be financed up to 45%. 5	ould be the private co-	-financing	
Monitoring and Evaluation: Ministry of economy and	energy, Bulgarian Ago	ency for promotion o	f SMEs
Process and implementation: Public institutions, aw	vareness campaigns, ir	ternational evaluato	rs of projects

# **Draft Proposal**

Metadistricts - Bulgaria (MoEE)

# Name of the instrument Metadistricts

### **Applying Institution**

#### Managing Division in Institution, Address

"European funds for competitiveness" directorate -Managing Authority for Operational programme "Competitiveness" at the Ministry of Economy and Energy, Bulgarian small and medium sized promotion agency

#### I. Idea in a nutshell

# Overview on a) background, b) objective, expected impact and total cost

The main problem for Bulgarian companies with regard to the innovation process and the management of scientific research is the lack of financing and the high costs for the implementation of innovative projects. Only 3.43% of the total number of enterprises is engaged in R&D. The R&D expenditure of companies is relatively low as a percentage of the GDP, compared with other EU countries and this percentage has been stable over the last years. The low number of researchers hired in enterprises to develop research activities is a logical indicator for the lack of in-house R&D in enterprises. Other serious problems for Bulgarian enterprises and research institutions are the insufficient market experience and resources for protection of their industrial property rights.

Innovative companies, especially newly created ones, are considered a high risk segment for bank financing. That is why such companies experience serious difficulties in the initial stage of their development until the moment of successful commercialization of the product or process they have developed. In the initial stage, innovative start-ups need high quality, specialized consultancy services in the fields of economic and financial evaluation and assessment of intellectual

property rights of the particular innovative product or process, consultancy support towards market development, investments assuring the normal functioning of the enterprise, specialized training of the personnel of the company, etc. Unfortunately there is a serious lack of structures which provide such services to enterprises (e.g. technology business incubators) as the low number of existing ones are poorly developed and provide services to an extremely low number of enterprises. The lack of structures for development of areas of excellence and providing support in the process of development of innovations (technology centres, technology parks, technology platforms, etc.) constitutes a major barrier to the development of the Bulgarian innovation system.

Due to these reasons Bulgaria is in the group of catching-up countries in terms of innovative environment. Furthermore, the business-science relationships are very weak. They broke down during the transition period from a centrally planned to an open market economy due to the lack of financing for R&D activities and the lack of adequate state policy measures. The current poor market orientation of the activities of the research institutions is a direct result of this breakdown's effect on their financing and development.

The objective of the current scheme is to promote the R&D activity at the Bulgarian enterprises and to prepare the ground for the commercialization of these R&D results. At the end of the day these interventions should result in growing number of highly innovative, yet commercially sound enterprises in the Bulgarian economy.

#### I. Rationale specified

A generally recognised "generator" of innovations is the R&D activity of enterprises or clusters of enterprises, both "in-company" ("in-cluster") or in partnership with research organisations or universities. There are a significant number of companies, whose operations and competitiveness would greatly benefit from the introduction of innovative products, services or business models, but who lack the necessary resources to finance that R&D. The expected result of this intervention would be an increase of the number of successful innovations developed by enterprises alone or in partnership with research organisations, as well as increase in overall expenditure of this sector on research and development. In that sense cluster advantages could be used in order to provide innovationfriendly environment to enterprises that enables them to become more actively involved in technological research and development. Sharing resources in joint R&D activities among cluster members contributes to reduction of risks and financial barriers to R&D. Cluster's proximity and trust bring faster innovation adoption. Cluster managers play an important role in the promotion and diffusion of innovations among cluster members. In addition, firms in a cluster often have privileged access to venture capital (VC) because venture capitalists generally prefer to invest in relatively low-risk enterprises, as the risk is shared by the cluster members.

Large enterprises will also be eligible under the current scheme, as they have, unlike SMEs, a strong potential for development of R&D with expected significant results and notable impact over the economy.

#### II. Implementation strategy in details

#### a) Project duration:

Three years

#### b) Target group

Eligible applicants should meet the following requirements:

- To be a juridical person or sole trader registered under the Trade Law or Law on Co-operations, and
- 2. To have their headquarters in Bulgaria, and
- 3. To be directly responsible for the implementation of the activities under the project, but not to act as intermediary, and
- 4. To have on it's disposal stable and sufficient financial recourses in order to guarantee the financing of the project, i.e. the applicant must present evidence for it's capability to finance the project (100 % of the eligible costs under the project) before the entry into force of the Grant contract, and
- 5. To be registered according to the above conditions before 31.12.2007

Eligible partners: research organizations and NGOs involved in R&D

#### c) Implementation activities

#### Eligible activities:

- 1. Elaboration of technical, economic, financial and IPR assessments of innovative ideas:
- 2. R&D activities including:
  - a) creation of programmes and methods for research measurements and tests as well as measurements and tests themselves;
  - b) delivery of the materials and equipment necessary for R&D
  - c) rent of laboratories and necessary premisses for the R&D activities
- 3. Hiring highly qualified personnel for the implementation of the R&D activities
- 4. Protection of IPR including:
  - a) assesment of patentability,
  - b) elaboration of patent dossier,
  - c) Initial registration of patents or utility models;
- Elaboration of prototypes
   Priority areas: Bio tech, Nanotech, ICT, New materials, Machine building, Ecoinnovation, Energy
   efficiency

#### Eligible costs:

- 1. Costs for supply of materials and equipment, rent of laboratories;
- Costs for salaries and social insurancies for the hired personnel;
- 3. Costs for consultancy and legal services;
- 4. Subcontracting related to measurements and tests;
- 5. Registration taxes for patents and utility models created under the project;
- 6. Costs for consultancy, materials, rent of equipment, services regarding the elaboration of prototypes.

#### d) Description of the support facilities

The Bulgarian small and medium- sized Promotion agency will act as intermediate body for the implementation of the scheme.

www.sme.government.bg/IANMSP/Default\_en.aspx

#### e) Assumptions and risk assessment

Lack of accumulated critical mass of research potential within the enterprises, lack of qualitative research infrastructure

#### f) Success factors for implementation

Good research infrastructure, active awareness and promotion campaign

#### g) Monitoring and Evaluation

Monitoring and evaluation will be made in accordance with COUNCIL REGULATION (EC) No 1083/2006 of 11 July 2006 and REGULATION (EC) No 1080/2006 OF THE EUROPEAN PARLI-AMENT AND OF THE COUNCIL of 5 July 2006 and according to the applicable Bulgarian legislation. Technically the monitoring and evaluation will be executed by the Ministry of Economy and Energy, Bulgarian Agency for promotion of SMEs.

#### h) Sustainability

The project results tend to be sustainable and self financing after the project final. The commercialized R&D results should generate profit which is to be invested in the development of the companies, incl. new R&D activities.

#### i) Costs

20 MEUR

#### **Appendix**

I. Timetable

						Tim	netable			
Activity m	onth	2	l n	١,	l e	l c	7 20	104	2.2	D/i-1/i1/i-1/i
	ı		3	4	5	6	7-30	31	32	Responsible person/institution
Announcement of the scheme										Managing authority/ Intermediate body
Submission of project proposals										Applicants/ Intermediate body
Evaluation of proposals										Managing authority/ Intermediate body
Project implementation										Beneficiaries/ Intermediate body
Project monitoring										Managing authority/ Intermediate body
Financial audit										Beneficiaries/Licensed financial auditors
Balance payment										Managing authority

# **Competence Brokering**

Hordaland/Norway (HCC)



# THE COMPETENCE BROKERING INITIATIVE.

Linking SME needs to research opportunities





Øyvind Dahl

Hordaland County Council (HCC) Bergen









#### 1. Framework

Population: 457.611 - City of Bergen: 244.620

Workforce: about 241.000
 (74,3% of population 15-74 years)

- Growth in workforce 2000-2005: 4,2 %
- Unemployment rate: 1,9 % (April 2007)
- GDP: 14.370 M€
- R&D expenditures of industry: NOK 871M (~ 110 M€)
- Main industrial sectors: Mechanical manufacturing, metallurgical, petrochemical, shipbuilding, off-shore related and supply, aquaculture, fisheries, building and construction, energy











#### 1. Framework

# Actual situation in Hordaland within business and industry:

- all time high economic activity
- very high activity within building and construction
- high activity within manufacturing industry
- · labour shortage
- skilled working force imported









#### 1. Framework

- Number of SME in region: 39.479 (total in Norway: 460.000)
- SME structure:
  - 8% less than 5 employees
  - 89% less than 10 employees
    - 98% less than 50 employees
- Number of students: 31.200 (about 15% of total of Norway)
- · Level of education:
  - General / Basic school: 34,1% (Norway: 32,4%)
  - Higher Education: 47,7% (42,4%)
  - University: 18,1% (24,8%









#### **Research and Education**

- University of Bergen,
- Norwegian School of Economic and Business Admin.
- Bergen University College
- Regional University Colleges
- University College of Art,
- College of Teacher Education
- R&D on Human Rights
- The High Tech. Center,
- **Under Water Technology**
- Climate Research
- Chr. Michelsen Research AS
- 3 regional Centres of Excellence (Medieval studies, Climate Research, Integrated Petroleum Research)
- Industrial Centers of PetroChemistry, Oil and Gas Tech

#### 1. Framework















Bergen University College



The Norwegian Under water Technology Centre









#### 1. Framework

# R & D Staff: Man-labour year

60% 1999 2001 2003 2005 Sector 1991 1993 1995 1997 Business and 1.033 1.076 671 792 875 786 590 860 industry Institutes 825 798 823 789 785 794 811 835 23% High school- and 48% 1.181 1.328 1.446 1.428 1.442 1.448 1.502 1.778 Universities









#### 1. Framework

#### Main R&D Focus



#### National



#### National and regional





- Development / Globalization
- •Energy / Petroleum
- •Medicine / Health
- •Polar Research
- Social Sciences
- Large Scale programs
- •Technology, Natural Science and Mathematics •Centres of Excellence
- •Centres for Research Based Innovation
- •Humanoria
- •Public-oriented programs
- •Medicine and Health
- Competence, network
- Entrepreneur, strategy, education
- Internationalization
- Regional development
- Marine sectors /fisheries / aqua culture Agriculture, farming
- Tourism and travel
- Petro chemistry and offshore sectors
- Culture based economy
- Women in focus

Regional

- Entrepreneurship within trade and business
- · New business development
- · Regional development
- Strategic development
- Economic support within strategic
- · Centers of Excellence









## 2. Description of the instrument

"Research based Competence Brokering"- a national initiative based on experience from the former "TEFT" program





Competence Brokering

1994-2003 National program National funded TT between SME - R&D institutions Pro-active focus Technology focus

2005-2007 National Program National and regional funded Regional focus / Regional coalitions TT between SME - R&D resources Pro-active focus "Broad innovation perspective"









## 2. Description of the instrument



#### Main Goals:

· Linking the SMEs needs to research opportunities

To promote greater focus on R&D activity in companies with little or no R&D experience in order to increase their internal innovative capacity, thereby enhancing value creation and competitiveness.

→ stimulation of R&D demand

· Research institutes as partners to SME

To strengthen the role of the research institutes as partners in collaboration with industry . The competence mediators should contribute to a heightened awareness of the possibilities and potential of the SMEs demand for research.

→ stimulation of R&D supply









#### 2. Description of the instrument

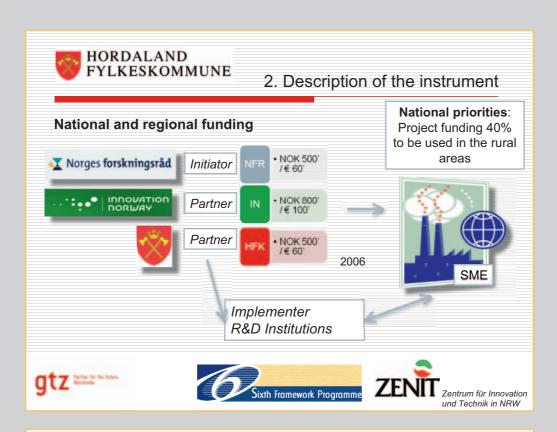
## **Subsidiary goals:**

- Increase the R&D activity of SME
- Improve the reception capacities of SME
- Strengthen the economic competitiveness of SME
- Strengthen the knowledge of new technology adopted by the SME
- Strengthen the links and communication between R&D institutions and SME
- Support technology transfer from universities and technical colleges
- Increase the knowledge of the TT-process and the methodology











## 2. Description of the instrument

#### **Project fundings:**

Typical project budget 160' NOK (ca. 20' €)

External funding NOK 80' (50%) (ca. 10' €)

Private funding NOK 20' + 60' (50%) (ca. 10' €)

#### Typical:

- · Small scale projects
- · Limited funding
- Limited time
- Limited R&D
- Preliminary work, start-ups
  - "Feasibility study"
  - "Pre-research/investigation"









# 2. Description of the instrument

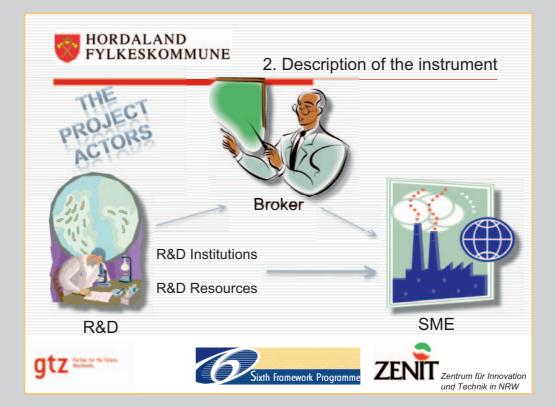
## **Characterisation of the Competence Broker:**

- Experienced researchers act as competence brokers
- The competence broker must:
  - Have a broad R&D network (national and regional)
  - · Experience in projects planning and project performing
  - Have sufficient soft-skills (communicate, counseling, guiding, be determined...)
  - To be an initiator, a pusher, following-up, TT mediator, quality assurer, TT-process experience
  - To establish interdisciplinary cooperation











# FYLKESKOMMUNE 3. Impacts/results of the instrument

Quantitative (2005-2007): about 2 ½ year

Number of contracts signed: 24

Project funding:

- Governmental funding NOK 2 Mill. (250' €)
- Funding from SME, in kind NOK 1,6 Mill. (200' €)
- Funding from SME, cash NOK 0,6 Mill. (75' €)

#### **Qualitative (2005-2007)**

Value or estimated expression of success

(Subjective expressions from both parts - Web based questionnaire)

Projects continued with funding from other sources:

- · through the "Skattefunn" instrument
- · through own / private financing
- through other governmental innovation programs (eg. Innvovation Norway instruments)









# 3. Impacts/results of the instrument

#### Who participates in Hordaland projects?

- · up to now, mostly mechanical related industry from different branches
- mostly small manufactures with up to about 50 employees
- · geographically scattered
- · both "high-tech" and "low-tech" manufacturers











Wema Systems
Development of
fuel and AdBlue
Censors (NOx
removal)



Fitjar Betong
Development
of new product
added to
concrete.

Bremnes Seafood Utilising fish scrap from salmon in new products









#### 4. Success factors

## High focus on:

### The Technology Transfer Process

Sucess factor: Technology Results at the SME

base for further Product Development work

Sucess factor: Higher Technology knowledge at the SME

adaptable to further R&D work

Sucess factor: A proven and consistent method

adaptable to further R&D work

Sucess factor: Number of projects

at the different regional R&D institutions









5. Bottlenecks

- TT process is strongly related to the competence brokers capacity and network
- Incapacity, interpersonal barriers or lack of competence at the SME or R&D
- Low priority or interests in TT from the University-sector
- Limitation in outreach activities due to limited competence broker staff
- Limited funding allow "only" start-up projects, further R&D is dependent on other financing
- Unclear priorities (and sub-goals) in the different national regions
- Focus on SME goals and Institute goals, but less on system goals (regional)
- · Short term budgeting makes future unpredictable









#### 6. Transformation needs

#### Framework

Predictable future through longer term budgeting/funding

# **Implementation**

- Increase the competence of the competence broker (incl. network)
- Increase the possibilities of take-over project funding (extensions)

## Further Improvements needed

Incentives to motivate R&D-institutions/universities









## 7. Surprises

- After barely three years duration, The Competence Broker initiative enters into a new national program
- In spite of thorough information collection/ registering, no/little common accessible feedback information is available









# 8. Development of the instrument

# "Research based Competence Brokering"

# TEFT Program





VRI Regional R&D Policy

1994-2003
National program
National funded
TT → SME – R&D Inst
Pro-active focus
Technology Focus

2005-2007
National Program
National & regional funded
Reg. focus/reg. coalitions
TT → SME – R&D
Pro-active focus
"Broad innovation
perspective"

2007-2017
National Program
National & regional funded
Reg. focus/reg. coalitions
SME initiated projects
Pro-active focus
"Broad innovation
perspective"









## 9. Revision and adjustments

I	Recommendations	Communications	Implementations	Results
	Long term commitment Availability of Funding	Results of PRW presented to HFK	VRI: 07 → 17 Substantial increase in resources	Improved funding opportunities regional R&D-funds
	Training Common Methodology	Results of PRW presented to coordinator VRI	Formal training adopted - NRC	National training programme
	Networks R&D – SME	Joint discussion on how to implement in new programme	CB from different background Integration with other services	Number of brokers expanded from 1 to 3







# Transfer Scheme

# Competence Brokering - Thuringia/Germany (STIFT)

	Competence Broke	ering	
Region of origin (transferring region)	Hordaland/Norwa	/	
Region adapting the instrument (receiving region)	Thuringia/German	у	
I. Transferability Check List			
	Yes	Action needed	No
1. Do you actually battle the same problem that is addressed by the instrument?			
<ol><li>Does the instrument fit into the given regional planning/national strategy?</li></ol>			
3. Are the institutional prerequisites fulfilled?			
4. Are the prerequisites regarding knowledge structure fulfilled?			
5. Are the financial resources available?			
6. Is the instrument compatible with the overall incent structure in your region/country?	ive		
7. Is the instrument compatible with/additional to exis projects in your region/country?	ting <b>T</b>		
8. Are the requirements regarding social capital, credibility, reliability fulfilled?			
II. Pre-implementation needs			
Thuringen can refer to a well structured R&D supports different means of financing R&D and promoting innovation of SMEs is making use of the available instruments for about the programs, the lack of experience and confidence regarding R&D programs consist in information events presented by their host organisations. But there is no deneeds of individual SMEs. Managers of SMEs, especial	tive SMEs. The pro r various reasons. I ence or just small- where companies a dicated brokerage a ly newcomers in te	blem is that not a la t may be the lack of mindedness. Awarene tre invited and R&D p ddressing the specific trms of R&D, need to	rge number knowledge ess activities programs are e technological
addressed, informed and motivated to innovate in orde They need support in identifying their technology needs projects within appropriate funding programs. This incl with regional R&D organisations.	, in defining R&D t	opics accordingly and	competitive. I in generating
They need support in identifying their technology needs projects within appropriate funding programs. This incl	, in defining R&D t udes also the estal awareness and to isations of R&D fun ntation strategy for	opics accordingly and blishment of long-ter inform regional decis ding programs of the	competitive.  d in generating m cooperation  ion makers e successful
They need support in identifying their technology needs projects within appropriate funding programs. This incl with regional R&D organisations.  In order to solve this problem it is necessary to raise at the ministry for economy as well as the host organ "Competence Broker" program from Norway. An implement	, in defining R&D t udes also the estal awareness and to isations of R&D fun ntation strategy for ns defined.	opics accordingly and blishment of long-ter inform regional decis ding programs of the	competitive.  d in generating m cooperation  ion makers e successful

There are so called R&D or transfer managers employed by the universities aiming rather at the exploitation of R&D results generated at the universities than getting involved in small scale contract research for SMEs. But nevertheless there is a political orientation that universities too cooperate more with the industry and get involved in joint projects in the long run.

