

### **REGIONAL IMPROVEMENT PLAN** of NORTH EAST REGION OF BULGARIA

| 1. Identification of Regional Policies to be improved and policy documents related to this policies.  | 2  |
|---|----|
| . 2. Recommendations for improvement of the identified policies, to be included in policies documents.  | 2  |
| <ol><li>Sustainability, proposing follow-up of the policy improvement in the next period and/or<br/>measures and actions for realizing the improvement.</li></ol> | 3  |
| INDEX OF THE RIP  |    |
| 1. Analysis of the socioeconomic reality of the region.   | 3  |
| a. Analysis of key economic indicators  |    |
| b. Entrepreneur   | 8  |
| 2. Analysis of existing structures to support innovation.   | 10 |
| a. Regulatory framework and current plans on innovation. Current situation.   |    |
| <ul> <li>b. Analysis of the reference entities in the promotion of regional innovation.</li> <li>c. Identification of needs.</li> </ul>                           |    |
| 3. Analysis of other reference experiences.   |    |
| a. Reference strategies and actions in other regions. Experiences of reference for the  |    |
| development and deployment of Regional Innovation Strategies.   | 13 |
| b. Identification of other experiences within INOLINK.  |    |
| 4. Main conclusions.  | 13 |
| E. Destingel Strategic Improvement Disp (Approach)  | 15 |
| <ol> <li>Regional Strategic Improvement Plan (Approach).</li> <li>a. General Objective</li> </ol>   | 13 |
| b. Specific objectives.   | 15 |
| 6. Definition of the Regional Improvement Plan.   |    |
| a. Main Lines of Action.  |    |
| b. Definition of actions.   | 14 |
| c. Planning   |    |
| d. Calendar.  |    |
| e. Sizing   |    |
| 7. RIP evaluation system.   | 14 |
| 8. Annexes  | 14 |
| 9. References   | 14 |





### **REGIONAL IMPROVEMENT PLAN of NORTH EAST REGION OF BULGARIA**

## 1. <u>Identification of Regional Policies to be improved and policy documents related to</u> this policies.

The main regional and district documents for regional development of Varna District are: 1. Updated Regional Plan for the Development of North East Planning Region for the Period 2007-2013

- 2. Regional Innovation Strategy for the North East Planning Region of Bulgaria (NE-BG RIS)
- 3. The Strategy for Development of Varna District 2005-2013

**Municipal Development Plan of Varna**, adopted by Resolution 2739-3 of Protocol No 35/30.10.2005 of the Municipal Council of Varna, is a basic and fundamental document that outlines general guidelines for municipal development policies for the seven-year planning period from 2007 to 2013 on developed based on analysis of existing situation, needs and constraints.

Municipal Development Plan (MDP) is a continuation and concretization of the Strategy for Development of Varna District 2005-2013. Municipal Development Plan is divided into four parts: 1. Situation analysis 2. Vision and priorities 3. Indicators for assessing and 4. Indicative table. The situational analysis contains analytical information on: general characteristics of Varna Municipality, state of the business sector's human resources, social activities in the municipality, the municipal infrastructure, state of the environment as well as information about planned activities and measures to address the defined problems and overcoming the identified "barriers to development." The structure and content of MDP and provided in the second part of his activities for the implementation of municipal strategy closely follow the structure and content of the National Strategy for Regional Development 2005-2013.

# 2. Recommendations for improvement of the identified policies, to be included in policy documents.

Policies, addressed by INOLINK project are the policies for supporting innovations and innovation networks (In the Municipal plan these policies and the measures for improvement are referred to in Priority 1: Increasing of the competitiveness of the economy on the grounds of the economy of knowledge).