In Thueringen there is a number of Applied Research Institutes. Most of them used to be the R&D departments of large enterprises in the former East Germany. With the financial support from the region they have developed into high-performance R&D providers with a strong focus on tailored R&D for the industry. They too used to have R&D and transfer managers who are now sales or marketing representatives, department managers or in other leading positions and who still initiate and maintain contacts to enterprises and acquire new R&D contracts. Also the number of Independent Research Institutes such as Fraunhofer, Max Planck or other non-university institutes needs to be mentioned. With the appropriate thematic background and a commercial motivation these R&D and transfer managers as well as sales persons are actually acting as brokers between the R&D organisations and the SMEs and could therefore be organised in a coordinated network according to the Norwegian example. They would need to visit companies, be trained to perform innovation audits, identify technology needs in SMEs and propose R&D subjects / projects accordingly. Their experience and access to latest developments and trends in their particular technology fields is of big advantage in this process. Simultaneously the brokers also need to be trained regarding respective R&D funding programmes. They need to refer SMEs to the appropriate program and the corresponding host organisation. They may also partially be involved in the application procedure.

The broker's network would have to be set up and coordinated by the Regional Development Corporation (LEG) together with the Foundation for Technology, Innovation and Research Thueringen (STIFT). LEG's department for Acquisition, Technology and International contacts consists of experts in the most important technology fields in Thueringen. Together with the management department of STIFT they would be setting the frame for a new R&D broker's program defining the thematic areas of action, maintaining the contact to the R&D organisations, setting up and coordinating the broker's network, establishing the terms and conditions for the brokers, promoting the program and organising information events and targeted workshops to bring together R&D organisations and SMEs.

Complementary to the brokerage activities STIFT is facilitating funding schemes for small scale projects suitable for SMEs who have never participated in a project before. This opportunity to perform an exploratory phase or a feasibility study needs to be promoted among SMEs through the brokers and may encourage them to get involved in large projects later on.

Infrastructure: Thueringen has the necessary infrastructure available from a policy point of view as the implementation of the "Competence Brokering" complies with the regional technology and innovation strategy set by the Thueringen Ministry for Economy, Technology and Labour as well as the Ministry for Education. Infrastructural prerequisites are also fulfilled in terms of institutions, technical provisions, expertise and capacities.

**Institutions**: Most regional large scale R&D programs are coordinated by a dedicated credit institute called Thuringian Bank for reconstruction and development (Thüringer Aufbaubank TAB) — very experienced and capable.

STIFT is facilitating funding schemes for small scale projects suitable for SMEs who have never participated in a project before.

LEG as well as STIFT have the capacity as well as the political authority for the coordination of a broker's network and also to connect them to the regional funding programs. LEG can refer to highly-qualified technology experts in all important technology fields who play an important role in the regional policy making process. STIFT can provide complementary R&D funding especially aimed at R&D-inexperienced SMEs.

Thuringen can also refer to well-known universities as well as to a large number of applied and independent research institutes with long experience in industrial research.

And there is a strong SME base with a large number of innovative and knowledge based companies. All necessary institutions for implementing the new program are available.

**Finance:** Since the increase of R&D activities in SMEs and the improvement of the links between R&D organisations and the industry was assigned to LEG by the Thueringen Ministry for Economy there is no additional money needed for the initial phase which includes the organisation of dedicated workshops to present R&D programs as well as R&D organisations to SMEs, communicating the new concept to the potential brokers and defining the terms and conditions for a broker's network.

But in the long run administrative costs for coordinating the broker's network, to perform coaching and to provide training on specific brokerage services, to promote the program and to organise joint information events and targeted workshops will be generated. Also the question of offering incentives to the brokers needs to be decided.

Financing of small scale preparational projects or feasibility studies are covered by the dedicated funds of STIFT

**Monitoring and Evaluation:** A monitoring and evaluation procedure has to be established by the coordinating organisations LEG and STIFT in order to control progress and to measure success. Annual targets could be determined and a problem and a failure analysis procedure established.

The monitoring procedure must include regular reviews of the individual brokerage activities, trainings and the number of initiated projects followed by corrective measures if necessary. It should also assess the long term economic impact of the projects initiated by the brokers.

**Process and implementation**: The instrument will be started as a complementary initiative to the existing R&D programs in the region, using the existing infrastructure as much as possible in order to keep costs low.

The broker's network will be set up and coordinated by LEG together with STIFT. LEG's department for Acquisition, Technology and International contacts consists of experts in the most important technology fields in Thueringen. Together with the management department of STIFT they will be setting the frame for a new R&D broker's programe defining the thematic areas of action, maintaining the contact to the R&D organsinations, setting up and coordinating the broker's network, establishing the terms and conditions for the brokers, promoting the program and organising information events and targeted workshops to bring together R&D organisations and SMEs.

To gain access to the target group of innovative SMEs other regional key players such a the Chambers of Commerce and Industry, start-up and technology centres as well as industrial networks and technology clusters will be involved.

On behalf of the Ministry for Economy, Technology and Labour LEG is currently assigned to address exactly the above mentioned problem – the insufficient use of the regional R&D infrastructure and the available funding programs by SMEs. In order to improve the links between R&D organisations and the industry is planning a series of dedicated workshops presenting R&D programs as well as R&D organisations to SMEs.

These workshops will now be used as a platform to contact potential brokers from the R&D institutes as well as SMEs in order to communicate the idea of a new R&D broker's network and the intended closer linkage between SMEs, regional R&D institutions and the corresponding R&D funding programs. Apart from the introduction of R&D providers and programs to SMEs the workshops will be used to identify the specific problems and needs of SMEs to participate in R&D projects and of R&D organisations / brokers to access and encourage SMEs to R&D. In the result of this analysis the terms and conditions for the broker's network and their specific brokerage activities will be determined.

# Draft Proposal

# Competence Brokering - Thuringia/Germany (STIFT)

#### Name of the instrument

Competence Brokering

#### **Applying Institution**

- Stiftung f
  ür Technologie, Innovation und Forschung Thueringen (STIFT) - Foundation for Technology, Innovation and Research Thueringen
- Landesentwicklungsgesellschaft Thüringen (LEG) -State Development Corporation Thueringen

#### Managing Division in Institution, Address

- STIFT / ENTERPRISE EUROPE NETWORK Thueringen Mainzerhofstr. 10
- LEG / Department for Acquisition, Technology and International Contacts
   Mainzerhofstr. 12
   99084 Erfurt / Germany

#### I. Idea in a nutshell

99084 Erfurt / Germany

Overview on a) background, b) objective, expected impact and total cost

#### a) Background:

Thueringen can refer to a well structured R&D support system consisting of various funding instruments and different means of financing R&D and promoting innovative SMEs. The problem is that not a large number of SMEs is making use of the available instruments for various reasons. It may be the lack of knowledge about the programs, the lack of experience and confidence or just small-mindedness. Awareness activities regarding R&D programs consist in information events where companies are invited and R&D programs are presented by their host organisations. But there is no dedicated brokerage aiming at the specific technological needs of individual SMEs.

Practice shows that the managers of many SMEs have an overall idea that they need technical and know-how advancement in order to remain competitive and to access new markets. But under the pressure of daily business and for other reasons they are not able to clearly identify their own weaknesses and needs and based on that to determine R&D and innovation opportunities. Very often they lack experience and confidence, but also knowledge about how to implement innovation in their own companies and thus about appropriate R&D performers and existing funding programs.

On the contrary there are R&D and transfer managers employed by the universities and the R&D institutes who don't take up an active brokerage role. Especially the large number of small and non-R&D-active SMEs is not specifically addressed. In addition these R&D and transfer managers are not organised in a network and not trained in targeted brokerage activities.

#### b) Objectives:

Managers of SMES, especially newcomers in terms of R&D, need to be specifically addressed, informed and motivated to innovate in order to grow their business and to remain competitive. They need support in identifying their technology needs, in defining R&D topics accordingly and in generating projects within appropriate funding programs.

This imbalance between a strong regional R&D infrastructure and its insufficient use by SMEs implies the need also for raising awareness among regional decision makers at the ministry for economy as well as the host organisations of R&D funding programs.

An interface in the form of an advisory and brokerage service is necessary for the identification of SME's specific innovation needs, the respective generation of projects and the corresponding R&D services.

The successful implementation of the Norwegian instrument "Competence Brokering" was presented at on of the Peer Review Workshops within the EURO-PEER SME project and appeared as a suitable instrument to tackle the problems in our region.

The good experience Norway made especially with small and micro enterprises, who have never participated in projects before, has made the instrument very attractive for Thueringen. Professional advisory and brokerage services combined with financial contributions to small preparatory projects or feasibility studies lower the risk of failure and help to encourage SMEs to enter into R&D.

#### d) Expected outcome / impact:

The implementation of a R&D broker's network for the targeted access of SMEs to R&D in Thueringen will hopefully increase significantly the efficiency and use of regional R&D funding programs by a much broader SME base. SMEs should benefit in the long run by gathering project experience, learning about funding programs in general (how to apply, how to find partners, how to prepare and carry out the project and how to exploit the results) but also about the cooperation with R&D performers. Successful small projects can be in many cases the starting point for large R&D projects and a long-term cooperation with the R&D organisations.

To receive professional / expert advice on innovation and support in establishing long term business strategies, in identifying R&D topics and in generating projects will also increase the scientific knowledge and know how of SMEs, make them more competitive and help them to access new (international) markets etc. But also the brokers themselves will benefit from the program. Being trained and organised in a network they will be able to provide a professional brokerage service to SMEs and to R&D organisations.

Total costs can not be estimated at this point as the scale, the terms and conditions for possible incentives and other actions are not clearly defined yet.

#### e) EU program coherence:

The ultimate objective to strengthen the economy in the region by initiating and accelerating R&D and innovation in SMEs and thereby increasing scientific knowledge and technical advancement and creating employment are in compliance with EU innovation policies and the Lisbon strategy. To increase the share of SME's in R&D and thus the economic benefit significantly will contribute to putting R&D at the heart of the EU's development agenda and the strategic objectives of the Lisbon summit.

#### I. Rationale specified

**1. Demand from the private sector:** please see I.a) Background and I.d) Expected outcome / impact

# 2. Coordination with regional activities / key players:

- Regional R&D programs are coordinated by a
   dedicated credit institute called Thuringen Bank
   for reconstruction and development (Thueringer
   Aufbaubank TAB). The services provided by TAB
   include application procedures, project evaluation
   and approval, financing, monitoring and reporting.
   But the assignment of TAB does not include a targeted brokerage service for potential applicants. TAB
   is a credit institute handling mainly the financial
   aspects and using internal and external experts for
   project evaluation. They are therefore not capable of
   providing initial consulting, auditing and dedicated
   brokerage to SMEs.
- Based on its mission the Foundation for Technology, Innovation and Research Thueringen (STIFT) itself can initiate and provide funding to SMEs for feasibility studies as well as for small scale and preparatory R&D projects, but this excludes targeted brokerage activities.
- STIFT is also hosting one office of the Enterprise Europe Network Thueringen which is qualified to provide training to the R&D brokers in technology and innovation auditing.

- There are R&D and transfer managers employed by the universities and the R&D institutes who are actually acting already as brokers to a certain extend. But most of them don't take up an active brokerage role and they are not organised in a network and not trained in targeted brokerage activities.
- Conveniently the Regional Development Corporation
  of Thueringen LEG is currently assigned by the
  Ministry for Economy, Technology and Labour to
  address exactly the above mentioned problem the
  insufficient use of the regional R&D infrastructure
  by SMEs. In order to access and encourage SMEs
  and especially R&D newcomers LEG is planning a
  series of dedicated workshops presenting R&D programs as well as R&D organisations to SMEs.

These workshops will now be used as a platform to contact potential brokers from the R&D institutes as well as SMEs in order to communicate the idea of a new R&D broker's network. Apart from the introduction of R&D providers and programs to SMEs the workshops will be used to identify the specific problems and needs of SMEs to participate in R&D projects on the one hand and the problems of R&D organisations / brokers to access and encourage SMEs to R&D on the other hand. In the result of this analysis the terms and conditions for the brokerage activities and the links to regional R&D funding schemes will be determined.

#### II. Implementation strategy in details

The Norwegian program consists of two components: 1st "R&D brokering" and 2nd "Funding of small scale R&D projects". Based on the specific situation in Thueringen only the actual R&D brokering of would be transferable to our region as, various programs for co-funding R&D projects are in place already. The implementation could be realised as follows:

- 1. As mentioned under point I.2. the dedicated workshops of LEG would be used as a platform to contact potential brokers from the R&D institutes as well as SMEs. The objective is to identify the specific problems and needs of SMEs to participate in R&D projects on the one hand and the problems of R&D organisations / brokers to access and encourage SMEs on the other hand. In the result of this analysis the terms and conditions for the brokerage activities will be determined.
- 2. In Thueringen there are R&D and transfer managers employed by the universities aiming rather at the exploitation of R&D results generated at the universities than getting involved in small scale contract research for SMEs. Being employed by the universities these R&D or transfer managers are subordinated to the Ministry for Education which would consequently have to get involved in the broker's network implementation.

There are also 9 Applied Research Institutes, transfer points and other institutionally financed R&D organisations. With the financial support from the region they have developed into high-performance R&D providers with a strong focus on tailored R&D for the industry.

Last but not least the number of Independent Research Institutes such as Fraunhofer, Max Planck or other non-university institutes needs to be mentioned.

With the appropriate thematic background and a commercial motivation the R&D / transfer managers and representatives are actually acting already as intermediaries between their own R&D organisations and the industry and could therefore be organised in a coordinated network according to the Norwegian example.

- 3. For high quality brokerage services the R&D and transfer managers of universities and R&D institutes need to extend their activities and services substantially by visiting companies, performing innovation audits, identifying individual technology needs in SMEs and proposing R&D subjects / projects accordingly. Their experience and access to latest developments and trends in their particular technology fields are of big advantage in this process. But in order to provide a truly professional and successful brokerage the brokers need to be coached and trained in all relevant issues including the appropriate funding programs.
- 4. The State Development Corporation of Thueringen (LEG) together with STIFT would be suitable organisations to set up and coordinate the R&D broker's network.
  - LEG is experienced in running support programs at regional as well as international level. Its "Department for Acquisition, Technology and International Contacts" consists of highly-qualified technology experts in all important technology fields who have very close contacts to the SME base on the one hand and who significantly contribute to the regional policy making process on the other hand.

STIFT is very experienced in initiating infrastructural technology and innovation oriented projects and is hosting funds for R&D activities, especially for small scale and preparatory projects or feasibility studies. STIFT is also partner in the Enterprise Europe Network which is be qualified to provide training to the brokers in technology and innovation auditing.

While the coordination part would be more on the side of LEG, the training of the brokers and promoting especially small scale funding scheme for R&D newcomers would be the focus of STIFT.

a) Project duration: October 2008 - December 2013

#### b) Target groups

- Micro enterprises and SMEs (inexperienced in R&D projects)
- 2. Applied and Independent R&D institutes universities (R&D and transfer managers, representatives, department managers or other leading persons acting as future brokers)

#### c) Implementation activities

#### a) Inception Phase (done a)

Approaching decision and policy makers and corresponding political institutions as well as host organisations of regional funding programs by postal or electronic mailing, telephonically or at regional events (Ministry for Economy, Technology and Labour of Thueringen, Ministry of Education, Foundation for Technology, Innovation and Research Thueringen (STIFT), Chamber of Commerce and Industry (IHK), State Development Corporation of Thueringen (LEG), Thueringen Bank for Reconstruction and Development (TAB), Beteiligungsmanagement Thueringen GmbH (bm-t), universities and research organisations - information about EUROPEER, introduction of best practice examples from other European countries, invitation to the PRW workshops, decision on the instrument / program to be transferred ("Competence Brokering" from Norway) and the possible host organisations, several meetings with the Project Manager of the "Department for Acquisition, Technology and International Contacts" of LEG Thueringen and the Managing Director of STIFT, - coordination of LEG's and STIFT's current relevant activities with the implementation of the "Competence Broker", elaboration of an implementation strategy, planning joint activities and events

#### b) Implementation (current, ongoing)

# 1. Awareness raising mobilisation and communication

Since the implementation of the "Competence Broker" will be combined with a corresponding official task assigned to LEG Thueringen by the Ministry for Economy already the first activities for implementation are determined by the strategic outline of this task. This includes awareness actions to the target groups (SMEs and R&D organisations / potential brokers), mobilising institutions, contacts to multipliers, communication, organisation of introduction workshops ...). All these already scheduled activities of LEG will be extended and simultaneously used for the exploratory phase of the implementation of a broker's network.

To gain access to the target group of SMEs / R&D newcomers other regional key players such a the Chambers of Commerce and Industry, start-up and technology centres as well as industrial networks and technology clusters are involved.

2. Exploratory phase / Analysis of the specific needs of the target groups (October 2008 until March 2009)

The joint workshops organised by LEG are used to introduce R&D programs and providers to R&D newcomers, but also to discuss with them their specific problems and needs to access R&D, (first WS planned for 21st October 2008, next one planned for November 2008. A schedule for further workshops is planned to be set up before the end of October 2008.