RAPIV is a non-governmental organisation, carrying out its activities in public benefit, for stimulating regional economy, through the development of entrepreneurship and innovations. RAPIV reports every year for the results of its activities as part of the report of the implementation of the Municipal development plan. The implementation of project INOLINK is reported under:

# Specific objective 1: Stimulating public-private partnership and of the cooperation in networks/clusters

Specific objective 1 is supported by measures aiming at stimulating the public-private partnership, partnership between companies, establishment of business networks; expanding and optimisation of the connection between businesses, branch and professional structures;





efficient exploitation of labour and financial resources, technology transfer, know-how and good practices from the EC; development of programmes for supporting of cluster structures in the local economy, etc.

RAPIV has reported the main objectives and expected results as well as the structure of the partnership, duration and budget of the project.

INOLINK is included also in VI. PRIORITY: INTERNATIONAL COOPERATION AND EUROPEAN INTEGRATION, Specific Objective 1: European Integration.

6.1.1. Development of contacts and active international activity with the institutions of the EC and the Community Member countries for studying their experience and adopting good practices in the main trends for development.

6.1.8 Development of capacity and partnerships for participation in international projects under the European programmes and funds, including 7FP, CIP, Interreg IV, SEE, JESSICA, World bank, etc.

# 3. Sustainability, proposing follow-up of the policy improvement in the next period and/or measures and actions for realizing the improvement.

The implementation of INOLINK project is already accepted as part of the implementation of the policy of Municipality of Varna for support of innovations and competitiveness. The Regional Improvement plan, developed under the project, will be recommended to the Municipal Authorities to be included in the Municipal development plan.

### **INDEX OF THE RIP**

## Analysis of the socioeconomic reality of the region *Analysis of key economic indicators:*

The North East region is the smallest planning region in Bulgaria and covers 14,487 square kilometres with a population of 961,965 people (NSI 2011). This forms 13% of the country's total inhabitants. It is the second largest regional economy, generating €3,7bln of gross domestic product (GDP) and contributing 11% to the national GDP (2009 Eurostat data). The region encompasses four administrative regions, the largest of which is Dobrich. The regional gross value added (GVA) is €3,2bln (Eurostat 2009) of which 64% is contributed by the services sector, followed by industry - 29% and agriculture - 7% (NSI 2009). The main industry sectors are food, beverage and tobacco production, chemicals, textile, fibres and clothing, machine building, transport equipment and construction building. The region features high investment activity focused mainly in the Varna administrative region due to its appeal as a tourist and logistical centre on the Black Sea coast. The cluster approach is seen as good opportunity for overcoming the intra-regional disparities. Regional clusters focusing on marine technologies, information and communication technologies, high technologies, tourism, agricultural equipment, bakery, bee-production and clothing are established in the region. GDP per capita in the region amounts to €3,700, compared to an average of €4,600 for the country (2009 Eurostat).

The regional employment rates of 44.6% (374,000 people in 2011) is slightly below average national values of 45,6% for the same reference year (NSI 2011). Employment in high-tech





industries and knowledge-intensive services features about 2% of the total due to the presence of national universities and research and development (R&D) institutes in the region that work close with industry. These rates are significantly below the respective estimates of the leading regions in Bulgaria and show significant disparities between the big cities and the smaller and remote municipalities. Despite the establishment of the Varna High-Tech Business Incubator and the available conditions for establishment of a High Tech Park, the region generally features underdeveloped local infrastructure and modern production facilities. In 2011, unemployment was set at 15.5% (NSI 2011).

| Indicator  | Value (averaged over 2005-2010) |
|--|---------------------------------|
| Per Capita GDP (EUR)   | (€) 3 250                       |
| Growth of Regional per Capita GDP (percentage)                             | 0,15                            |
| Share of Employment in Industry<br>(including Construction) (in %) (share) | 31,83                           |
| Unemployment Rate (in %) (share)   | 10,58                           |
| Gross Expenditure on R&D (GERD; EUR) (million of €)                        | 7,12                            |
| Gross Expenditure on R&D per GDP(in %) (percentage)                        | 0,22                            |
| EPO Patent Applications (by Priority Year)                                 | 2,44                            |
| Share of Knowledge Workers   |                                 |
| (Share of HRST in Economically Active Population)<br>(in %) (share)        | 13,22                           |
| Share of Business Expenditure on R&D in GERD (in % (share)                 | <sup>6</sup> ) 28,08            |

http://www.rim-europa.eu/index.cfm?q=p.regionalProfile&r=BG33#economy

The North East Region (NER) is situated in the northeastern part of the country. To the east it is broadly opened to the Black sea. It has a population a slightly below one million of which nearly 332 000 live in the biggest city at the Bulgarian Black Sea coast – Varna. Agriculture benefits from the extremely suitable natural and climatic conditions. The NER occupies first place in quantity of arable land in the country which serves as a base for agriculture development. The Black sea littoral is suitable for recreation activities and tourism. On the area of the NER are situated more than 15% of the enterprises from the non-financial sector in the country and it possesses 12.8% of the long term material assets. The industry in the North East Region is a mixture of big and small companies, presented on a wide industrial base. Among the most developed sub-sectors of the industry (according to the gross production volume) in NER, which are of national importance, are the production of food products and beverages (about 25% of the industrial products (about 18%), of production of electric and heat





energy, gas and water supply (about 14%) etc. Very fast development is registered in construction, trade, and transport and hotel industry. The industrial sector is distinguished with high degree of concentration in the district centres and in the industrial agglomeration Varna-Devnya-Beloslav. This way for example in the industrial sub-sectors as chemical substances production, products and fibres, electric and heat energy production, gas and water supply as well as in the sector of services in the field of transport, warehousing and communications district Varna gives above 90 % of the total gross production for 2008.

| Legal/administrative status of the region  |                     |
|--|---------------------|
| For example: federal states in the case of Germany                                   | North – East Region |
| NUTS level   | NUTS 2, BG33        |
| Size of the region (in km <sup>2</sup> ):  | 14 487.4            |
| Population   | 966 095 (Feb 2011)  |
| How high is the ratio of population in cities with more than 100.000 inhabitants (%) | 42.8 %              |

|                             | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009  | 2010 | 2011 |
|-----------------------------|------|------|------|------|------|------|------|-------|------|------|
| Unemployment<br>rate (in %) | 19.8 | 18.4 | 17.4 | 12.1 | 11.0 | 10.8 | 8.6  | 10.4  | 14,6 | 14,7 |
| GDP per capita in Euro      | 1838 | 2000 | 2248 | 2456 | 2858 | 3241 | 4010 | 4124  |      |      |
| Economic<br>growth (%)      | 1.5  | 5.3  | 4.6  | 3.8  | 6.1  | 4.5  | 4.3  | - 4.0 |      |      |

NER is taking second-third place in the country after the South-West and South central regions in absolute and relative share of RTD expenses in GDP – with average for the country – 0.53% (2009),–which is a considerable lagging behind the objective set out in the Lisbon Agenda (4% of GDP). The invested funds are quite minimal and do not serve as a solid base for new technological and competitive development. NER universities are mainly concentrated in Varna (5) and Shumen (1). During the academic year 2011/2012 there are in total 41 055 students and 2 329 lecturers in the six Universities of NER.

The existing research and development potential is limited, which does not contribute to the development of the regional innovative capacity. The number of functioning organizations in the field of RTD in the region is quite low and concentrated mainly in Varna (4– on fisheries; on marine research and oceanology; on hydro- and aerodynamics and on metal sciences).





With the National Centre for Agricultural Sciences in General Toshevo and Shumen there are research and development structures. There is a lack of technological infrastructure, namely technological parks, incubators, technology transfer centres and other structures for technological partnership with the business. Innovations are still priority of the large enterprises.