To identify the specific needs of SMEs and the problems of potential brokers / R&D organisations a short questionnaire could be developed for each target group to have a standard base for problem analysis. Each potential broker (representatives of R&D organisations) and also a number of SMEs in each workshop should be questioned.

# 3. Evaluation and assessment – strategy for setting up the broker's network (April 2009 - June 2009)

The answers would then be used to compare statements and to identify common problems. Based on the outcome joint terms and conditions for a broker's network would be established. It is intended that the R&D representatives willing to act as brokers and to participate in the network take part in this initial phase and then decide on necessary coaching and training. Coaching, joint events and PR would be coordinated by LEG. The training can be offered by the Enterprise Europe Network Thueringen or by other appropriate providers in the region (RKW, TAB STIFT). Also the terms for possible incentives for the brokers should then be addressed.

# 4. Authorisation by the Ministries and acquisition of funds for network coordination, broker's training, broker's incentive if applicable, ... (July 2009 - September 2009)

Presentation of the concept of a coordinated regional R&D broker's network (with an envisaged program start in January 2010).

# 5. Starting the program according to the outline Arranging regular meetings between (potential) brokers; organising training workshops for the brokers, coordinating individual and joint brokerage activities, ...

# 6. Monitoring and Evaluation of the program A monitoring and evaluation procedure for the brokerage activities would have to be established in order to control progress and to measure success.

order to control progress and to measure success. Annual targets could be determined and a problem and failure analysis procedure established.

The monitoring procedure should include regular reviews of the individual brokerage activities, trainings and the number of initiated projects followed by corrective measures if necessary. It should also assess the long term economic impact of the projects initiated by the brokers.

#### d) Description of the support facilities

The State Development Corporation LEG Thueringen itself is very experienced in running support programs at regional as well as international level. So they have the necessary expertise internally available in terms of program management and consultancy, in public awareness building as well as in monitoring and evaluation. The very broad assignment of LEG by the Ministry for Economy, Technology and Labour to get more SMEs involved in R&D allows its combination with some of the initial and preparatory activities for the implementation of the broker's network in Thueringen.

STIFT is very experienced in initiating infrastructural technology and innovation oriented projects. As part of its mission STIFT is also providing funds for R&D activities, especially for small scale and preparatory projects or feasibility studies. In addition STIFT is a regional office of the Enterprise Europe Network which is qualified to provide training to the brokers in technology and innovation auditing. Emerged from the previous European Network of Innovation Relay Centred (IRC) it can make use of proven tools and instruments.

In the implementation process LEG and STIFT would also cooperate closely with TAB hosting most of the other regional R&D funding programs.

To gain access to the target group of SMEs / R&D newcomers other regional key players such a the Chambers of Commerce and Industry, start-up and technology centres as well as industrial networks and technology clusters are involved.

The implementation of the new R&D broker's network in Thueringen would have to be authorised and supported by the two responsible Ministries -the Ministry for Economy, Technology and Labour and the Ministry for Education.

#### e) Assumptions and risk assessment

Risks for failure of the implementation could be: The risk of failure should be minimised by the initial workshops where the specific needs of SMEs to perform R&D and the problems of R&D institutions to access SMEs are analysed. All following actions in terms of setting up and coordinating a broker's network will be determined by the results of this initial analysis and the identified needs. There is a risk of no need or common interest by the potential brokers (different motivation depending on the R&D organisation behind them), not enough SMEs expressing interest on the tailored brokerage services. Also the acquisition of small projects with small budgets might not be attractive for R&D organisations. If it is not possible to prove a clear need for the program with its two components it will be impossible to communicate it to the Ministry for Economy.

But even if the broker's network is approved and takes off as planned there is still the risk of SMEs still not making sufficient use of it, not meeting evaluation criteria for project funding and the whole action not having the expected economic impact for various reasons.

Strict progress monitoring and interim assessment during implementation and immediate corrective measures in the case of problems will contribute to successful implementation.

#### f) Success factors for implementation

- Acknowledgement of the need for the instrument by regional policy and decision makers (see Transferability Check List)
- Authorised and competent regional organisations hosting the new program (LEG, STIFT)
- Sufficient and continuous (reliable!) allocation of funds (regarding the broker's network as well as the complementary regional R&D funding programs
- Willing and motivated R&D brokers
- An innovative and technology orientated SME base
- Long term cooperation among relevant regional key players, multipliers and host organisations of regional support programs such as STIFT, TAB, technology clusters and industrial networks, CCI, R&D institutions, etc.

## g) Monitoring and Evaluation

A monitoring and evaluation procedure for the brokerage activities would have to be established in order to control progress and to measure success. Annual targets could be determined and a problem and failure analysis procedure established. The monitoring procedure should include regular reviews of the individual brokerage activities, trainings and the number of initiated projects followed by corrective measures if necessary. It should also assess the long term economic impact of the projects initiated by the brokers. A clear definition of performance indicators, milestones and evaluation criteria is not possible at this point.

#### h) Sustainability

Statements about sustainability can not be made at this point as it is not clear yet how it will be implemented. The broker's network would receive an initial support by LEG being set up, coordinated and coached to an extent that it could be self-supporting after a few years. It is important that the brokers receive high quality initial but also follow-up trainings which enable them to offer excellent brokerage services to SMEs in the long term.

The objective is to get as many SME newcomers as possible involved in R&D in order to make them fit for the future, to be able to generate own R&D projects or to get into European funding programs.

Possible revenues generated by applying the program can not be specified at this stage.

#### i) Costs

The broker's network would start as a complementary initiative to the existing R&D programs in the region, using the existing infrastructure as much as possible. Since the increase of R&D activities in SMEs is already assigned to LEG by the Thueringen Ministry for Economy there is no additional money needed for the initial phase which includes the organisation of dedicated workshops to present R&D programs as well as R&D organisations to SMEs, communicating the concept to the potential brokers and defining the terms and conditions for a broker's network.

But in the long run administrative costs for coordinating the broker's network, to perform coaching and to provide training on specific brokerage services, to promote them and to organise joint information events and targeted workshops will be generated. Also the question of offering incentives to the brokers needs to be decided.

Since the extend and therefore the corresponding administrative costs of all these activities are not clearly defined yet, neither an overall total nor a detailed cost calculation can be made at this stage.

# EUROPEER SME - Logical framework of the implementation of "Competence Brokering" by partner 5 / STIFT in Thueringen (Germany)

Work packages	Duration	Manpower	Costs
a) Inception Phase	done a	2	0 (EUROPEER), LEG assignment and STIFT mission

Contacting decision and policy makers, informing them about EUROPEER, introduction of best practice examples from other European countries, invitation to the PRW workshops, decision on the instrument / program to be transferred ("Competence Broker" from Norway) and the intended organisations hosting the new program (STIFT, LEG);

Meetings with the Project Manager of LEG Thueringen and Managing Director STIFT - coordination of current relevant activities with the implementation of the "Competence Broker", elaboration of an implementation strategy, planning joint activities and events.

b) 1. Awareness raising,	Current until	2	0 (EUROPEER),
mobilisation, communication	October 2008		LEG assignment and
			STIFT mission

Awareness actions to the target groups (SMEs and R&D organisations / potential brokers), mobilising institutions, contacts to multipliers, introduction workshops ...). All these already scheduled activities within LEG's assignment by the Ministry for Economy will be extended and simultaneously used for the exploratory phase of the implementation of a broker's network and a small scale R&D program.

In order to access SMEs / R&D newcomers Chambers of Commerce and Industry, start-up and technology centres as well as industrial networks and technology clusters will be involved.

2. Exploratory phase /	October 2008	2	0 (EUROPEER),
Analysis of the specific needs of	until March 2009		assignment and
the target groups			STIFT mission

Joint workshops will be organised by LEG in order to introduce R&D programs and providers to SMEs, especially to R&D newcomers, but also to discuss with them their specific problems and needs to access R&D. Further workshops are planned until March 2009. To identify the specific needs of SMEs and the problems of potential brokers / R&D organisations a short questionnaire will be developed for each target group to have a standard base for problem analysis. Each potential broker (representatives of R&D organisations) and also a number of SMEs in each workshop will be questioned.

3. Evaluation and assessment – April 2009 2 0 (EUROPEER),
strategy for the R&D broker's until June 2009 LEG assignment,
network STIFT mission and the expertise
of the Enterprise Europe
Network Thueringen

Based on the outcome joint terms and conditions for a broker's network would be established. R&D representatives willing to act as brokers and to participate in the network would take part in this initial phase and then decide on necessary coaching and training. Coaching, joint events and PR would be coordinated by LEG. The training can be offered by the Enterprise Europe Network Thueringen or by other appropriate providers in the region (RKW, TAB STIFT). Also the terms for possible incentives for the brokers should then be addressed.

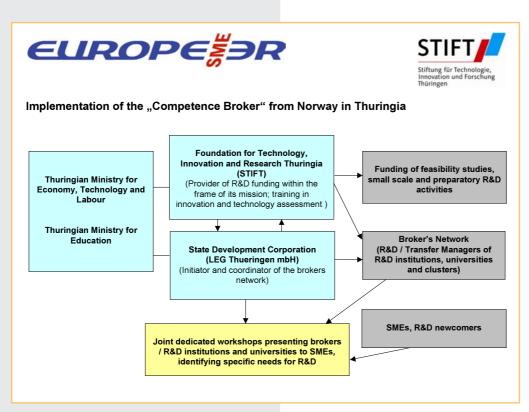
Work packages	Duration	Manpower	Costs
4. Authorisation by the Ministries and acquisition of funds for network coordination , broker's training, broker's incentive	July 2009 until September 2009	1	0 (EUROPEER), LEG assignment and STIFT mission
Presentation of the concept of a coordina start in January 2010)	ted regional R&D bro	ker's network (	with an envisaged program

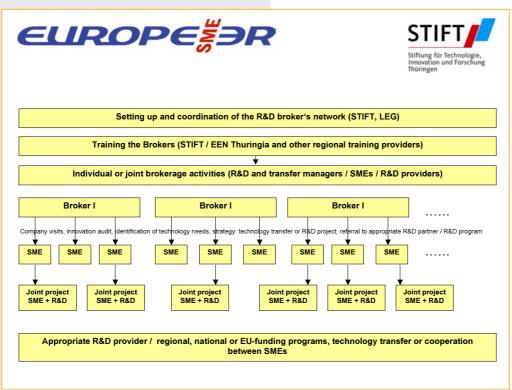
8. Starting the program Starting 2 ? Broker's training according to the outline January 2010 ? Broker's incentive

Arranging regular meetings between (potential) brokers; organising training workshops for the brokers, coordinating individual and joint brokerage activities, ...

9. Monitoring and Evaluation January until 1 ?
of the program December 2013

Monitoring and evaluation of the program according to an established procedure in order to control progress and to measure success. Annual targets and performance indicators should be determined and a problem and failure analysis procedure established. The procedure should include regular reviews of the individual brokerage activities, trainings and the number of initiated projects followed by corrective measures if necessary and also an assessment of the long term economic impact of the initiated projects.





# Nanotechnology

Veneto Region/Italy (VenInn)



# THE CLUSTER FOR NANOTECHNOLOGIES IN VENETO REGION



Enzo Sisti Veneto Nanotech

Investors Relation









1. Framework



• Population: 4.642.899 (2003)

· Working market: 2.042.300

• Unemployment rate: 4,02%

• GDP: 113.593,3 million €

• R&D infrastructure: 4 Universities, 3 STP

 R&D expenditures of industry: 0,7 % of GDP (2003)

- Number of SMEs in region: 490.000
- Main industrial sectors: shoes, clothes and fashion, furniture, mechanics
- Main technology strength: nanotechnology, ICT











## 1. Framework

#### The Problem:

- SME dominated economy
- · Lack of technology transfer in small companies
- Loss of competitiveness in international markets

#### The Reason:

- Economic system mostly based on mature sectors
- System based rather on the capability to do than on high-value services

### The Consequence:

 Stimulating transversal and radical innovation of the product by applying nanotechnology to materials









## 1. Framework

In 2003 the Italian Ministry of Education, University and Research has chosen the high tech cluster model as the main tool to foster innovation. The focus for nanotechnology was appointed in Veneto where *The Italian High Tech Cluster for Nanotechnologies* was established.

Increasing private investments in R&D activities

Developing international excellent R&D centers

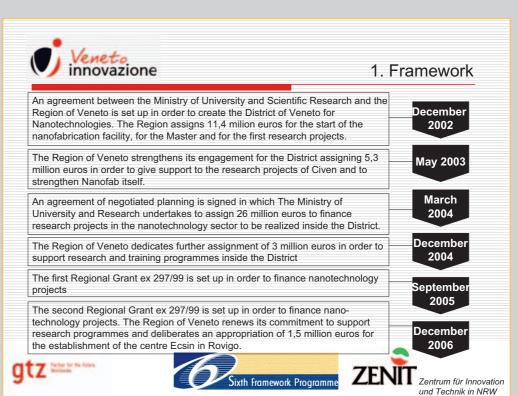
Developing technological entrepreneurship

- Supporting the industrial research within enterprises by managing public funding
- Fostering technological transfer through new infrastructures devoted to scientific research and to industrial experimentation
- Attracting companies and investors and promoting the birth of start-up through the management of seed capital funds











## 2. Description of the instruments

□ Developing facilities and foster technology transfer - The District is engaged in planning and developing laboratories and research centres able to acknowledge the university resources and know-how and to focus on the themes of interest of the companies. The aim to use nanotechnology as a driver for the development of traditional companies has been delivered with a technology transfer strategy based on structures exclusively dedicated to technology transfer and use of public fund.

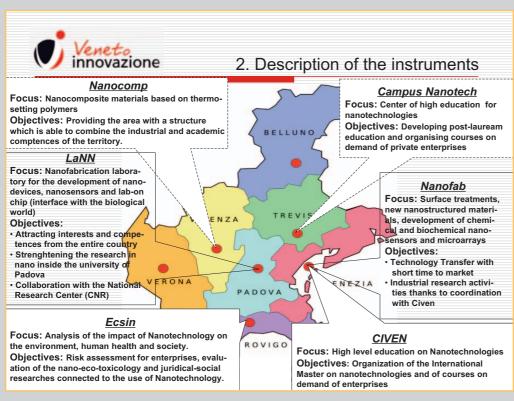
□ Support new entrepreneurship - The innovation is a bottom-up process too. The program supporting new start-ups is *Nanochallenge* a business plan competition which every year awards with a seed capital investment of 300 K€ the best business idea on nanotechnology.

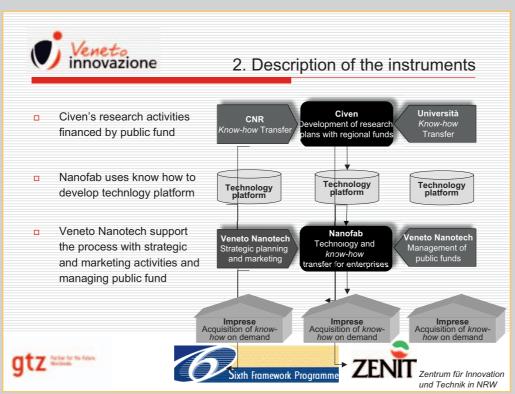
□ Education, training and diffusion - The International Master in Nanotechnology which is a post-graduate program attracts brains from all the world and is a necessary element of scientific growth of the District. *Nanoweek* is a training and diffusion event organised every year from Veneto Nanotech to promote nanotechnology in the region.

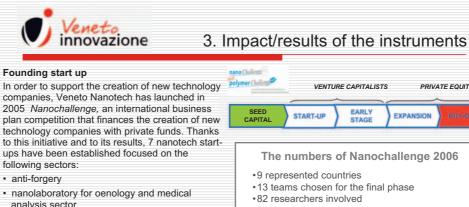












- analysis sector
- · nanotechnologies for the substitution of platinum
- · production of nanoparticles for immunodiagnostics and drug delivery
- · medical diagnostics
- · high precision optical components
- · amorph metals

Biotechnology

Medicine

Diagnostics

Electronics Computer

> Zentrum für Innovation und Technik in NRW

Instruments Equipment

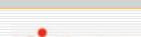
PRIVATE EQUITY

Materials

Energy Sensors

onment

EXPANSION



## 3. Impact/results of the instruments

20%

#### Quantitative

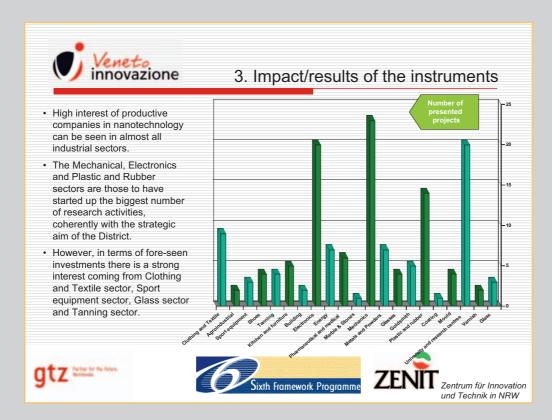
- 25 Million Euros financed by the Ministry implied a co-financing of other 25 Million Euros raised by other instruments and by the private sector;
- 2 Nanoweeks were organised to promote the culture of nanotechnologies in common people;
- 5 editions of the International Master in Nanotechnologies (2nd level);
- · 20 students for each edition;
- · more than 300 companies visited Nanofab;
- 1 international business competition for start-ups in nanotechnology.

- · The industrial sectors where Veneto holds a recognised leading position coincide with those where nanotechnology applications are already strong or have big growing potentials for product or process
- The use of products with a nanotechnological content, even in traditional and mature sectors, will allow experienced companies to adopt the necessary innovation to remain competitive on a more and more
- The tight link between innovation and companies paves the ways towards a continuous scientific and technological research and experimentation in nanotechnologies necessary for the development of businesses.











## 3. Impact/results of the instruments

## **Activated Cooperations**

- · IMAST Polymer Materials Technology District, Campania
- LCN London Center for Nanotechnology (UK)
- Minatec Grenoble (F)
- Fraunhofer Institute Dresda (D)
- Institute of Inorganic Chemistry and Surfaces (ICIS) of CNR (National Research Centre)

  — (ITA)
- IRST Trento and Kessler Foundation (ITA)
- ENEA (Casaccia) (ITA)
- Kyoto Nanotech Cluster (J)
- Institute of Occupational Medicine / Toxicology particle risk section (D)
- · University of Leeds (UK)









## 4. Success Factors

- Existence of nanotechnology competence centres
- Strong commitment of the Ministery and the Region
- Ability to point out the strategic value of innovation in SMEs
- Explaining to companies the importance of borderline scientific research
- Urge young researchers towards the result/product









## 5. Bottlenecks

- · Great number of actors
- Polycentrism
- Difficulty to promote an innovation that is supposed to be incremental but is radical in its origin.