#### Table 9: Regional innovation indicators

|  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008 | 2009 |
|--|-------|-------|-------|-------|-------|-------|------|------|
| Public R&D expenditures as<br>a percentage of GDP (R&D<br>expenditures in the<br>government sector<br>(GOVERD) and the higher<br>education sector (HRED). <sup>1</sup> | 0.35  | 0.35  | 0.33  | 0.32  | 0.31  | 0.28  | 0.28 | 0,3  |
| Private (business) R & D<br>expenditures (BERD) as a<br>percent of GDP   | 0.09  | 0.1   | 0.12  | 0.10  | 0.12  | 0.15  | 0.15 |      |
| AND (if available) at the<br>European Patent Office<br>(EPO) per million population.   | 1.963 | 0.988 | 2.982 | 4.323 | 2.006 | 1.006 |      |      |

For full and objective information for the innovation activity and the innovative needs of the NER two studies were conducted within the project "Regional Innovation Strategy of NER". First one was "Investigation of the Innovativeness and Competitiveness of Companies from the North East Region" where the proinnovative needs of the enterprises have been investigated (basically small and medium enterprises) from NER. Answers have been received from 538 companies, distributed according to the criteria in the developed project methodology in ten priority sectors and the NER districts. The second one was "RESEARCH OF THE POTENTIAL FOR CREATION AND SUPPORT OF THE INNOVATIONS" for the potential and revealing of the innovation activity by the academic organizations, scientific and research institutes, and intermediary organizations from NER for creation, adoption and support of innovations. The results show the North East Region is lagging far behind the EU average one. GDP per capita is almost 2,7 times lower than EU-27 and the EU-25 regions correspondingly. At the same time rather high disparities are observed between districts, involved in the NER. NER labour productivity per person employed is also relatively low. According to official statistical data, the NER average gross monthly earnings are many times lower than those in EU. This fact and the observed wage dynamics cannot be interpreted as a sufficient condition for the low unit labour costs and thus for the competitiveness improvement.





The combination between low salaries and the relatively low labour productivity is not a good starting point for raising competitiveness.

 Table 3: The five main sectors of economic activity and total number of employees in each and their correlation to degree course or research centres in the region

| Sector   | Employees (2008) | Correlated degree  | Correlated  |
|--|------------------|--|---|
|  |                  | course   | research centres  |
| Energy Industry                                | 7042             | TU - Varna   |   |
| Information and<br>Communication<br>Technology | 2442             | TU Varna, Varna<br>Free University,<br>University of<br>Economics                                  | Technical Institute at<br>Varna Free<br>University  |
| Machine building,<br>Marine industry           | 25 000 (appr.)   | Naval Academy,<br>TU - Varna   | Bulgarian Ship and<br>Hydrodynamics<br>centre, Institute of<br>Oceanology,<br>Technology Transfer<br>Centre at Naval<br>Academy                       |
| Tourism  | 22 484           | VarnaFreeUniversity,UniversityofEconomics,ShumenUniversity,InternationalUniversitycollege(Dobrich) |   |
| Agriculture                                    | 12849            |  | -National Centre for<br>Agricultural Sciences<br>in General Toshevo<br>and Shumen,<br>Institute of Fisheries<br>and Aquacultures –<br>Varna, MU-Varna |

RAPIV, Survey on Innovation Needs, INOLINK





| Table 4: The five most important innovative sectors in the region listed by the regional |
|--|
| stakeholders (N=22)  |

| Rank | Innovative Sector               | Number of entries |
|------|---------------------------------|-------------------|
| 1    | Tourism                         | 18                |
| 2    | Marine industry                 | 13                |
| 3    | Agriculture                     | 9                 |
| 4    | Transport                       | 9                 |
| 5    | ICT and communication equipment | 8                 |