## 6. Transformation needs

- A specific knowledge and experience on nanotechnology in universities and research centres are necessary.
- There should be some companies interested to apply Nanotechnology.
- Deep policy makers commitment to develop a cluster strategy on nanotech.
- · Conspicuous long-term investments are necessary.
- The cluster specialisation must fully answer to the policy objectives that are contained in the principles and in the documents of EU planning: networking between universities and companies, technology transfer and start-ups having a high knowledge and education content, attracting the best researchers and scientists.
- Facilities to develop applied research must be built: the cluster is busy with the designing and the development of laboratories and research centres able to collect researchers and know-how from universities focusing on subjects interesting for companies.
- Nanotechnologies are used as drivers to develop traditional companies through structures exclusively dedicated to technology transfer.
- It is essential to create educational paths (International Master in Nanotechnology), to support innovative start-ups (Nanochallenge) and to let people know what nanotechnologies are about (Nanoweeks).









## 7. Revision and adjustments

## SUGGESTIONS

- Research partially to be done in third countries (i.e. India, China...)
- · Other clusters from other countries to be involved
- · International projects
- · Short way from potential applications to business opportunities
- · A strong dissemination
- · Additional communication channels in order to facilitate new projects
- · Advertisements of importance of Nanotech
- Projects should be applied by enterprises involving R&D centres
- Financial aid should be paid to enterprises which have a R&D need

#### HAS BEEN DONE:

- ☑ We have deepened relations with other Nanotech clusters, for example we have made an agreement with Kyoto Nanotech cluster.









## 7. Revision and adjustments

#### TO BE REALIZED IN THE NEXT FUTURE:

- It has been worked on establishing relations and international cooperation with other hitech clusters in order to start up projects of international cooperation and exchange.
- ▶ The participation at 7th Framework Programme is of particular importance for district enterprises and facilities (like Nanofab).
- Great importance has been given to communication and dissemination activities. Every year a conference week dedicated to nanotechnologies is organized, and starting form this year it has assumed an international importance.
- ▶ In order to avoid non justified and a priori rejection, there is a special study and research centre that evaluates the impact of nanotechnologies on ethical other than physical and chemical level.
- A particular attention is given to the attraction of foreign competences and knowledge through an international business competition with the aim to encourage settlement of innovative start-ups in Veneto region.
- ▶ In order to maintain a strong relation with local enterprises and promote intrinsic initiatives it is necessary to introduce an efficient system of supervising the results achieved in already launched research projects.







# Transfer Scheme

## Nanotechnology - Hordaland/Norway (HCC)

Project name	Nanotechnology					
Region of origin (transferring region)	Venice/Italy					
Region adapting the instrument (receiving region)	Hordaland/Norwa	у				
I. Transferability Check List						
	Yes	Action needed	No			
1. Do you actually battle the same problem that is addressed by the instrument?						
<ol><li>Does the instrument fit into the given regional planning/national strategy?</li></ol>						
3. Are the institutional prerequisites fulfilled?						
4. Are the prerequisites regarding knowledge structure fulfilled?						
5. Are the financial resources available?						
6. Is the instrument compatible with the overall incent structure in your region/country?	ive					
7. Is the instrument compatible with/additional to exist projects in your region/country?	ting					
8. Are the requirements regarding social capital, credibility, reliability fulfilled?						
II. Pre-implementation needs						
While the Nanotech project has a specific scientific area in which the region has a comparative advantage as its point of departure, this adaptation starts with the needs of the SMEs within the economic areas in which the region of Hordaland has a certain advantage. Though the county has a number of research institutions of international renown, too little research are conducted with relevance for the SMEs within the priority sectors of the Regional Development Plan.						
The purpose of the Nanotech project was to create inco- generated within the research communities, the purpos R&D institutions to analyse the research needs of these	e of this adaptation	on will be to create in	centives for			
III. Adaptation needs of the instrument on the level	of					
Content: The adaptation will be directed at the same target group - R&D institutions and SMEs - but their roles will be reversed. Rather than focusing on the implementation of research result in SMEs, the adaptation will focus on analysing research needs of SMEs and promote these as possible R&D project within the scientific community						
The project should be executed under the survaillance	of the Regional De	evelopment Forum				
Infrastructure: The necessary research institutions and to conduct a pre-project analysis of the research capa relevant for the project			-			

#### Institutions:

- 1. The Norwegian research council (the main funder of research activities in Norway)
- 2. Municipal Economic Development Bodies (Most municipalities have officers working directly with the local SMEs. These will be vital players for the project with their unique insight into the daily life an problems of the SMEs)
- 3. R&D institutions (the 4 main research and development institutions)
- 4. Institutions for technical transfer and licensing of research results
- 5. The university of Bergen has several institutions dedicated at the commercialisation of research results.

**Finance**: A budget of 3 mill NOK is proprosed. The funding will come from the government sposored VRI-programme

Monitoring and Evaluation: Evaluation would be put up to tender the relevant institutions

**Process and implementation**: The project will focus on how centres of expertise, such as universities, affect competition at the regional and international level, how such expertise are transformed into successful products, and how public policy can be adjusted to encourage these efforts.

## Draft Proposal

## Nanotechnology - Hordaland/Norway (HCC)

#### Name of the instrument

TechNet - Technological Networking in Hordaland

## **Applying Institution**

Hordaland County Council

#### Managing Division in Institution, Address

Dept. of Regional development

#### I. Idea in a nutshell

# Overview on a) background, b) objective, expected impact and total cost

The problem of the Veneto region was an economy dominated by mature sector companies which were losing competitiveness due to lack of innovation. At the same time, the region hosted R&D facilities with technologies (nano) that would enhance the competitiveness of the local companies if a mechanism could be found to transfer relevant technologies from the research centres to the SMEs.

#### **Background**

Hordaland is a resource-rich region with a strong economy that has expanded over the latest decade. The region is a significant producer of energy, even in a European context, of hydroelectric power as well as oil and gas form the offshore fields in the North Sea. It has a strong sector of small and medium sized companies, many of which have recorded record profits over the latest years. The latest business survey indicates that the companies expect tighter profit margins over the coming year, mainly as a result of rising costs of labour and intermediate products. The region also has strong centres of research and education. As such Hordaland should have excellent opportunities to create sustainable growth and employment for the future. There still are, though, a number of challenges that need to be overcome in order to release the full economic potential of the region. These involve shortage of labour, sustainability (related to oil/gas production and processing), development of the rural areas and innovation.

Our Strategic Development Plan has identified five main sectors in which Hordaland is considered to have a comparative advantage:

- Energy
- Marine sector
- Maritime sector
- Tourism and leisure
- Young innovative start-ups

As in Vento the bulk of the companies in these clusters are in mature sectors of the economy.

### Objective

Hordaland has both strong business clusters and strong research centres. While the Veneto project took as its point of departure the academic strengths of the regional research institutions, Hordaland will start by analysing the research needs of the strongest business clusters and promote research into these areas.

The objective is to create incentives for the regional R&D centres to conduct research into areas of specific interest to the sectors most important to the future economic development of Hordaland. The main objective for the county council is to create new methods to make the resources found both in the regional R&D institutions and in the private companies and industries in the region work together for a common goal.

Increase private investments in R&D activities:

- Stimulate more direct contact between companies and researchers
- Making the companies analyse their own research needs
- Increase in the number of researchers employed by private companies

Developing international R&D centres with international excellence on the selected topics:

- Promote research related to the use of the entire region
- Create more sustainable development of the regional industry
- Improve systems for technical transfer between R&D-institutions and industry

Developing technological entrepreneurship

The challenges facing Hordaland also contains significant business opportunities as mentioned above.
 Research and development will unleash a significant business potential

#### **Expected Outcome**

We expect the outcome of the project to be a number of small project related to the needs of the most important regional economic sectors and through this:

- An increased recognition by the companies of their own research needs
- A number of young researchers with increased understanding of the problems facing regional companies and industry clusters
- More competitive and sustainable companies than would otherwise be obtained
- New innovative start-ups formed.

#### I. Rationale specified

The main rationale of the project is to develop a cooperative environment for R&D-related activities in Hordaland. In this way we will create new entrepreneurial activities, both within existing companies and increased cooperation between companies and R&D institutions based on innovation. Through creating networks between companies and between companies and researchers we will stimulate an active and lasting relationship focusing on problem areas such as environment and sustainability, energy efficiency, quality, and management.

#### 1. RUP (Regional Development Forum)

A joint forum representing both private and public sector, dedicated to coordinate and promote innovation and value creation in Hordaland. This body will act as a steering group for the project

2. Innovation Norway – the main source of funding for innovation activities in private companies
Promotes funding for various activities within SMEs

### 3. The Norwegian research council

The main funder of research activities in Norway

#### 4. Municipal Economic Development Bodies

Most municipalities have officers working directly with the local SMEs. These will be vital players for the project with their unique insight into the daily life and problems of the SMEs

#### 5. R&D institutions

The four main research and development institutions

## 6. Institutions for technical transfer and licensing of research results

The University of Bergen has several institutions dedicated at the commercialisation of research results.

#### II. Implementation strategy in details

#### 1. Set up the project

Analyse the research needs of the five most important sectors and arrange them according to importance and research needs. Select the sector where the project will seem to have the most impact.

#### 2. Analyse research capabilities

Analyse and identify the research capabilities for the given sector selected. Identify areas where the regional research capabilities will need to be strengthened.

# 3. Match research needs and research opportunities

Find the best combination of researcher(s) to carry out specific projects. These will have to be funded from regular sources for research and/or business development, both nationally and internationally. The project will train officers to help write funding applications and will always be updated on funding opportunities. We will also keep a close eye on international projects (such as "research for SME's") and promote the project internationally.

- 4. Identify possibilities for technical transfer between R&D-institutions and companies. Exploit existing networks for this task to an as large degree as possible
- 5. Competition for the best SME related research project

## 6. Events

Host promotional events - Demostrate research results. Exploitation of the media

## a) Project duration

3 years

## b) Target group

SME's (within sectors mentioned under I above) R&D institutions, Entrepreneurs

## c) Implementation activities

Activity 1	Analysis and set up
Objective	Analyse the research needs of the most relevant industry sectors. Identify the
	areas where the project will have the greatest impact
Partner Responsible:	Research institution (tender)
Deliverables:	Report
Activity 2	Mobilise Companies
Objective	Mobilise the relevant companies to take part in the project
Partner Responsible:	Innovation Norway, Municipal Development Officers + all partners
Deliverables:	List of relevant and interested companies
Activity 3	Mobilise research institutions
Objective	Mobilise the relevant R&D institutions to take part in the project.
,	Analyse their capabilities and where they need to be strengthened
Partner Responsible:	The Norwegian research council + all partners
Deliverables:	List of research institutions
Activity 5	Matching research needs with research capacities
Objective	Supply the relevant SMEs with research-base know how in their respective fields
Partner Responsible:	Research Institutions
Deliverables:	Research projects ready to be funded
Activity 6	Brokering - promote take-up of SMEs with new technologies
Objective	Promote technology transfer
Partner Responsible:	University of Bergen
Deliverables:	Technology transfer projects
Activity 7	Research for SME competition
Objective	Promote research for SMEs to young researchers
Partner Responsible:	University of Bergen
	Competition for young researchers for SME-relevant research projects

Activity 8	Research funding
Objective	Find external funding from national and international spruced for projects promoted under 5 and 6
Partner Responsible:	Innovation Norway, Hordaland County Council
Deliverables:	Continuous updated information of funding opportunities readily available for the companies.
Activity 9	Events
Objective	Promote the programme - both to the target groups and to the general public
Partner Responsible:	All
Deliverables:	1 main yearly event - several smaller local events
	Use other conferences
	Use media - innovation in companies is always popluar by the media
Activity 10	Management, coordination and control
Objective	Managing funds, reporting, coordination with other activities, promoting etc
Partner Responsible:	Hordaland County Council
Deliverables:	Reports

## d) Description of the support facilities

National partners who will implement the instrument too and back-stopping that the implementation will have from the EU-Network and national institutions (enumerate co-financing and equipment needed, consultancy/management expertise, policy and legal advise, support in public awareness building/visibility, training in monitoring and evaluation

#### Research Institutions:

The University of Bergen - UNIFOB

Unifob conducts research and associated activities across all the scientific fields covered by the university departments, - usually in collaboration with these departments and always in the form of projects. The clients of Unifob are public and private enterprises and institutions.

The company is 100% based on external research funds.

#### Sarsia Innovation:

Sarsia Innovation shall find, develop and finance research-based concepts to create businesses whose potential makes them interesting investment objects for industry and international capital providers. Supports research-based commercialisation initiatives.

Bergen University College: Runs a research based incubator

#### Chr Michelsen Research:

CMR is conducts research on industrial development and is working in the intersection between research and industry.

#### e) Assumptions and risk assessment

#### Assumptions:

The main critical assumption is that the project will get a substantial amount of funding from central sources. At least half the project budget must come form central sources outside the county or the project will not be viable

#### Risk assessment:

- 1. Lack of interest among
  - a. Companies
  - b. Research institutions
- 2. Mismatch between research needs and research offered
- 3. Lack of external funding opportunities unable to fund projects
- 4. Unable to muster necessary enthusiasm among local Business Development officers

## f) Success factors for implementation

The project is developed in accordance with all the relevant regional programmes, and is in the spirit of both the overall national strategy for economic development as well as within the EU Lisbon Strategy

## g) Monitoring and Evaluation

Evaluation of the programme will be given to an external tender among relevant institutions outside of Hordaland

#### h) Sustainability

The project should be more or less self-sufficient after three years -

#### i) Costs

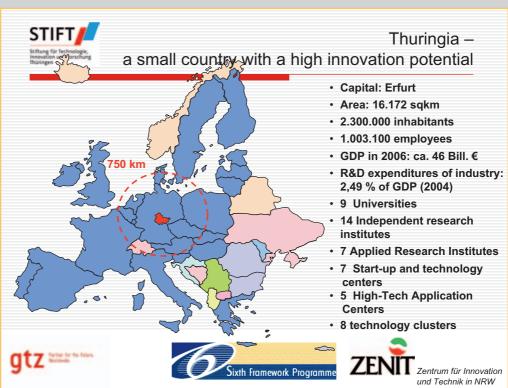
3 mill NOK over 3 years

The project could have a larger budget but there is not much money available for this kind of projects

# Thuringian Innovation Fund

Thuringia/Germany (STIFT)







## Regional Technology Focus

## Main technology fields:

- Automotive
- Production and Automation Technology
- Information and Communication Technology
- Medical Technology; Biotechnology
- New Materials
- Optics and Photonics
- Solar and Environmental Technologies









1. Initial situation

## Situation:

 innovative entrepreneurs need R&D-projects in order to develop new products and technologies and to enter new markets

#### Problem:

- they have not enough private equity need investment
- for high-risk R&D private investors are rare
- investment from the public sector is necessary!!
- >> TI Fund is closing this financial gap









## 2. Description of the instrument

## **Thuringian Innovation Fund**

Who: (young) innovative SMEs

What: development of new systems, technologies and products

including market entry

How: Investment in form of a silent partnership up to € 500 000 with co-investor up to € 1 Million no guarantee or other "securities" duration 10 years, interest rate 8-10% p.a.

payments according to achievements of milestones









## 2.1. History of the instrument

## **Thuringian Innovation Fund**

First Step: decision of Thuringian government 1994 to create

an Innovation Fund

Fund Size: € 13 million, first closing 1995

Legal condition: notification of the European Commission

by the Thuringian Ministry of Economy, Technology and Labour; definition of investment criteria (duration, interest rate etc.)









## 2.2. Main goals of the instrument

## **Thuringian Innovation Fund**

- · to close a financial gap for R&D projects
- to ensure the financing of innovative SMEs
- · enabling SMEs to perform R&D in technology fields of high economic risks
- to facilitate the technological advancement of innovative SMEs
- to achieve and maintain international competitiveness

**Overall goal of the programme:** to support innovation and technological advancement in SMEs, to generate sustainable employment and to foster the economic growth in our region, to maintain and develop scientific and technological competence and excellence in the region









## 2.3. Initiator, implementer and partner

- Initiator: Thuringian Ministry for Economy, Technology and Labour
- Implementer: Thuringian Investment Corporation (bm-t beteiligungsmanagement thueringen gmbh; Thuringian Bank for Reconstruction and development Thueringer Aufbaubank TAB)
- Partner: TAB (Evaluation)
   Universities and Applied Research Institutes (Evaluation)









#### 2.4. Investment Process

· Businessplan of SME

(bm-t)

First check: SME?

(bm-t) Shareholder?

Management?

Commercial competence?

 Presentation of SME / R&D-project to an investment manager of bm-t (SME)

Evaluation of R&D-project: technological excellence?
 (TAB, R&D institutes) USP? Patents?

» Expert's report: positive vote!









## 2.4. Investment Process

Financing structure

(bm-t)

Due diligence: (bm-t) legal (company agreement, main contracts...) product / market (patents, USP, market entry...)

financial (balance sheets, forecasts...)

Investment proposal: positive vote!

- Investment decision: general manager bm-t (bm-t)
- Contract with agreement of milestone payments of full investment amount (SME and bm-t)









## 2.4. Investment Process

- Monitoring
- regular periodical visits
- (bm-t)
- regular periodical payment of interests
- target-performance comparison
- regular periodical forecasts
- consultation for further financing
- · Return of investment after 10 years









## 3. Impact of the instrument

## Quantitative

- · more than 100 project investments
- presently about 30 projects
- creation of about 1500 1800 jobs

## Qualitative

- positive effects on regional SMEs; more competitive; access
- · to new (international) markets
- · increased technical knowledge and scientific know-how
- · well established and frequented programme









## 4. Success factors

## Regional prerequisites

- network of universities and R&D institutes
- · critical mass of innovative SMEs
- technological experts
- · professional fund management
- · regional bank payment transactions
  - technical equipment (computers etc.)
  - cooperation with other bank departments (grants...)