RAPIV, Survey on Innovation Needs, INOLINK

| Table 5: Most important innovative sectors and total number of employees in each and t | their |
|--|-------|
| correlation to degree course or research centres in the region                         |       |

| Sector          | Employees      | Correlated degree  | Correlated research    |
|-----------------|----------------|--------------------|------------------------|
|                 |                | courses            | centres                |
| Information and | 2442           | TU Varna, Varna    | Technical Institute at |
| Communication   |                | Free University,   | Varna Free             |
| Technologies    |                | University of      | University             |
|                 |                | Economics          |                        |
| Chemicals       | 4000 (appr.)   | TU Varna           |                        |
| Energy industry | 7042           | TU Varna           |                        |
| Tourism         | 22 484         | Varna Free         |                        |
|                 |                | University,        |                        |
|                 |                | University of      |                        |
|                 |                | Economics, Shumen  |                        |
|                 |                | University,        |                        |
|                 |                | International      |                        |
|                 |                | University college |                        |
|                 |                | (Dobrich)          |                        |
| Marine industry | 25 000 (appr.) | Naval Academy, TU- | Bulgarian Ship and     |
|                 |                | Varna              | Hydrodynamics          |
|                 |                |                    | centre, Institute of   |
|                 |                |                    | Oceanology,            |
|                 |                |                    | Technology Transfer    |
|                 |                |                    | Office (TTO) at        |
|                 |                |                    | Naval Academy          |

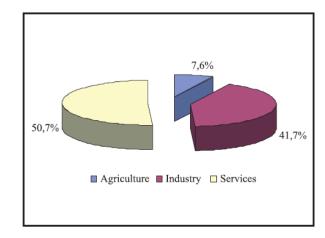
----No data available

RAPIV, Survey on Innovation Needs, INOLINK





#### b. Entrepreneur:



Services are the prevailing sector in NER, accounting for 50,7 % of the gross production.

Fig.3. Gross production by sectors

On the area of the NER are situated more than 15% of the enterprises from the non-financial sector in the country and it possesses 12.8% of the long term material assets.

The North East Region takes leading position in the country in **tourism** development with over 40% of the total bed space in the country, from the night stays in exploitation, the realized night stays and the income from accommodation. Compared to the other planning regions, NER is distinguished with longest stay of visitors – 7,1 days, highest base occupation – 35,7%, highest density of bed space– 3,5 per km<sup>2</sup>, beds per 100 habitants – 5,1 and night stays per 100 habitants – 412. This classifies NER as the region with greatest ,,impact on the environment" and socially economic influence of tourism, measured with the indicators density of beds and night stays, beds and night stays per 100 inhabitants, through the urbanization of the sea shore from Varna to Balchik, etc.

**The industry** in the North East Region is a mixture of big and small companies, presented on a wide industrial base.

Among the most developed sub-sectors of the industry (according to the gross production volume) in NER, which are of national importance, are the production of food products and beverages (about 25% of the industrial production for 2008), of metal products and machine building (about 20%), of chemical products (about 18%), of production of electric and heat energy, gas and water supply (about 14%) etc. Very fast development is registered in construction, trade, and transport and hotel industry.

The industrial sector is distinguished with high degree of concentration in the district centres and in the industrial agglomeration Varna-Devnya-Beloslav.

This way for example in the industrial sub-sectors as chemical substances production, products and fibres, electric and heat energy production, gas and water supply as well as in the sector of services in the field of transport, warehousing and communications district Varna gives above 90 % of the total gross production for 2008.

At the same time negative trends have been registered as: Enduring decline in the development of stockbreeding; Non-functioning depreciated irrigation systems; Ineffective





production, broken connection between science, production and market; Low level of organization of producers, lack of functioning organization structures at local level; Fragmentation, small size of a large part of the terrains and farms. Independently of the building of some elements of the entrepreneurial infrastructure of agriculture in the region, it will be additionally developed in future.

NER is with rich cultural and historical heritage which is good prerequisite for alternative forms of tourism – cultural, agricultural and ecological.