## 4. Success factors

## Advantages of the instrument

- push new technologies into the market
- successfully invested public money motivates private capital for further financing rounds
- return of investments
   in comparison to grants
- ▶ new investments are possible
- money is gone
- interest generated covers partially operating costs for fund management
- competitive SMEs with an above average economic growth









## 4. Success factors

#### 3 Success stories:

	IBYKUS A	BYKUS AG		Leistungselektronik GmbH		onic GmbH
	revenue (k€)	emplo yees	revenue (k€)	emplo yees	revenue (k€)	emplo yees
1996	3.118	25	432	13	370	11
2006	6.100	81	4.362	20	2.474	32









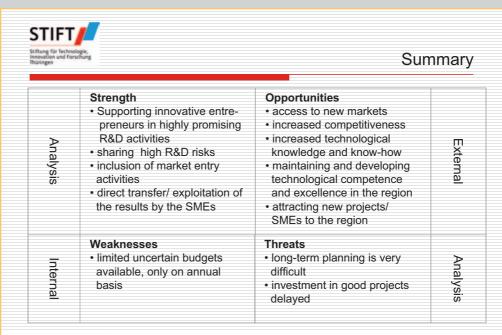
## 5. Bottlenecks

- high number of insolvencies (30%) at the beginning, with the
- introduction of stricter access and evaluation criteria now decreasing
- uncertain limited budgets by the Ministry of Economy
- dependency on Ministry of Economy (not so strong, but sometimes)
- high administrative expenses
- long term planning is very difficult

















## 6. Transfer recommendations

- Long-term strategic focus must be determined
- Funds/annual budgets need to be assigned to the programme/instrument (including project funding as well as administration and management of the instrument)
- Suitable initiator, implementer and partners need to be selected
- Clear determination of target group(s) as well as access and evaluation criteria









## 7. Revision and adjustments

 Provide coaching to make SMEs more successful:

 already provided (regular company visits and assessments of

 the financial status allowing early identification of upcoming liquidity problems, network of financing partners is also used for follow-up financing of next business phases)

#### 2. Set up a mentorship scheme:

- not envisaged because not realistic (potential mentors have lack of time or competence, conflict of interest)
- in some cases an advisory board has been established in companies
- BAs could partially act as mentors since they are financially engaged and business experienced, but there is a general lack of BAs in the region









#### 7. Revision and adjustments

#### 3. Conduct research to identify risks of bankruptcy factors develop a learning system:

- analysis is always performed risk/bankruptcy factors are mainly lack of business competence, wrong market estimation, incompetent management, no follow-up financing
- learning system not envisaged, but special attention is paid to these points regarding new investments
- failures have been reduced significantly in the last few years (non in 2007, only 2 in 2006, which is a good results for a dedicated risk financing institute)

## 4. Feedback from unsuccessful stories:

- reasons for failure are discussed with the SME managers and correspond to the factors mentioned above
- often managers reassess themselves and realise their lack of business skills









## 7. Revision and adjustments

# 5. Integrate "Assessment Centre" on entrepreneurial capabilities into selection process

- this process has started and will be further developed
- prior to each investment two intensive structured interviews are performed regarding the commercial and social skills of the applicant, after pre-selection each applicant has to do an onehour presentation his/her business skills

#### 6. More predictable financial framework

 this point is permanently communicated to the responsible Ministry, there is an understanding for the correlation between the success of the instrument and the sustainability of funds, but implementation takes long

#### 7. Increase participation of Business Angles

- was realised in some cases
- great effort is currently put into the establishment of a small sector specific BA network for all investment funds of bm-t







# Transfer Scheme

## Thuringian Innovation Fund - Stuttgart/Germany (WRS)

Project name	Thuringian Innovation	Fund		
Region of origin (transferring region)	Thuringia/Germany			
Region adapting the instrument (receiving region)	Stuttgart/Germany			
I. Transferability Check List				
	Yes	Action needed	No	
1. Do you actually battle the same problem that is addressed by the instrument?	•			
2. Does the instrument fit into the given regional planning/national strategy?				
3. Are the institutional prerequisites fulfilled?				
4. Are the prerequisites regarding knowledge struct fulfilled?	rure 📕			
5. Are the financial resources available?				
6. Is the instrument compatible with the overall inc structure in your region/country?	centive			
7. Is the instrument compatible with/additional to e projects in your region/country?	existing			
8. Are the requirements regarding social capital, credibility, reliability fulfilled?	•			
II. Pre-implementation needs				
An Innovation Fund could not be managed by WRS are different private VC companies and banking ins up support network PUSH! and the Business Angel to take over this role.	titutes working closel	y together with the	regional start-	
Financial Resources are not readily available, as St ral state) with a limited budget. Therefore, Stuttgar instrument. For example, there is already the comm similar fund. Hence it would probably be the main ready to invest in the fund. There might also be an	t Region would need nitment of the regiona effort of setting up th	financing partners to l Business Angels to e fund to find inves	o set up the o invest in a tors (banks etc.)	
III. Adaptation needs of the instrument on the le	vel of			
Content				
Infrastructure: As mentioned above, an experience for attracting potential investors. Therefore, WRS wable to evaluate project ideas from a technical and	ould have to establish	n a partnership with	•	
Institutions: Commercial banks, VC companies and industry would be important partners for such a fund in Stuttgart Region. Their investment is needed to reach a reasonable size of the fund. Moreover, their experience in this field would be needed, and they would be valuable multiplicators and testimonials for this fund.				
Monitoring and Evaluation				

Finance: As explained above, several funding partners would be needed, both from public side and private investors. As the fund would be implemented by different shareholders, these institutions would have to be members of the board of the fund.

**Process and implementation**: As Stuttgart Region is a region quite small compared to a Bundesland (federal state), the scope of the fund would be the whole state of Baden-Württemberg. This would allow a higher number of promising projects and would thus be more interesting to investors. To make it an instrument of regional value, recommendations by regional Business Angels will be seen as signs of reference in the evaluation procedure.

There would also probably be 2 or 3 calls per year, as this enables the fund management to better select the projects by comparing them directly with each other.

For young entrepreneurs from universities there would be the offer of receiving complementary coaching by PUSH! Campus Agencies. Other start-up companies could receive coaching by the PUSH! network partners.

## Early Stage Financing

Stuttgart Region/Germany (WRS)



# STUTTGART MODEL OF EARLY STAGE FINANCING

## Oliver Reichert

WRS - Stuttgart Region Economic Development Corporation









## **Economic structure of Stuttgart Region**

- Population: 2.7 mio. inhabitants, workforce 1.44 mio. people
- Unemployment rate: 6 %
- Strong economy: GDP: € 92 bio.
- Strong industrial background
- Main sectors. Automotive, Mechanical + Electrical Engineering, ICT
- Strong research: 5.8 % of GDP spent on R&D

### 1. Initial Situation











### 1. Initial Situation

## **Good Conditions for Start-Up Companies:**

- Promotion of technologies and related clusters
- Promotion of start ups
- PUSH! network (Partnernetz für Unternehmensgründungen aus Stuttgarter Hochschulen)
- Entrepreneurship programmes run by the state
- · Incubators at all universities
- Entrepreneurship in university education
- Regional competence centre programme
- · High number of technology based start ups









### 1. Initial Situation

#### The Problem: Crash at New Market

## Consequences:

- Retreat of institutional VCs
- Gap in financing of young NTBFs (Seed phase)
- · Return to a realistic rating of NTBFs
- Increasing importance of private investors!

#### → "Market failure"

#### Aim of WRS:

- Improve financing options for young NTBFs
- · Stimulating a new investment culture
- Creating an integrated investment platform for informal and institutional investors
- · Bundling Know-How of regional partners









## 2. Description of the instrument

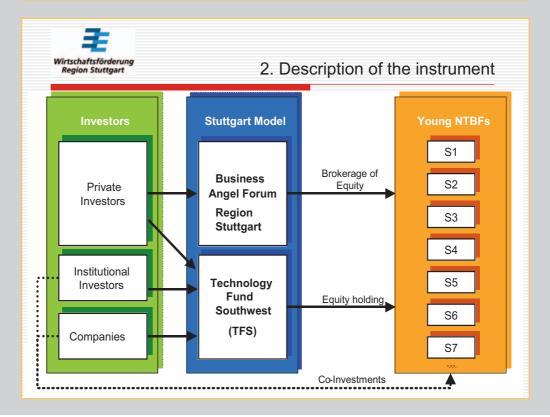
## Stuttgart Model of Early Stage Financing

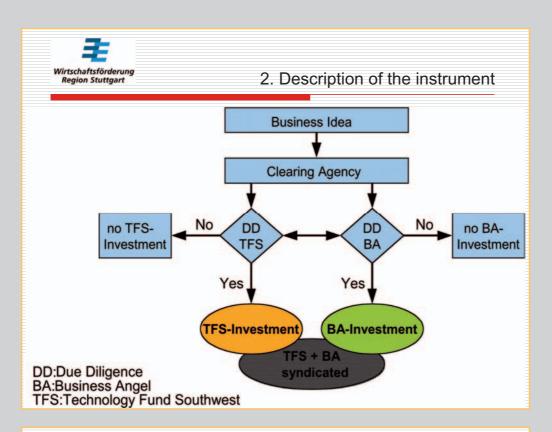
- 1. Business Angel Forum Region Stuttgart (BAFRS)
- Network of private investors, willing to invest in NTBFs (early stage)
- Business Angels are willing to provide risk capital (€ 20,000-200,000), know-how and business contacts
- · BAFRS as equity broker
- 2. Seed Capital Fund (Technology Fund Southwest)
- · Planned as investment fund
- · Business Angels already committed themselves to invest in the fund
- · Also institutional investors needed to engage in the fund













2. Description of the instrument

## **Advantages of Stuttgart Model of Early Stage Financing**

- High grade of flexibility in terms of possible investment constellations
- Higher capital expenditure and diversification of risks
- Easier access to public investment programs
- High efficiency through bundling competencies on a regional level
- Link of informal and institutional capital in a very early stage!









## 2. Description of the instrument

## **Functioning of Business Angel Forum Region Stuttgart**

- 1. Branch Office: WRS GmbH
  - · Contact point for investors
  - · organisation of pitching events
  - · support of syndicated investments
  - · get-togethers, exchange of experience
- 2. Clearing Agency: i.con innovation GmbH
  - Contact point for entrepreneurs
    - pre-selection of NTBFs
    - · Creation of information sheets / exposées
    - · Support for Due Diligence process









## 2. Description of the instrument

### Type and Rationale of the Instrument

- Instrument aims to increase the effectiveness of the regional innovation system and to overcome fragmentation
  - → Overcome the barrier between technology and financing
- · Top-Down approach by WRS
  - → but: evolved from experience with PUSH! initiative ("bottom-up")
- Early Stage Financing designed as temporary intervention, to regain the interest of investors for early-stage investments
  - If BAFRS and/or TFS do not need the engagement of WRS any more, WRS will retreat
  - · but no clear exit strategy so far









## 3. Impact of the instrument

## Status of Early Stage Financing

- BAFRS founded in 2003
- Currently 23 members → expanding continuously
- Several deals closed (see examples)
- Focus of investments: engineering; biotechnology and medicine; information and communication technologies
- Seed Capital Fund: Not yet realised
  - · Fundraising failed in 2003
  - · but: Commitment of all BAs to invest in Fund
  - · currently new consultations with institutional investors
- → Impact is not measurable in figures, but can be described in qualitative terms









## 3. Impact of the instrument

### **IMMATICS Biotechnologies History**

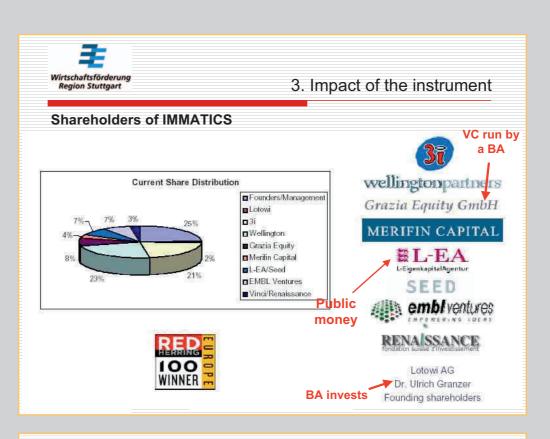


- Development of peptide-based immunotherapeutics for cancer treatment
- 2000: founded as a spin-off from the University of Tübingen
- Start-up support by public programmes (Incubators, Young Innovators Programme,...)
   Generating first turnaround.
- 2002 Seed financing by one of our Business Angels (200 K Euro)
- VC acquisition supported by the Clearing Agency.
- 2004/5: series A financing round (€14.1m) closed with lead investors Wellington Partners and 3i Group
- 2005: 30 employees (25 FTEs)











## 3. Impact of the instrument

## Other successful examples

- Subitec GmbH
  - Production of microalgae biomass
  - Spin-off from Fraunhofer Institute for Interfacial Engineering and Biotechnology
  - First financing round: € 610,000 by Business Angel and High-Tech-Gründerfonds (national public equity fund)
- FutureE Fuel Cell Solutions GmbH
  - Development, production and sales of fuel-cell systems (performance 0.5-20 kW)
  - First seed financing round: 3 Business Angels and L-EA (public equity fund of the State of Baden-Württemberg)
- Makatec GmbH
  - Development of innovative membrane technologies for heating and cooling applications
  - Founded as spin-off from University of Stuttgart
  - Operative engagement of a Business Angel, providing know-how









#### 4. Success factors

### **Success Factors**

- 1. Close contact to universities and research institutes by link to PUSH! Network
- 2. Institutionalisation of Business Angel Forum
  - BAFRS institutionalised as association (e.V.)
  - Democratic structures and clear decision process
- 3. Creation of trust between Network members
  - · Slow growth, focus on quality instead of quantity
  - · Could be fostered by strict affiliation criteria
  - → e.g.: membership fee, commitment to invest in Fund, no consultants
  - → Facilitates common investments and trust in Lead Investor / BA
- 4. Provide clear benefit for Business Angels
- 5. Experienced investors can fulfil "pilot role"
- 6. Personal links between Business Angels and VC organisations









### 4. Success factors

## **PUSH! Start-Up Network**

- → An initiative of WRS that promotes Start-Ups from universities and research institutions
- → a decentrally structured regional network with over 100 partners



- ⇒ Higher education institutions
- ⇒Research institutions
- ⇒Banks and Savings & Loans
- ⇒Public investors
- ⇒Private companies
- ⇒Government agencies









#### 4. Success factors

## **PUSH! Start-Up Network offers**

**Qualifications** Access to all available start-up qualification programmes in

the region

**Counselling** Secure and improve the quality of start-up counselling in the

region of Stuttgart - from initial talks to market entry

**Contacts** Provide direct access to all the contacts that start-ups need

- from the local small business associations to pilot

customers

Information Provide all information necessary to support university-

based start-ups – from making contracts to finding

supporting programs.

**Financing** Financing start-ups – from grants for qualifying measures to

consulting assistance and helping start-ups find financial

backing









### 4. Success factors

## **PUSH! Start-Up Network Structure**

- · PUSH! e.V.: Strategy, Planning, Decision-making
- PUSH!-Universities: Entrepreneurship Education
- PUSH! Campus Agencies: Support and Counsel for start-ups
- PUSH!-Office c/o Wirtschaftsförderung Region Stuttgart: business management of the PUSH! e. V., Network-coordination, Project management, PR
- PUSH!-Partners und Partner Network: Services for Start-Ups, integrating Start-Ups into their local markets









## 5. Bottlenecks

## **Bottlenecks**

- 1. Critical mass of Capital providers and Deal Flow
- 2. → In Stuttgart Region, the critical mass of deals for a Seed Capital Fund cannot be achieved, so the model will have to be enlarged
- 3. Difficult to address target group / potential Business Angels
- 4. Active Business Angels as initiators are needed
- 5. Without publicity it is difficult to attract promising young high-tech companies
- 6. Involvement of experienced management team is necessary to set up the fund









## 6. Transformation needs

## a) Framework

- Critical mass of capital providers (private and institutional)
  - → Wider scope of investments
- Critical mass of deal flow / high potential start-up companies

## b) Implementation

- Foster trust of Business Angels in the network / other BA
- Establish networks / contacts to potential investors in advance









## 7. Surprises

High dedication of some Business Angels for the startups and the network

→ willing to invest time and money and provide knowledge









## 8. Revision and adjustments

After the EUROPEER SME Peer Review Workshop, two of the suggested improvements for the instrument have been taken up and integrated into the existing model:

- 1.) Suggestion "Create a Board of Experts who evaluates Business Plans"
  - → Since 2008, the Business Angels (two of them also active as VC Fund Managers) are integrated into the assessment of BP
  - → a number of BP is distributed to all Business Angels, who then make a rating and identify the most interesting ones
  - → top ranked BP are invited to present their business idea at BAFRS









## 8. Revision and adjustments

## 2.) Suggestion "More PR (success stories, media plan, website,...)"

- → In October 2008, BAFRS hosted the Business Angel Congress BW to promote the activities of Business Angels in general, and the advantages of the Stuttgart BA network in particular
- → A cooperation has now been launched between Stuttgart Region and Heilbronn Region to join the forces of two BA networks and to hold common information events
- → an update of the BAFRS homepage is currently planned (http://business-chance.region-stuttgart.de/)







## Transfer Scheme

## Early Stage Financing - Nova Gorica/Slovenia (RRA)

Project name	Early Stage Financing						
Region of origin (transferring region)	Stuttgart/Germany						
Region adapting the instrument (receiving region)	Nova Gorica/Slovenia						
I. Transferability Check List							
	Yes	Action needed	No				
Do you actually battle the same problem that is addressed by the instrument?							
<ol><li>Does the instrument fit into the given regional planning/national strategy?</li></ol>							
3. Are the institutional prerequisites fulfilled?							
4. Are the prerequisites regarding knowledge struct fulfilled?	ure						
5. Are the financial resources available?							
6. Is the instrument compatible with the overall inc structure in your region/country?	centive						
7. Is the instrument compatible with/additional to e projects in your region/country?	existing						
8. Are the requirements regarding social capital, credibility, reliability fulfilled?							
II. Pre-implementation needs							
At national level we have a Business angels asociation and five VC enterprises which have been established in other contries (EU). In Slovenia, the first Venture Capital Company (First Venture Capital Company, LTD) was established in 2008 in accordance with the Venture capital Companies Act (Official Journal of the RS, No. 92/2007). With this law and awareness raising campaigns for attracting investors we have the opportunity to organize the market with seed capital and early stage financing.							
Mainstay argument for the implementation of the E. and regional innovation strategies have shown us t Technology Park, Business Zones, Technology Center Programmes for Human Resources Management), al off enterprises to survive the first five years. Hi-tecapital and human resources at the beginning.	hat we need beside tw rs, Universities, Univers so financial instrument	o other pillars (inf sity Incubators, etc ts that help start-	frastructure: . and ups and spin-				
III. Adaptation needs of the instrument on the le	vel of						
Content: Aim of the Early Stage Financing instrument is to give financial support to SMEs in order to increase their competitiveness on global markets. There are three main financial lines:							
1st financial line: LOAN AND GUARANTEE LINE FOR SMEs							
2nd financial line: CO-FINANCING SME's PROJECTS							
3rd financial line: SMEs EQUITY FINANCING THROUG	H REGIONAL BUSINESS	ANGELS NETWORK	<				
We have already implemented financial lines through public institutions. But these financial lines are not connected with each other and they do not deploy bigger impact on the regional economy's competitiveness in Slovenia and Central Europe.							

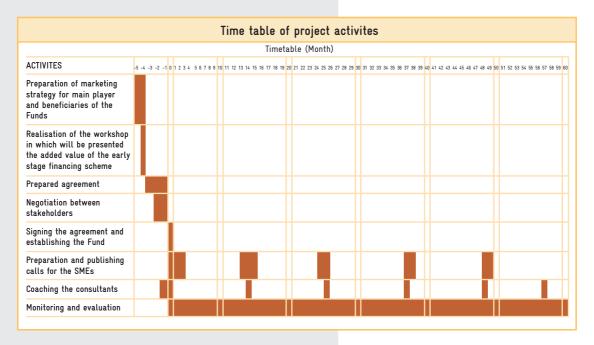
Infrastructure: We don't need extra infrastructure. It is more about organising consortia, social capital, infopoints, grants and other financing opportunities for the projects and the Early Stage Financing instrument.

Institutions: We need to harmonise our instrument with other project approaches and connect it with other supporting institutions which could be interested in the instrument. Supporting institutes are: Public Fund of Small Enterprises for Gori\_ka region, Regijska razvojna agencija SEVERNE PRIMORSKE d.o.o., Primorski tehnolo\_li park d.o.o., BIC Se\_ana, University Incubator in Koper and Nova Gorica and the Regional Bussines Angels Network (RBAN).

Finance: Initially the Public Fund of Small Enterprises for Gori\_ka region plus private contributions through RBAN are required for the set-up of the Early Stage Financing instrument. Afterwards membership fees plus contributions from the European Investment Funds (VC, revolving funds, etc) ensure sustainable financing of the instrument. Capital for the establishment of the instrument is contributed from privat and public funds in proportion of 49% public and 51% private.

Monitoring and Evaluation: Board of Experts (evaluation) and Management Board (monitoring)

**Process and implementation:** The implementation of the instrument is foreseen in the Goriska statistic region in a period of one or two years. Further information on the implementation can be found below.



Slovenia/Nova Gorica: Early Stage Financing								
Table 1:Budget of the project Early stage Financing								
Costs	Units	2009	2010	2011	2012	2013	Total	
Projects	5 projects per year	250.000	250.000	250.000	500.000	500.000	1.750.000	
Board of expert	5 experts	50.000	50.000	50.000	50.000	50.000	250.000	
Operation costs	5 years	20.000	20.000	20.000	40.000	40.000	140.000	
Overhades	5 years	20.000	10.000	10.000	10.000	10.000	60.000	
Total		342.009	332.010	332.011	602.012	602.013	2.200.000	

## Young Researchers in Economy

Northern Primorska/Slovenia (RRA)



## YOUNG RESEARCHERS IN ECONOMY



by RDA NP





## Črtomir Špacapan and Tomaž Vadjunec

Regional Development Agency of Northern Primorska Ltd Nova Gorica/Slovenia (RRA)









### 1. Framework

- Population: 2.019.406 (06/2007)
- Working market (population): 923.124 (08/2007)
- GDP: 30.448 million Euro (2006)
- R&D expenditures of industry: 0,6 GDP (2005)
- R&D expenditures in total: 1,49 GDP (2005)
- Number of SME: 104.236 (2006)
- R&D infrastructure: 35 technology centres, 4 technology parks, 22 technology national Platforms, 4 universities, 10 research institutes; 2 technology transfer agencies.









#### 1. Framework

## Statistics on R&D (2004):

- Number of students: 115.944 students (26.810 students from Science, Mathematics, ICT and Technology)
- Number of persons in R&D total: 10.115
- Number of persons in R&D in industry: 4.638
- Number of persons in R&D in industry with PhD: 216
- Number of persons YR in R&D in industry with PhD: 2









### 1. Framework

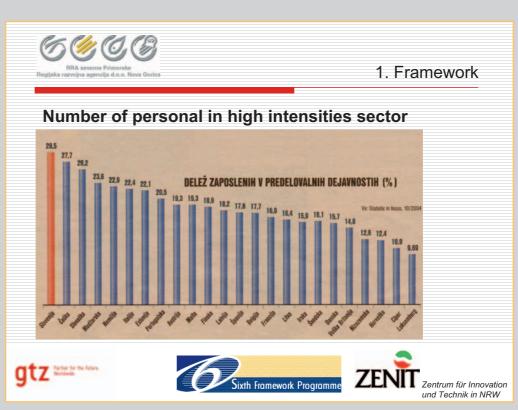
## Basic economic facts:

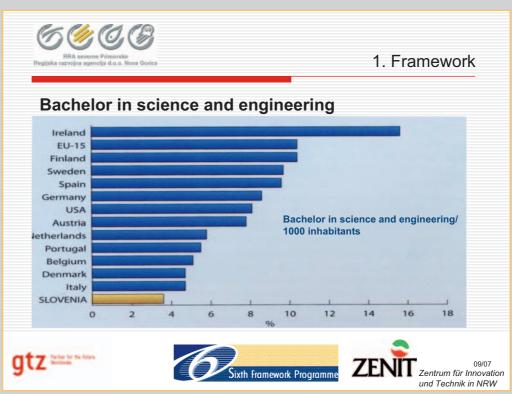
- Economic growth: 5,7 % (real growth of the GDP)
- ILO Unemployment rate: 5,9 %
- Industrial R&D-staff: 4.638
- Main industrial sectors: Chemistry, Steel, Automobile, Commerce trade, Construction, Tourism
- Main technology strength: Engineering, Life Sciences, ICT

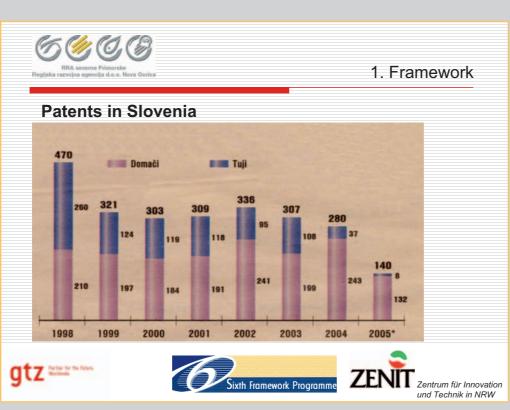


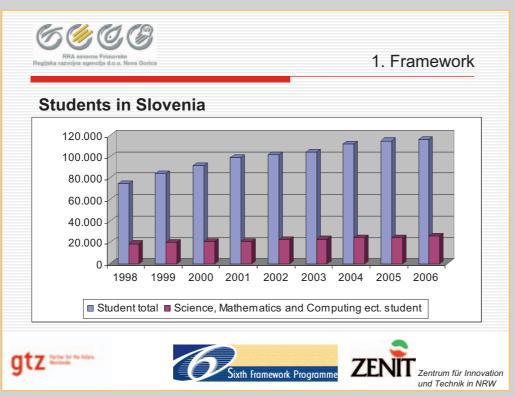














#### 1. Framework

## The Problem:

- · Low rate of PhD in Industry
- SME dominated economy
- SME without (or with insufficient) own R&D-capacities
- · Lack in technology transfer into enterprises

#### The Reason:

Higher salaries in public research organisations in comparison with enterprises

#### The Consequence:

Initiative to stimulate SME to hire young graduates to overcome existing gap between institutes and industry









2. Brief description of the instrument

#### **History:**

- In 2001, a special cooperation has been developed between Ministry of Education, Science and Sport and Ministry of Economics. Both provide part of the funding for young researches (approx. 30 new young researches every year), who work in industrial R&D units while they still pursue their PhD at the university.
- The programme was managed till 2006 by Directorate for Technology which is one of Directorates run under Ministry of Higher Education, Science and Technology (MHEST).
- Slovenian Technology Agency (TIA) will run the program in financial perspective 2007-2013.









## 2. Brief description of the instrument

#### Initiator:

 Directorate for Technology under Ministry of Higher Education, Science and Technology

## Implementer:

Slovenian Technology Agency

#### Partner:

- Commercial enterprises, Technology canters, RO
- (as beneficiaries)
- Universities (as beneficiaries)
- European Union (European Social Fund as co-financing instrument) in the period 2007 - 2013









2. Brief description of the instrument

## Main goals of the instrument:

- Financial help for researchers who work in enterprises – especially industry, technology centres with the aim to achieve a title of PhD
- Promote the influx of research and development into the economy in order to strengthen the development core of enterprises through financing the work of young researchers employed by enterprises, technology centres









## 2. Brief description of the instrument

## Criteria for eligibility:

- Finished under-graduate student
- Average of total grade at the university minimum 8,0
- Age of the student 35 years or less (for students with master degree 38 years)

## Project proposal are ranked according to the criteria:

- suitability of a young researcher
- suitability of a mentors
- suitability of a SME
- suitability of a research group and research organization programme of training









2. Brief description of the instrument

**Evaluation commission** presents results to the MHEST which signs contract with enterprise, young researcher and research organization.

#### Funding:

- depends on price category of a research group and on status of a young researcher
- total budget of the program 81.694.118 EUR for the period 2007-2013
  - 69.440.000 EUR EU/European Social Fund (ESF)
  - 12.254.118 EUR Slovenian Government









## 3. Impacts/results of the instrument

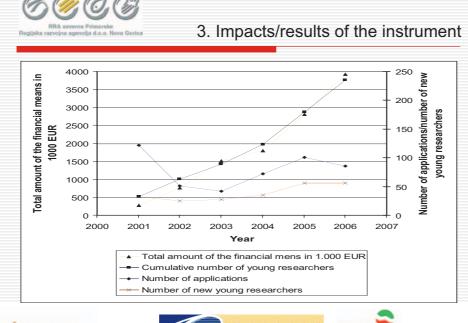
### Result:

- In last six years there were no external evaluations (MHEST and ARD made internal evaluation)
- Assessment of over 474 project proposals (2001 to 2006)
- 233 young researchers being granted support of which 44 PhD were already successfully completed.
- Education level in enterprises is higher (from level V or VI to VI or VII)
- Added value of the SME has been increasing for 20%
- More than 50% of enterprises invest more assets into R&D





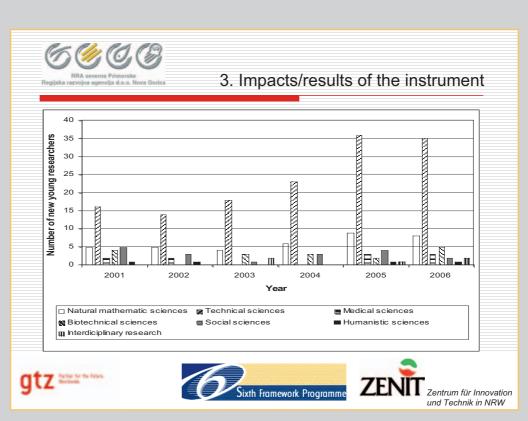


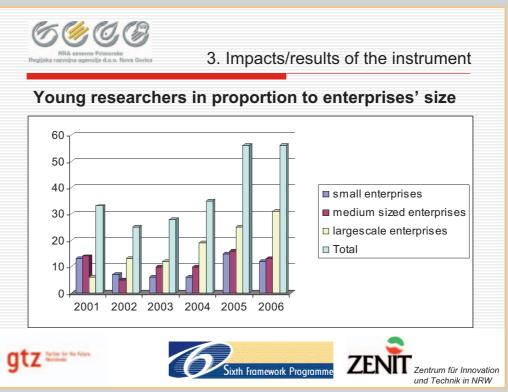














#### 4. Success factors

- Bringing the information about the programme to the enterprises (MHEST, TIA, enterprises, research organisation, universities, ...)
- Improvement of science-industry links, transfer of knowledge
- · Education level in enterprises is higher
- Establishment of permanent links between enterprises and research organisations









### 5. Bottlenecks

- Identification of potential enterprises (enterprises research organisations – researchers)
- Open the mind of the enterprises, that R&D is necessary
- Competition for good graduates among the enterprises
- Lower wages in enterprises for R&D (< 20% than in public research organisations)









#### 6. Transformation needs

## A) Framework

- Enough university graduates available from science, mathematics, computing, engineering, manufacturing etc.
- Involvement of enterprises into the programme with R&D strategy
- (Financial) resources for 4,5 years period is guaranteed

## B) Implementation

- The grant must be adapted to regional/national payment levels
- Projects must be clearly defined for the evaluators

## C) Possible improvement

 There must be adequate incentives to motivate enterprises and research organisations to support the instrument









### 7. Surprises

- Reliability of the monthly payments for the partners of the instrument.
- Project actors started to create business and together they are developing new products and services.
- Because of the educational period 4,5 years there have been problems between enterprises and RO (universities): Face to face argumentation and explanation.









## 8. Revision and adjustments

- First call in financial period 2007-2013 was closed in January 2008
- Results: 68 projects have been selected for co-financing
- The total budget for 2007 is 10,5 Mio. EUR
- Experiences with programme in first year:
  - Number of SMEs involved in the Young Researchers in Economy instrument has been increased
  - Technical-administrative problems for SMEs
  - TIA has some recommendation regarding regulations of the state aid for R&D and innovations (Eurolex 30.12.2006 European Commission)
- Second call has been opened in July 2008 and was closed in September 2008







## Transfer Scheme

Young Researchers in Economy - Stuttgart/Germany (WRS)

Project name	Young Researchers	in Economy					
Region of origin (transferring region)	Nova Gori	ca/Slovenia					
Region adapting the instrument (receiving i	r <b>egion)</b> Stuttga	ırt/Germany					
I. Transferability Check List							
	Υ	es Ac	tion needed	No			
1. Do you actually battle the same problem is addressed by the instrument?	that						
<ol><li>Does the instrument fit into the given reg planning/national strategy?</li></ol>	ional						
3. Are the institutional prerequisites fulfilled	l?						
4. Are the prerequisites regarding knowledge fulfilled?	e structure						
5. Are the financial resources available?	[						
6. Is the instrument compatible with the ove structure in your region/country?	erall incentive						
7. Is the instrument compatible with/addition projects in your region/country?	nal to existing						
<ol><li>Are the requirements regarding social cap credibility, reliability fulfilled?</li></ol>	oital,						
II. Pre-implementation needs							
As Stuttgart Region is not a Bundesland (federal state), financial resources are quite scarce. Within the current budget of the PUSH! initiative this instrument could not be run by WRS. Therefore funding by other programmes like ESF would be necessary.							
III. Adaptation needs of the instrument on	the level of						
Content: In Stuttgart Region the main aim of such a programme would be to provide research capacities to SMEs for the improvement of their own market positions. Therefore it would be essential that the young researchers are working physically in the companies' offices and the PhD topics are aligned with the companies' interests. If the programme is structured like that, it can be useful for SME, also because many SMEs currently suffer from a lack of young engineers. Therefore, both sides would have to apply: the company has to apply to get such a young researcher, and the researcher would have to apply for a PhD position paid by private and public actors.							
In order to increase the attractiveness of such a programme for private companies, in Stuttgart Region a necessary feature of the programme would be to limit the duration of funding for PhD. Therefore, the funding of such cooperations would be restricted to a shorter period than in Slovenia. This would also increase the attractiveness of such a programme for the private companies because it reduces their risk. For the same reason, the option to erminate the agreement for both sides would be essential.							
The target group on the research side would not be limited to universities' PhD candidates but would also include other research institutions like Fraunhofer and Max-Planck institutes.							
Infrastructure: no adaptation needed							

**Institutions**: In Stuttgart Region a committee consisting of universities and probably private partners would have to be installed to receive and evaluate the applications. The existing network of PUSH! could be a good starting point as it already involves all regional universities and universities of applied sciences.

**Finance:** A funding of 90% of a PhD position would neither be possible nor meeting the strategic goals of WRS. The aim of WRS is to involve the private sector to a greater extent. Therefore private contributions for the salary of PhD candidates would be at least 50 %. Of course, the young researchers would have to work on PhD topics that meet the companies' interests.

**Monitoring and Evaluation:** Close monitoring would be very important for such a programme. The definition and achievement of milestones would be a prerequisite to receive public funding.

**Process and implementation**: It would be essential in Stuttgart Region to install a public-private committee as decision board. This committee also has to define common goals of the research institutions and the private enterprises. It would be a moderating actor also for the approvement of PhD topics that have to meet both the needs of the private enterprises and the needs of the scientific mentors.

If the programme is structured as such, it could be marketed as a supportive action to technology based SMEs looking for young engineers.

## Main Outcomes of the EUROPEER SME Project

The EUROPEER SME project has produced a series of peer reviewed good practice instruments for innovation promotion. Additionally the transfer scheme that has been developed proved to be a useful tool to make a first assessment of transferability.

However, the project has also provoked general discussions on the institutional environment for innovation promotion and policy requirements for Research and Development (R&D) promotion. These discussions formed an integral part of the project and should not be forgotten when it comes to the presentation of the outputs of the project. Therefore the chapter on the main outcomes of the EUROPEER SME project is divided into three topics:

- 1. General lessons learned from EUROPEER SME project implementation
- 2. Findings on the institutional environment for innovation promotion
- 3. Policy recommendations for R&D policies

## 1. General lessons learned from the EUROPEER SME project implementation

The structure of the consortium turned out to be very effective as it included policy makers as well as implementers of the peer reviewed instruments. Also the geographic composition provided for fruitful discussions as complementary knowledge and experiences were brought together.