#### Seed crystals in the region (emerging sectors)

The stakeholders mentioned following sectors as possible innovative and economicaly relevant in the future but without major economic relevance today:

- Desolating of sea water is a promising business area. The traditional sources of drinking water progressively decrease their capacity and its obtaining is becoming more and more expensive which makes the industrially filtrated water competitive. The separation of salts from the sea water is carried out with the help of membranes, the so called reversed osmosis.
- Energy networks, improvement of the energy efficiency and development of renewable energy sources:
  - provision of the district with networks and facilities for transfer and distribution of electricity, gas and fuels from transeuropean, national and regional networks. Building of new networks and facilities and rehabilitation of the existing ones.
  - building and rehabilitation of energy networks, providing the economical development of the business zones and the newly urbanised territories – new networks and electric sub stations, reconstruction and rehabilitation of the existing low power networks.
  - Development and implementation of strategies and programmes for energy efficiency for cutting down the expenses in the public sector and in the production sector.
  - Development and implementations of systems for reducing the energy consumption, cogeneration of energy, energy efficient management.
  - Support to the building of facilities for utilisation of renewable energy sources: geothermal energy; energy from biomass; energy from wind power, solar energy; energy from water.
  - Supporting actions on creation, registration and transfer of know-how of energy saving technologies, machines and equipment.
- Marine industry potential with regard to the presence of broad coastal line (above 90 km) Black sea, relatively near disposition to the agglomeration centre Varna with developed scientific, production and technological objects and human resources in this field.

#### 2. <u>Analysis of existing structures to support innovation.</u>





#### a. Regulatory framework and current plans on innovation. Current situation.

From a historical point of view, Bulgaria has been a highly centralised economy and it has not developed a regional dimension to its research and innovation policy yet. The country has only recently begun to establish a regional element in its innovation policy through the elaboration of Regional Innovation Strategies (RIS). The pilot RIS for the North East Planning Region of Bulgaria was published in 2008. Although the region demonstrated bottom-up activity in developing its regional innovation strategy, this strategy did not receive support from the government to launch its implementation. As a result, there are no innovation policy measures implemented on the regional level. All innovation-related measures and support programmes are coordinated centrally, at the national level.

The innovative companies of the North East region are lagging behind the leading South West region in its application rates to the two main Bulgarian innovation and research funding mechanisms - the National Innovation Fund (NIF) and the National Science Fund (NSF) as well as the Sixth and Seventh Framework programmes.

The region performs relatively poorly in absorbing funds under Operational programme "Competitiveness" 2007-2013 - the only operational programme that supports innovations. The region is ranking next to last in terms of value of contracted funds.

| Region               | Total contracts | Total value      | Total beneficiaries |
|----------------------|-----------------|------------------|---------------------|
| Yugozapaden          | 758             | € 210 092 699,26 | 673                 |
| Severozapaden        | 122             | € 45 481 399,71  | 108                 |
| Severen Tsentralen   | 198             | € 80 809 836,23  | 156                 |
| Yuzhen Tsentralen    | 350             | € 164 935 681,53 | 283                 |
| Yugoiztochen         | 189             | € 99 143 773,23  | 154                 |
| Severoiztochen (NER) | 184             | € 58 083 157,02  | 166                 |

## **Operational programme ''Development of the Competitiveness of Bulgarian Economy'' 2007-2013, financial implementation by September 2012**

Source: Information System for Management and Monitoring of the Structural Instruments of the EU in Bulgaria (UMIS), <u>http://umispublic.minfin.bg/</u>

At the present moment, the strategic priorities for the next funding period are being set. On regional level, the Plans for Urban Development and reconstruction are elaborated with the aim to set the different priority zones for improvement within the support from European Structural funds.

Development of preliminary concept for establishment of Technology park in Varna as a result of the exchanged experience. The preliminary concept (enclosed in **Annex 3**) is included in the Plan for Urban Reconstruction and Development of Varna. The plan will be the basis for the preparation of city development projects to be proposed for financing during the next funding period. 500 mln. Euro are envisaged for all zones, included in the plan, 200 mln. of which are designated for the zone of high social importance.





#### b. Analysis of the reference entities in the promotion of regional innovation

## Cooperation of business from the region with the other main actors in the Regional Innovation System

**Intermediary organizations.** From the sectoral studies done it is obvious that the cooperation of the business from the region with the regional development agencies is weak – less than 10% on the average of the surveyed companies from the studied sectors respond that they have collaborated with an agency for regional development. The companies collaborate more actively with the branches of Bulgarian Chamber of Commerce and Industry. Regarding the innovations the conclusion can be made that the innovation services in the region are poorly developed or they are nearly missing – the services and consultations are offered from general business character on the one side, and the companies do not see the innovations as a significant factor for company development and improvement of the enterprises' competitiveness – on the other.