Further lessons learned can be resumed along the objectives of the project:

## a) Identify transferable good practice instruments for R&D promotion in SMEs

The first selection of instruments that where to undergo the process of peer review was of utmost importance. The mechanism of proposition and selection of instruments could have been improved. Some partners might have proposed other instruments for the peer review if they had known the propositions of other partners in order to achieve as many complementarities as possible. This is a natural result as the partners have joined hands for the first time. If there had been

a second round of peer reviews this problem would be of less importance as partners would be already familiar with each other as well as with the method. They would therefore be better able to judge the suitability of instruments for the peer review process and propose instruments accordingly.

Ten instruments have been selected and their transferability has been discussed in detail. The instruments showed different degrees of transferability. No final assessment or ranking of transferability has been made. It is important to note that an instrument that would perfectly work in one region might not be transferable to another region. Instruments can not be harmonised towards a one-size-fits-all solution. Even confirmed good practice instruments have to be adjusted to different regional settings and backgrounds (cultural, political, economical, and financial). This was an explicit result of the Peer Review Analysis which addressed the most important criteria of transferability (checklist) and necessary adjustments before an instrument can be transferred.

As a general observation those instruments that had a clear focus and structure and implied a limited level of resources required seemed the most suited for transfer. These kinds of instruments may be rather easily integrated in already existing innovation promotion policies provided that complementarities exist.

## b) Verify the transfer method and initiate a transfer of good practice instruments

The Peers elaborated a check list on "transferability". This check list proved to be a very useful instrument to judge the individual instruments and to come to a first transfer decision that takes region specific cultural, financial and economical aspects into account. The necessary information was available and detailed questions could be directly addressed to the implementer of the instrument. This allowed for a very realistic judgement also of questions of operationability. The target to initiate the transfer of instruments was therefore achieved.

## c) Build a network to exchange ideas and experiences with peers for mutual learning

A double reflection process has been initiated through the Peer Review Methodology. The need to present and explain the functioning and effects of the instrument has prompted the owners of the instruments to reassess their instrument in depth in a structured way (self-assessment). The inputs made by peers have proven to be very valuable to the owners of the instruments as an outside view could be provided in an open and trustworthy atmosphere (external assessment). Thereby strength and weaknesses of each instrument were well analysed and propositions for improvement of the instruments were made. In order to take this process even a step further bilateral visits would have been desirable but could not be realised as a matter of budget constraints. It proved also to be ambitious to discuss several instruments during one peer review workshop (two days). More time to analyse each instrument would have been helpful.

Positive side effects have been achieved: The participation in the project has motivated the peers in general. They have improved their standing and visibility in their own region and especially with regard to their policy makers: their instruments have been successfully peer-reviewed by an international consortium and the significance of the instruments has been approved as a result.

Summing-up, it can be concluded that the peer review methodology is a result driven approach and a well structured way to deal with a lot of information in a very limited period of time. The peer review also helps to organise a self reflection in the region which is offering a good practice. Each region has acquired additional and usable project ideas as well as a broadened horizon and a better understanding of existing problems EU-wide.

Overall, the project has been very successful in initiating a network of peers and in transferring good practices of innovation promotion. The process has been well initiated and needs, however, to be continued in order to deepen the network relationships and to

successfully implement the instruments. A full implementation of the transferred instruments was not realistic during a period of only two years. The project has brought up a number of good ideas for further networking which deserve to be followed up in order to build upon this momentum.

## 2. Findings on the institutional environment for innovation promotion

As experiences with the different instruments were analysed the following three issues regarding the institutional environment for innovation promotion emerged as main outcome from the discussions:

## a) Preconditions for institutionalised innovation promotion

A fundamental precondition for successful and sustainable innovation promotion is the existence of the necessary institutions; including enterprises willing to innovate, research institutions and public administrations. Moreover, the existence of these institutions must be combined with a willingness to cooperate with each other and to engage in public-private partnerships.

Another precondition identified is the existence of an innovation culture among all stakeholders of the innovation process. Innovation culture implies the affinity for teamwork as well as openness for mutual learning at all levels. Accordingly policy making for innovation promotion should consider bottom-up mechanisms in order to incorporate lessons learned and initiatives coming from the operational level. Innovation promotion also tends to be more successful if it is client driven and thus is responding to articulated needs of the SME and to market failures. In order to develop such a culture of innovation the educational system can play an important role by fostering an innovation oriented mindset right from the start.

Creating a culture of innovation, however, is only possible in a setting where the institutions involved are reliable. Innovation implies taking risks. A predictable environment in terms of policies, funding

and incentives helps to reduce these risks. Public administration therefore needs to work result oriented. Transparency of responsibilities and decision making is important to ensure efficient use of public funds for R&D and innovation promotion activities of SMEs. Here again education is a major issue in order to build up administrative capacities.

## b) Resources required for institutionalised innovation promotion

Innovative output requires the right combination of input including financial, human and institutional resources as well as networking and cooperation capacities.

Financial resources must be available to finance innovation activities. Public financing instruments need to be endowed with a strategic and long-term financial commitment so that innovation projects once they have been engaged can rely on the funding. In order to ensure a most effective use of available funds exit strategies should be clearly defined. They are needed in the case of projects that fall short of producing the envisioned impact but also when marked failures cease to exist and the market demand matches the supply. Access to private funding opportunities must be developed to complement public funding.

Required human resources encompass a high percentage of qualified staff. Competences relevant to innovation promotion are needed in public administrations, programme management units, evaluation panels, consultancies, research institutions and enterprises.

Regarding the institutional resources, intermediary institutions must be in place to provide a support structure for SMEs in particular. Simple application procedures and the existence of credible and reliable implementation institutions ensure the timely implementation of instruments.

Partnership and cooperation among implementing institutions is key for the efficient use of resources. Stakeholder networks between technology transfer

offices, business incubators, science parks and trade associations help to reduce overlap and to create synergies between multiple instruments.

#### c) Communication and information needs

Information on available instruments and exchange of experiences are indispensable in order to increase innovation activities. Awareness raising campaigns, information days and presentations of success stories are necessary to disseminate possibilities on how to improve the competitiveness of SMEs. Finding the right mix of communication chanels including modern technologies and new network approaches is key in reaching a critical mass of actors. International networking fosters trans-border cooperation and learning.

### 3. Policy recommendations

As important aspects regarding the institutional environment for innovation promotion had been defined, policy recommendations were developed on how to support an environment conducive for innovation promotion activities. These policy recommendations can be distinguished into recommendations regarding governance and funding aspects.

## a) Recommendations regarding the governance of innovation policies

A general tendency for a fragmentation of stakeholders in the public as well as in the private sector sphere has been observed which results in a number of problems.

In the public sector innovation policy setting touches upon the responsibilities of several line ministries. This requires intensive horizontal coordination and cooperation between the relevant ministries. Additionally stakeholders active in innovation policy setting exist also on the European level and in some countries on a sub national (regional) level. Vertical coordination is therefore needed to ensure that instruments and funding schemes for innovation promotion are coherent and complementary in terms of their approaches and goals. Modalities for application should be harmonised in order to avoid a multitude of procedures, requirements and forms. Accordingly horizontal and vertical

coordination is necessary in order to avoid that instruments available are overlapping if not contradictory and are thus confusing the target group.

The coordination of policy making between the national and regional level is of utmost importance for yet another reason. National policies on R&D promotion set a binding framework also for activities on a regional level in terms of priorities and budget allocations. Regional strategies are therefore contingent on the national framework. However, a frequent observation is that national policy making is a top down process without active participation of regional actors. Therefore national programs do not necessarily respond to the demand of regional target groups. As a result it may not be possible to exploit specific regional potentials and regional constraints to innovation may not be covered by national programs. Furthermore sudden changes in national policy making can result in severe consequences for the regional implementation of programmes. A change of national priorities may lead to the early termination of projets. Which may have severe repercussions on the credibility of national support schemes. Regional actors should therefore be actively involved in the national policy making process in order to ensure that programmes are demand oriented. National programmes need to set the framework for regional strategies but leave sufficient scope for implementation on the regional level giving room to respond to regional characteristics. Regular consultations allow for longer term planning and in time adjustments to running programmes.

In order to actively integrate all stakeholders, including representatives of the target group also the fragmentation of the private sector needs to be overcome. Strengthening regional networks between private, public and scientific stakeholders, provides the opportunity for institutionalised dialogue. Initiatives of public-private dialogue are yet in few cases institutionalised but mostly ad-hoc initiatives. As a result experiences are characterised by excessive dialogue and very few substantial results. A regular and well structured dialogue streamlines the consultation process into a workable and output oriented instrument. Public-private dialogue is an important instrument but needs

to be institutionalised and well structured to produce useful inputs for the policy making process. Regional governments should play an active role in the management and moderation of regional innovation networks to ensure a common vision of regional innovation strategies between all stakeholders. Regional innovation priorities and strategies must be widely communicated and their rationale explained.

## b) Recommendations regarding the funding of innovation programs

In order to allow for long term planning funding mechanisms must be predictable and sudden budget cuts are to be avoided. Annual financial planning is particularly difficult as innovation projects are content and result driven. This implies longer implementation periods of projects which typically do not correspond with the twelve month horizon of our Gregorian calendar. In order to provide for a result oriented budgeting, allocation should be based on measurable results and milestones which are to be defined in project proposals. Innovation promotion needs impact oriented long term budgeting. Budget allocations need to be decided along thematic and sectoral priorities and match the political ambitions.

In order to increase the impact of projects, the upscaling of successful project approaches and large scale programs in general should be supported instead of sprinkling funds over a large number of small projects. This may imply the need to build up capacities to steer larger projects especially in R&D institutions. Currently, there is, however, a tendency for institutions to participate in a number of different projects in order to cover the running costs implied. Generally the administrative procedures are often time-consuming, complex and hardly matched by the funds obtained. For newcomers there is a high entry barrier to participate in funding mechanisms. As a result the same groups of companies and institutions tend to apply for funding. Application procedures and administration requirements need to be streamlined.

## **EUROPEER SME Partners**

## GTZ Deutsche Gesellschaft für Technische Zusammenarbeit GmbH

# **GtZ** Partner for the Future. Worldwide.

As an international cooperation enterprise for sustainable development with worldwide operations, the federally owned Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH supports the German Government in achieving its development-policy objectives. It provides viable, forward looking solutions for political, economic, ecological and social development in a globalised world. The German Federal Ministry for Economic Cooperation and Development (BMZ) is its major client. However, the company also operates on behalf of other German ministries, the governments of other countries and international clients, such as the European Commission, the United Nations and the World Bank, as well as on behalf of private enterprises. GTZ works on a public-benefit basis.

GTZ employs some 12,000 staff in more than 120 countries of Africa, Asia, Latin America, the Eastern European countries and the New Independent States (NIS). Beside its Head Office near Frankfurt am Main, GTZ maintains its own offices in 69 countries, including in Berlin, Bonn and Brussels.

GTZ has its own planning and development department which is functioning as an in-house consulting. Within the division for economic development and employment over 50 permanent staffs are assuring the technical backstopping of programmes. The topics covered range from policy advice in business environment and SME policy, innovation and technology promotion, local and regional economic development, trade, value chains, private sector development in conflict regions, finance system development and credit including micro finance, technical and vocational education and training and ICT in private sector development.

Our concept of private-sector promotion is based on the systemic competitiveness approach: Enterprises remain competitive where a sound institutional environment for investments is provided and where they have access to an efficient support network of service providers, business associations and promotion agencies. In this sense innovation promotion is increasingly gaining importance as knowledge is becoming a decisive factor for competitiveness. Currently, GTZ's portfolio in innovation promotion includes more than 15 projects in Europe, Asia and Africa. GTZ strives to make markets work and is therefore cooperating with the business sector as a partner and driving force for development. Public-private dialogue is the core instrument of our multi-stakeholder approach.

Since the 1990s, GTZ has also designed and implemented projects in the framework of EU programmes, especially in Central and Eastern Europe. Since 1998, the Berlin based Department German Public Sector Clients has been involved in the Twinning scheme of the European Commission which is one of the principal tools of Institution Building accession assistance. The thematic areas range from regional development, finance and the economy to public health, judicial administration, agriculture, transport and environment. Moreover, GTZ implements, commissioned by German ministries, complex supra-regional program approaches and has outstanding management experience and competence.

GTZ functioned as coordinator in the EUROPEER SME project, assuming as well the project management, i.e. the administrative and financial coordination, as the technical and scientific coordination.



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## **EUROPEER SME Partners**

## Zenit GmbH Centre in North Rhine-Westphalia for Innovation and Technology



ZENIT (Centre in North Rhine-Westphalia for Innovation and Technology) was funded in 1984 as a technology-oriented consulting company equally owned by the Ministry of Economics of the Federal State of North Rhine-Westphalia, a group of banks and a private association which unites about 250 companies from the region. Our team of over 50 employees achieve an annual turnover of approximately 5 million Euro. ZENIT's main objective is to advise SMEs in technical and technological issues and to promote (transnational) technology transfer out of NRW into other regions of Europe and vice versa.

Our activities range from publications and seminars which address the general public to tailor-made consulting services provided for individual firms and public organisations. Since our primary target group is SMEs, many of our services are geared specifically to their needs. Through ZENIT's participation in the Technology Network of North Rhine-Westphalia, our clientèle can benefit from our close involvement with a vast number of R&D and technology transfer initiatives and organisations. Clients also benefit from our status as a publicly owned company since our recommendations on SME-related issues is often sought by the ministries concerned with this section of the business community.

Thanks to our participation in the European Enterprise Network (EEN) we are highly familiar with how the European Commission functions. On behalf of our clients as well as for ourselves we have successfully placed several proposals for financial support under European funding schemes, for example within the RTD framework programmes. ZENIT supports proposers as regards the identification of appropriate thematic programmes, the proposal writing and the identification of cooperation partners. As an additional service to our clients we also take care of the accompanying financial controlling and reporting.



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## **EUROPEER SME Partners**

## NCPM National Centre for Programme Management



NCPM (National Centre for Programme Management), Romania, is a legal Romanian public body established by the Government Decision no1264/2004 to coordinate research programmes under the National Plan(s) for Research, Development & Innovation.

The NCPM has been assigned by the Ministry of Education, Research and Youth/ The National Authority for Scientific Research (NASR) to manage the following research programmes:

- 1) Under the 1st National Plan for Research, Development & Innovation (1999-2006) Cooperation and International Partnership Programme (running), Biotechnology Programme (ended in 2006) and INFOSOC Programme (ended in 2006). The total budget managed in 2004-2006 was 44 million EUR.
- 2) Under the "Research of Excellence Programme" Module 1 Complex R&D projects in the Biotechnology, Health, Agriculture and Information Society fields (running by the end of 2008) and Module 3 Promoting Romanian participation in European and international research programmes (running by the end of 2008). The total budget managed in 2005-2008 is 130 million EUR.
- 3) Under the 2nd National Plan for Research, Development & Innovation (2007-2013) - The R&D Programme "Partnerships in Priority S&T Areas". The total budget managed in 2007-2013 is 1, 465 million EUR.

The NCPM is partner, acting as Funding Agency in 11 ERA-NETs Coordination Actions under ERA-NET Scheme/FP6: EUROPOLAR, NEURON, AirTN, URBAN-NET, MNT ERA-NET, MANUNET, EUROPEER SME, ERA-IB, FENCO-ERA-NET, HY-CO ERA-NET and ERACOBUILD.

All ERA-NETs CAs are managed within the Programme Management Unit dedicated to international co-operation.

The NCPM's activity as programme manager means preparation of calls for proposals, organization of independent proposals evaluation, contract negotiation, scientific and financial monitoring of (projects based) programmes and evaluation of programmes implementation, results and impact.

The experience as National Programmes manager is complementary to its expertise in international cooperation, building of partnerships and networking.



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### IBS Institute of Baltic Studies



IBS (Institute of Baltic Studies) is an independentnon-profit research and development centre established in Estonia. It was founded in 1995 in order to promote Baltic studies using new opportunities offered by Information and Communication Technologies. In the first years the Institute focused on different themes related to development of Information Society in the region. Several research and development projects were carried out ranging from law to life long learning. Since then the focus has gradually moved towards development and policy oriented research activities with the objective to contribute to the increase of knowledge and understanding of the challenges and opportunities facing Estonia in particular and Baltic Sea region in general. Institute's mission statement stipulates that in addition to theoretical knowledge it must seek to provide practical inputs for various public and private initiatives aiming to improve or change a situation in a specific field. Connecting theory with practice is thus the underlying motto of the Institute.

Over the years IBS has implemented tens of different projects together with government, academic, business and NGO type of organisations from all around the world. Formal partnership agreements have been concluded with the University of Tartu in Estonia, Latvian University in Latvia, Kaunas Technological University in Lithuania and Uppsala University in Sweden. IBS regional partner network extends to more than 100 organisations.

IBS main fields of competence include science and technology policy, industrial and economic policy, information society, foresight, regional development, cross-cultural communication, etc.



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# STIFT Stiftung für Technologie, Innovation und Forschung Thueringen



The Foundation for Technology, Innovation and Research Thueringen is a non-commercial foundation governed by public law, established by the German Federal State of Thueringen in 1993. STIFT's mission consists of:

- Promoting science, research and technology in universities, (applied) research institutes, research associations and other related organisations in Thueringen
- Facilitating the exploitation of new scientific results and innovative technologies
- Establishing flexible and competitive structures in the technological landscape of Thueringen
- Promoting entrepreneurship as well as the transfer of scientific results for the creation of technology and knowledge based businesses

The mission of STIFT is realised by the following activities:

 Improving the access of industrial enterprises to new products and processes and their commercial exploitation as well as the accumulation of scientific results and knowledge at regional universities and research institutes by co-funding joint projects

- Promoting technology and innovation through the generation of technology-orientated projects aimed at new start-up businesses and at new marketable products and services in established SME's
- Initiation of infrastructure projects such as technology and application centres providing high-value R&D capacity and an efficient technology transfer infrastructure for innovative companies
- Organisation of large regional events and competitions for the promotion of technology and innovation
- Organisation of sector specific technology transfer workshops
- Supporting the creation and the development of technology clusters

STIFT is hosting the department of "Technology and Innovation" of the Enterprise Europe Network providing targeted services to regional enterprises and research institutions regarding transnational technology transfer as well as research and development within the European framework programmes such as FP7 and CIP (Competitiveness and Innovation Programme).