Regarding the barriers before the cooperation with organizations that support the business development, the following ones come to the fore: complicated procedures for collaboration, lack of training in the institutions for support of the business; the support is directed to limited number of companies, which comply with certain requirements.

**Research institutes and universities.** Based on the implemented survey among the companies from NER it is obvious that the cooperation between science and business is weak. The collaboration with the institutes for all the ten sectors is less than 10% on the average. The collaboration between the business and the universities is more efficient and it is the strongest for the sector of Energy Industry – 33% collaborate constantly with the universities. In the sectors of ICT and Services 16% on the average collaborate with universities. The companies-consumers do not have well developed innovation policy and plans related to investments in knowledge and new technologies, the demand of knowledge by the companies is limited to consultation services of general business character and technological experts consultation, which do not require implementation of research activity and creation of new products. In long-term plan this trend will have a negative effect on the market positions of the companies as well as on their competitiveness taking into consideration the membership of Bulgaria in EU and the entering of the European companies on the Bulgarian market.

#### c. <u>Identification of needs. Which are the gaps that exist in the regional innovation</u> <u>system?</u>

- Innovation activities of researchers are limited to the development stage only;
- Insufficient funding of R&D infrastructure;
- Weaknesses of the knowledge supply process is insufficient funding of R&D activities.

The most important barriers which prevent companies from introducing innovations onto the market are:

- 'lack of access to finance (to enhance innovation and growth' and
- 'lack of information on available innovation support measures'.





The activity of RAPIV in this respect is very important for the development of innovative system in the region.

#### 3. Analysis of other reference experiences.

a) Reference strategies and actions in other regions. Experiences of reference for the development and deployment of Regional Innovation Strategies

Partners in INOLINK project have identified innovation networks in their regions. The innovation networks are described in the Article on Innovation Networks, published by RETA *b*) Identification of other experiences within INOLINK.

During the first round of 7 Study visits within INOLINK Project, RAPIV nominated 13 Good practices that are most feasible to be transferred regionally.

The preliminary selection of the good practices was then subjected to self-evaluation and consultations with the regional stakeholders. This process is described in the Action plan for Transfer **(Annex I)**.

As a result of the self-evaluation and consultations, the experience of CUE Ltd. in supporting the cooperation and relationships between academia and business was selected for transfer and more specifically the following types of support:

- Coventry University Technology Park (RAPIV selected the Coventry University Technology Park and its establishment as practice which is most suitable for transfer in NER).

- Institute of Applied Entrepreneurship (IAE) (The Institute and its programmes for encouraging students' entrepreneurship and promoting the culture of entrepreneurship are identified as most suitable for transfer in NER. RAPIV and Varna Free University have proved their interest in transferring the IAE experience into their activities).

#### 4. Main conclusions.

The establishment of a Black Sea Technology Park will have a favourable impact on the economic development and the competitiveness of SMEs from the region on the European market and especially on the development of high-technology products and services. The High-Technology Park in Varna, will support the market realization of the innovative products, will create conditions for attracting investments by large international companies as well as for start up and development of local innovative companies.

It is expected that the establishment of BSTP will lead to strengthening the relationships and creating new partnerships between the academic, research and business communities in the field of key markets, of the public and private sector and the local administration for the development of innovative enterprises in the selected priority sectors.

The implementation of the project will have positive effect on the marine technologies sector, which is traditionally well developed in Varna, due to the introduction of innovative solutions in the production which will increase the added value of products. For the development of technologies for exploitation of the resources of Black Sea and the coastal area there will be demand for specialised equipment and measuring devices, which will create new opportunities for development of the sectors Machine building and Information Technologies. The new technologies will contribute for exploitation of the Black sea resources in the food industry and





agriculture. The better knowledge of coastal zone is expected to ensure greater security, through reducing the risk from landslides.

The establishment of the Black Sea Technology park will have favourable impact on the environment and will lead to reducing the impact of human activity on the environment through the introduction and promotion of new ecological productions/products; conditions will be created for the faster growth of the share of the so called "clean energy", obtained from renewable energy sources and respectively to reducing of the carbon emissions. Additional effect is the diversification and reducing the dependency of the region on the supply of energy resources. There will be positive impact also on the preservation of the bio-diversity in the Black sea through specific solutions as the construction of artificial coastal reefs.

There will be positive impact on the sector of health care with regard to the mitigation and adaptation towards climate change and preventing the consequences of these changes on human health (through systems for early warning for natural disasters, better isolation of buildings, monitoring of the content of harmful substances in the atmosphere, etc.).

The newly created Black Sea Technology Park will generate conditions for the young and talented Bulgarians to stay and work and create in Bulgaria and their activity will be prerequisite for the creation of new jobs.

#### 5. Regional Strategic Improvement plan (Approach).

#### a. General Objective

General objective of the Regional Improvement plan is to provide regional stakeholders with the main findings and recommendations from INOLINK project for the improvement of regional policies in the field of innovation networks.

#### b. Specific Objectives (Referred to the conclusions extracted in Section 4)

*The Specific Objective of the Regional Improvement plan is to:* Improve the policies for support of the establishment of research infrastructure (Technology park) and fostering the linkages between academia and industry through new methods and practices for education in entrepreneurship.

The expected result from the elaboration of the RIP is to prepare the transfer of the selected Good practices, providing an elaborate Action plan with measures and actions for realizing the improvement/transfer.

#### 6.Definition of the Regional Improvement plan (Approach).

a. Main Lines of Action.

Definition of actions is enclosed in Annex I.

b. Planning is provided in the Action plan for Transfer (Annex I)

c. Sizing.

The design and the development of Technology park in Varna is expected to be financed by the EU Structural funds (Operational programmes) and by private investments.

Initially, the transfer of the best practice of IAE will be funded by Varna Free University. Partners will identify opportunities for joint participation in EU projects for the realization of the transfer.





#### 7. RIP evaluation system.

The Regional Council of North East Region will perform the monitoring and the evaluation of the Regional improvement plan of NER.

#### 8. Annexes:

- 1. Annex I Action plan;
- 2. Memorandum of Understanding between RAPIV and CUE Ltd.;
- 3. Preliminary conception for the establishment of Black Sea Technology Park;
- 4. Minutes from Experts' visit in Varna "Opportunities for Transfer of the Experience of CUE Ltd.", 13-14<sup>th</sup> September 2012.

#### 9. References:

1. Regional Innovation Strategy of the North East Region, RAPIV, 2008;

3. Municipal plan for Development of Varna Municipality 2007-2013;

4. Updated Regional Plan for the Development of North East Planning Region for the Period 2007-2013;

5. The Strategy for Development of Varna District 2005-2013;

6. Integrated Plan for Urban Reconstruction and Development - Varna http://www.ipgvr-varna.bg/

6. Article on Innovation Networks, INOLINK, 2011, published by RETA, Spain;

7. Study on Innovation needs, INOLINK 2011, published by NanoBioNet, Germany;

7. The Good Practice Guide on Initiatives to Improve Regional Innovation Policies, INOLINK 2012, Edited by University of Algarve and Coventry Enterprises Ltd.;

8. Regional Innovation monitor: <u>http://www.rim-europa.eu;</u>;

9. Information System for Management and Monitoring of the Structural Instruments of the EU in Bulgaria (UMIS), <u>http://umispublic.minfin.bg/;</u>

10. National Statistical Institute <u>www.nsi.bg</u>

11. Eurostat regional yearbook 2012;

12. Innovation Union Competitiveness report 2011 Country profile – Bulgaria.