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### **BIC Bratislava**



BIC Bratislava is a company with focus on innovation in small and medium sized companies. Within this target group BIC offers wide scale of services from business consultancy, financing, mediating of contacts up to initiating specific innovation support tools in individual Slovak regions. BIC Bratislava is member of respected international networks as

- EEN Enterprise Europe Network
- EBN European Business and Innovation Centre Networks
- Other initiatives, networks or thematic groups

The focus group of BIC Bratislava activity are high added value small and medium size companies with active approach to/need for innovation of their products, services or technologies, with an intention to utilize R&D resources.

For this group of clients BIC Bratislava offers:

- business consultancy
- specific information support on EU support and financial program possibilities
- support in technology transfer within EU
- support in implementation of specific financial tools on EU or Slovak level
- information on national support tools

BIC Bratislava co-operates with EU on the long term run in the area of implementation of activities and projects of FP and CIP programmes. In this area BIC Bratislava provides:

- support of participation of Slovak SMEs in these programmes
- support of implementation and use of results of these programmes in Slovak companies
- initiation and co-ordination of some EU network activities in Slovakia
- support in administration of EU funded projects in the phase of preparation, commencement or implementation

Innovation awareness in individual Slovak regions compared to EU status is low in general. This implies low engagement of public institutions in innovation support. BIC approaches public institutions mostly on the level of regional governments with an offer of support in effective implementation of innovation support systems. In this area BIC Bratislava:

- resents needs of innovative companies and is carrying out specific analyses of business environment
- offers expertise in the area of EU activities for innovation support in the regions
- is taking initiative in monitoring financial programmes and calls with regional focus
- supports public institutions in administration of EU funded projects in the phase of preparation, commencement or implementation
- contributes to national networking for innovation support and its compliance with EU networks



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### HCC Hordaland County Council



HCC (Hordaland County Council) is a regional authority responsible for county policies in the fields of econdary education, cultural affairs, communications, dental health, economic development and regional planning, including the development of the road system

The County Council is the elected body responsible for county policies. The Hordaland Council has 57 members elected every four years. For the election period 2007-2011 eight political parties are represented in the Council.

Detailed decision-making is delegated to the County Executive Board elected by the Council among its 57 members. The full Council meets 4-5 times a year, the County Executive Board once or twice a month and the other county principal standing committees once a month.

#### Main Activities

The County Council employs around 4,400 people with an annual budget of around 3,300 million NOK. Almost 60% of the work carried out by the council employees is related to secondary education.

46 secondary schools (including branches) situated in various parts of the county have more than 17,000 pupils.

The council's income is derived principally from local taxes (49%), central government block grants (35%), earmarked central government grants and from certain services provided by the council. The level of income is to a large extent defined by the central government.

The County Strategy Plan draws up the aims and strategies for the development of the county.



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## MoEE The Bulgarian Ministry of Economy and Energy





The Ministry of Economy and Energy (MoEE) was incorporated by decision of the Bulgarian Parliament in August 2005 through the merger of the Ministry of Economy and Ministry of Energy and Energy Resources. It is working on the development of the economic and energy policy of the Bulgarian state. The common trends in this policy are increasing the competitiveness of the national economy and the various institutions, encouraging investments, innovations, entrepreneurship, exports, modernization of the industrial base, stimulating measures on energy efficiency in the industry and the use of renewable energy resources. It also takes part it the implementation of the integration policy and effecting foreign economic cooperation. The MoEE develops the objectives and priorities of the state strategy and implements the state policy in the field of industry, trade, tourism, privatization and state interest management in these fields. It participates in the implementation of the integration policy and the foreign economic cooperation.

The nowadays "European funds for competitiveness" directorate ("Pre-accession programmes and projects" until 2007) was acting as PIU for Phare projects under Financial Memoranda from 2000 to 2003. Implementing Agency for those projects, designed at the MoEE was the Ministry of Regional Development and Public Works and the CFCU at the Ministry of Finance. From year 2005 on, the "Pre-accession programmes and projects" directorate at the Ministry of economy and energy assumed the responsibilities of Implementing Agency under Phare programme, acting as such under the Phare projects included in Financial Memoranda 2004 and 2005.

Following the adoption of the "Strategy for participation of the Republic of Bulgaria in the EU Structural and Cohesion Funds" the Ministry of Economy and Energy was nominated as Managing Authority for the Operational Programme "Development of the Competitiveness of the Bulgarian Economy".

With an amendment of the Organic Rules of the MoEE to the "Pre-accession programmes and projects" directorate within the ministry were explicitly imposed functions related to the organization and coordination of the ministry's activities regarding the fulfillment of the engagements foreseen in the "Strategy for participation of the Republic of Bulgaria in the EU Structural Funds", as well as execution of the functions of future Managing Authority under the Operational Programme "Development of the competitiveness of the Bulgarian economy" 2007 – 2013. As such the "European funds for competitiveness" directorate bears the ultimate responsibility for the successful programming and implementation of the programme.





**Philip Kroumov** 

Ivette Jabylanova

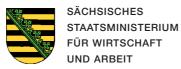
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# SMWA Saxony State Ministry for Economic Affairs and Labour



Within the range of governmental tasks the Saxony State Ministry for Economic Affairs and Labour (SMWA) is responsible for setting conducive framework conditions to support regional economic development in Saxony especially in the fields of

- economic strategy
- economic promotion (including the support for Research and Development) and
- Transportation, Road construction, Energy

From the very beginning after Saxony's restart as a regional and political entity in 1990 research and development (R&D) has always been one of the top priorities in Saxon economic politics. In this context SMWA supports Saxon enterprises, especially small and medium sized companies, in the field of individual and joint R&D-projects. Both schemes are quite similar in terms of funding conditions and the corresponding administrative process. A positive funding decision especially requires a high degree of innovation (EU-level) and a high technological risk. This may underline that the public support is focussed on technologically demanding projects being apt to contribute to a sustainable and long-term improvement of the beneficiaries' economic competitiveness. In addition to this the respective project must be both realized and economically implemented in Saxony by Saxon companies respectively R&D-institutions (joint R&D-projects). Due to the desirable cooperation between scientific institutions and enterprises joint R&D-projects enjoy slightly higher funding rates in comparison to individual project support.

In addition to these two large major programmes a further support scheme offers financial help to those Saxon enterprises which do not yet dispose of sufficient R&D staff to conduct R&D activities. In this context the employment of so-called innovation assistants (esp. academic graduates) can be financed for a maximum period of two years so as to strengthen the R&D potentials of the supported company.

From 1992 till the end of 2007 a total sum of roughly EUR bill 1,1 has been granted to Saxon enterprises and R&D institutions for more than 3500 individual and joint R&D projects. This led to the creation of over 18.000 new jobs. In the field of the innovation assistants' funding the employment of more than 600 innovation assistants could be supported with a total sum of EUR mill 20.

All mentioned funding schemes are co-financed by the European Regional Development Fund (ERDF) respectively the European Social Fund (ESF) in the case of the innovation assistant programme.

Further informations about SMWA and the mentioned support schemes can be obtained on the SMWA-homepage www.smwa.sachsen.de (English version www.smwa.saxony.de) or www.sab.sachsen.de



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# VenInn Veneto Innovazione Spa



Veneto Innovazione is the regional agency for innovation and technology transfer with the aim of promoting applied research and innovation in the Veneto Region.

The company's shareholders are the Veneto Region, main entrepreneurial and crafts associations, Chambers of Commerce, the region's four universities.

The Regional Innovation Agency coordinates the regional innovation network that unites Science and Technology Parks, centres of excellence, private and public organisations.

Veneto Innovazione's main activities are the following:

- Promotion of a regional network for research and innovation.
- Management of innovation holdings in research and innovation support centres such as Science Parks, research facilities, local development agencies;
- Collaboration and assistance to the Regional Authority for the local policies concerning research and innovation sector.
- Management of regional as well as national and European projects on research, innovation and local development related topics, aimed at exchanging best practices and best policies
- Information supply on technological innovation and applied research.
- Management of different regional innovation programmes, on behalf of the Regional Authority.

Moreover Veneto Innovazione supports SMEs, industries, research centres and university in the exploitation of their research results through technology transfer in close collaboration with the main international networks such as the Enterprise Europe Network, TII (European Technology Information Innovation Network), APSTI (Association among the Italian Science Parks), RIDITT (Italian net for innovation and technological Transfer towards companies).

Veneto Innovazione has also developed several specific competences in leading and managing projects at local and international level and it has a proven experience as partner in European Projects where the method designed to help Member States progress jointly in the reforms they needed to undertake in order to reach the Lisbon goals, is to be applied throughout networks of European Regions: FP6 PAXIS - START, FP6 PROINNO Europe INNET, FP6 PROINNO Europe EOS, FP6 RTD-OMC Regions for Research, FP6 RTD-OMC EUROPEER SME.



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RRA Severne Primorske d.o.o. Nova Gorika/Regional Development Agency of Northern Primorska Ltd. Nova Gorica



RDA OF NORTHERN PRIMORSKA Ltd. NOVA GORICA has been established in order to unite all local, regional and national potentials and to realise development projects financed with national and international resources. Its task is to identify the needs in economic and social environment and to stimulate regional development.

The Goriška statistic region is situated in the west part of Slovenia. On the west border there is Italy province of Gorizia and province of Udine, on the north border there is Gorenjska statistic region, on the east border there is Notranjska statistic region with the Slovenian capital city Ljubljana and on the south border there is Obalno-kraška statistic region. Due to its geographical position on the crossroads of the routes between Austria, Italy and Slovenia, where the Alps draw closest to the sea, here is a meeting point of different cultures and nations. The Soča River flows through the entire region, all the way from the Alps to the sea.

THE MISSION of RDA of Northern Primorska Ltd Nova Gorica is

- To stimulate development in economic, social, environmental and spatial area in Goriška statistical
- To prepare and to implement Regional Development Program and other joint development
- To advise and to stimulate development in the area of innovation and technological development,
- To support local entrepreneurship and form contemporary economic infrastructure,
- To gain national and international financing resources,
- To be a friendly and a useful agency for all subjects in the region and to stimulate regional development in Slovenia, among members of the EU and among accession members,
- To improve life standard of all inhabitants in Goriška statistical region.



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# **RWG** Region of Western Greece



Main goal of the Region of Western Greece is to share values, to develop and create for its people and the whole Europe in total. Main care is to improve living conditions for the inhabitants of Western Greece as well as to attract new residents to the region. With intensive teamwork we give our best to improve qualtity of life, strengthen social security and provide the new generation with motives to turn to the new technologies and sciences. One of the corner stones of the regional strategy for the enhancement of the economic prosperity of its citizens is the development of innovation. A strong prerequisite for this is the warm and open cooperation among public sector, private companies and academic community, which, we believe, is going to provide a new perspective for the regional economy.

RWG has a long experience in interregional cooperation and Structural Funds. Starting from Innovative Actions of ERDF (2002-2004), the Programme INNACT had a total budget of around 3.5 Million Euros and was run as a mini-programme with 12 subactions in total (covering innovation transfer to SMEs,

clustering, e-commerce, health and safety for the citizens, organic farming). Under ESF-Article 6 two projects were implemented, named WISE and FILES, which coped with the development of Local Employment Strategies at a first step and the future-oriented implementation of them at a second step. RWG has also experience in FP6 projects, since there are two projects in run (MANUNET, which deals with the "coordination of regional activities towards a European regionally based research area on new processes and flexible intelligent manufacturing systems" and EUROPEER SME, which tackles "best practices to bring research and innovation in European SME through the «peer review» method"). Moreover, RWG has participated as Lead Partner or Participating Partner in 13 INTERREG III projects (covering all three strands of INTERREG III Programme). Within the Regional Innovation Pole of Western Greece, a regional consortium of key actors in the field of innovation, RWG is participating, among others, in the creation of an integrated innovation network that supplies support services to local SMEs. Last but not least, RWG is a member of the IRE and ERIK+ networks.



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### WRS Wirtschaftsförderung Region Stuttgart GmbH



The Wirtschaftsförderung Region Stuttgart GmbH (WRS) is a subsidiary of the Verband Region Stuttgart (governmental status), aiming to meet the region's responsibility for business promotion and was founded in August 1995. It is partly financed by the Verband Region Stuttgart and by own business activity. The WRS has the mandate of attracting interested companies to settle in the Stuttgart region and to support them during all the phases of their investments, to support companies already located in the region, to carry out strategic projects to foster the regional economy with the main focus on SMEs as well as to boost cooperation among research facilities, universities and companies by the set-up and management of regional cluster management initiatives.

The main approach of WRS to promote R&D and Innovation activities within the Stuttgart Region combines promotion via dialogue, facilitating access to subsidies, improvement of regional knowledge management, workshops for continuing education as well as financial support for technical innovations. As an instrument in terms of an Applied Regional Innovation Strategy, WRS plays an active role in the development and support of so-called Regional Competence and Innovation Centres. These Regional Competence Centres support network creation among players from science, research, economy and the public sector and provide an instrument for economic development, which assists especially SMEs to meet the challenges of global competition. Competence and Innovation Centres provide support for involved partner institutions by linking SMEs to large companies as well as to regional research and education facilities. In this regards, the Competence Centres Programme is a major regional initiative aiming to provide a platform for cooperation, knowhow exchange as well as the initiation and implementation of innovative (regional, national and international) project ideas.

Furthermore, internal cluster management describes the WRS strategy of maintaining and fostering existing business networks in certain industries, especially the Automotive, Mechanical and Environmental Engineering, IT and Media industries. Internal cluster management is a sectoral approach while the Competence Centre approach is a kind of cross-sectoral innovation strategy. Both strategies are major parts of the Regional Economic Development Strategy for the Stuttgart Region.

WRS is involved in various European funded projects from different EU-Programmes, especially the Framework Programmes as well as the INTERREG programmes. Project examples highlighting innovation, regional development, coordination and support are REGINS (REGional standardised INterfaces for a better integration of regional SMEs in the European economy; INTERREG IIIc), EMERIPA (European Methodology for Regional Innovation Policy Impact Assessment and Benchmarking; 6th Framework Programme), and BeLCAR (BEnch Learning in Cluster management for the Automotive sector in European Regions, Europe Innova).



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### **EKT Group**



EKT Group is a Lithuanian consulting company, providing management, marketing consulting, marketing research and training services for business organizations as well as for public institutions.

- Our value increasing consulting company provides effective solutions to improve the activities of organisations. We have expert knowledge in the following organisation management fields: strategic management, marketing management, installation of management systems, personnel management and others.
- Background of 15 years of activities. The EKT Group is a private Lithuanian capital consulting company founded in 1993.
- Leaders among consultants. Over the last three years, we have been one of the largest business management consulting companies in Lithuania.
- Rapid growth. The turnover of the EKT Group in 2007, when compared with 2006, increased by 87% and reached LTL 6.7 million.
- Substantial experience. In the last few years, we have worked with over 180 organisations and implemented over 250 projects.
- The area of activities exceeds the territory of Lithuania. With the assistance of our long-standing partners, we provide services in Latvia, Estonia and other countries.
- Independent company. The EKT Group is currently owned by five people who are full-time consultants in the company.
- A big team of experts. Today the EKT Group has 36 employees with educational backgrounds in social, exact sciences and humanities.
- Combination of diverse competences. We co-operate with over 30 independent experts in various fields from Lithuania, and consulting companies operating in foreign countries.
- Loyalty is a value. Our team has recently grown rapidly, but few have left the company

#### Mission:

- To become one of the biggest management consulting companies in Lithuania;
- To be distinguished as having ability to manage complex projects;
- To shape consulting culture in Lithuania.

#### Main services and activities:

- Institutional development: project administration services of projects co-financed by EU Structural Funds competitiveness, regional development feasibility studies, SME development, Science Technology Parks, export development, innovation and entrepreneurship, supply chain development;
- Marketing research. EKT is committed to its clients on a continuing basis to assist in researching market structure and implementing marketing strategies in the developing market segments in Lithuania. EKT performs the following market researches;
- Market studies. Marketing planning and strategy development, new product development, competitive intelligence, industry sector analysis, quantitative and qualitative research, export marketing, feasibility studies:
- Management development and personnel training.
   Strategic planning and strategy development, applying scorecard, ISO 9000, EFQM, job compensations systems and other managerial techniques.



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### RegLom Regione Lombardia



RegLom (Regione Lombardia) covers a geographical area of 23,862 km<sup>2</sup> (7,9% of whole Italian territory); it represents one of the most populated region within Italy and Europe with 378 inhabitants/kms and its local population amounts to around 9 million inhabitants (the 15,7% of the national population). The region is well interconnected with the most important International cities through 4 international airports. Regione Lombardia's GDP amounts to Euro 296.2 million and represents more than 20% of the national one. With more or less 740,000 enterprises (of which the majority are SMEs) the region represents the 15% of the national concentration and, in some areas, the most relevant in Europe. The contribution to the regional economy is provided for the 38,5% by industry, 59,7% by services and the 1,8% by agriculture, with only an unemployment rate of 4,1%.

The most relevant enterprises with the greatest innovation potential and international vocation concern fashion and design, wood and textile, agricultural-food and zoo-techniques, biomedical, new materials, ICT and nanotech.

Regione Lombardia has also an excellent research infrastructure, including leading universities and around 225 public and private research centres; the Milan area is the heart of this phenomenon and the most qualified Italian scientific district with: 7 universities, 24 national research centres, roughly 70 universities carrying out research for third parties, 4 test labs and 2 nuclear physics institutes, 8 technology transfer centres, 3 consortia of universities and enterprises, 4 development agencies and 4 incubators.

Supporting research and innovation, the regional government promoted relevant understandings with and between public-private research institutes and enterprises, in order to implement efficient use of funds, to promote several projects and international partnerships, to support specific initiatives (ex. "Bio Forum" and "Bio Initiative", "Chemical Regions of Europe", a relevant number of projects within the EU-Programmes 6FP and INTERREG).

Regione Lombardia's main goals to foster industry development are:

- to promote research, innovation and technology transfer as strategic factors for the development of a modern and competitive economy;
- to help the world of research meeting the demand for innovation coming from the business community.
- to foster specific actions for the economic development of the territory especially turned to the development of SMEs and to the spread of the innovation with particular attention to the Industrial clusters;
- to promote specific actions turned to the modernization of the PA and to the reduction of the bureaucratic burden for the enterprises and actions turned to the improvement of the communication among institutions and between institution and enterprises



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Finlombarda SpA is the Developing Agency of Lombardy Region and the managing institution of the instrument "Metadistricts", which has been chosen among various Regione Lombardia financial instruments as a best practice within EUROPEER SME. In its role of the managing institution Finlombarda gave technical support to Lombardy Region within the project.



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