

## Recommendations regarding the promotion of innovation by the Baltic Euregio network

Sustainable development in the Baltic Sea Region requires the Baltic communities to adapt to historically dramatic changes generated externally by globalisation and internally by the ageing population of Europe. Innovation policy is a key tool for adapting constructively to the new challenges, ie a tool for maintaining sustainability while world around us is changing.

Euregions can play an important role in promoting innovation in their respective regions. They can do so individually, in their respective regions, and jointly, as a European network institution. The seminar highlighted a number of actions or activities that Euroregions can implement. Below is a summary of recommendations presented by the seminar speakers. The recommendations have been organised into three levels depending on their main target audience: (1) the individual Euroregion, (2) the Baltic Euregio network and (3) regional and European institutions. However, to become effective, many of the recommendations should be implemented at several levels simultaneously.

The seminar recommendations can be further summarized into a set of strategic projects that would offer structured approach to implementing the recommendations. The project proposals below have the potential to receive EU-funding.

The strategic projects are:

- **Collect and share information about innovation policies, actors and initiatives in the Baltic Sea.**  
To achieve the synergy all parties want, a more concise and consistent innovation environment need to be created for the entire Baltic Sea region. Euroregions can initiate the creation of the environment this by the collection of relevant material and identification of the key actors.
- **Baltic Triple Helix conference**  
The Triple Helix model for cooperation has become very popular in different parts of the Baltic Sea as a way to integrate the strategies of business, academics and public sector. However, the model is not without its problems and a new conference to asses experiences so far, shortcomings and future development options would help in establishing best practice. Especially important is prepare the model for cooperation with non-European partners from Asia and America.
- **Present academic resources in the new member states to European or global companies**  
The European Union has created the concept of European Research Area. However, the new member states do not always have the institutions to participate or the networks to promote themselves. Many Baltic companies

do not even consider to use Baltic knowledge resources even if they are in principle available. Yet the Baltic Sea has the potential to be a global knowledge hub in the world economy. For long-term sustainability, a closer integration of Baltic knowledge industry and global companies is critically important.

- **Conference to present and analyse the needs of European Twin-Cities**  
The Baltic Sea happens to have several twin-city communities. They have been very active and successful, but further progress urgently requires changes in legislation and financial procedures. The unique needs of twin-cities goes beyond the Baltic Sea and this initiative could generate considerable momentum towards a special status for twin-cities in Europe.

### ***Recommendations for individual Euroregions***

- Involve political leaders in discussions about the need for and potential of innovation in the region. The role of the public sector in innovation is essential because it shapes the innovation system
- Organise seminars focusing on innovation for Entrepreneurs as they have to be involved in innovation discussions as it can be finally implemented especially by them
- Improve the local awareness of the institutional basis and policies in the neighbouring region as a way to identify opportunities and resources and to reach scale benefits that the region may not be able to achieve alone
- Identify the needs for regional innovation support structures and lobby for their creation together with business or universities.
- Introduce foresight activities as a way to identify future challenges and opportunities that help setting the priorities for innovative actions and to identify areas of regional strengths and then to upgrade them with special EU programs and mechanisms for RTDI activities
- Be an advocate for very good educational opportunities and demonstrate that good education will be fuel for innovation in the region
- Identify actors or sectors in the region which are already competitive and help them strengthen their knowledge further to network with other actors in the Baltic Sea, Europe or globally.
- Help the region to create or strengthen their triple helix cooperation, ie identify potential partners, assist in networking, promote the concept internationally etc.

***Recommendations for strengthening the Euroregion network to exchange information and promote innovation jointly***

- Document and analyse different triple helix models to help local actors to develop their own cooperation concept and overcome cultural and behavioural differences between industries and universities.
- Collect information about national innovation policies in neighbouring regions and identify potential areas of cooperation as for example cross-border cooperation in the use of national testbeds, business incubators, student research facilities etc.
- Baltic Euroregions should create a joint virtual office to distribute and share information about relevant national innovation plans and projects
- Euroregion as a networking facilitator is important – selling arguments: we need triple-helix model to be coordinated by euresios due to the need for economic growth, more jobs to the region and branding; Companies will get easier access to university people via euresios if they have a research plan; cooperation would allow entrepreneurs to be good citizens and act on a global arena
- While many synergies are possible through cooperation in the Baltic Sea context, the Euroregions must also make strategic alliances partners in Asia as a way to help local actors to integrate into the global economy.
- Cross-border cooperation is still made difficult by unnecessary legal and other practical obstacles. Euroregions should actively try to identify such obstacles and make relevant national and European actors aware of them to initiate the removal on such obstacles remaining from pre-EU times.
- Geographical, historical and political barriers still exist between citizens in the Baltic Sea Region. This slows down progress and is a serious threat to long-term sustainability. Euroregions should cooperate to encourage direct contacts between citizens in innovative ways. The so called “ubiquitous” information society can be used to facilitate everyday contacts in a manner that will strengthen regional identity and cohesion.
- Euroregions can jointly take initiatives to strengthen or create new innovation support structures for their regional SMEs (cross-border incubators, educational programmes etc.)
- Despite a large number of partly functioning Baltic networks, we still do not know enough about the availability and shortages of academic capacity in the Baltic Sea. The Baltic Euroregion network should make efforts to collect and quantify such data in a pragmatic way to provide practical background data for

Triple Helix and other cooperation efforts where academic input can play an important part.

- Local and regional innovation initiatives must be integrated into national innovation strategies to be come fully effective. Euroregions can be instrumental in organising policy dialogs to link local, regional and national levels of innovation policy in border areas

### ***Recommendations regarding innovation related topics that the Euroregio network can promote in international cooperation***

- Twin-cities/regions have special needs and unique developmental circumstances not shared by other municipalities or towns. The Euroregions should take the initiative to lobby for special recognition of European twin-cities in European legislation and financing instruments.
  - While Euroregions already promote their individual regions, there is still room for joint promotion of the Baltic Sea as an attractive and dynamical knowledge hub in the North of Europe. The Euroregions should consider branding of the concept “Baltic Euroregion” i.e. by creating a regional brand, attracting firms, capital and talent to the region
  - *Co-operate locally, win regionally. Co-operate regionally, win globally*
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## **4th session Innovation and cross-border cooperation in universities**

### **Conclusions and recommendations**

#### Introduction

BEN project's aim is to promote spatial development and territorial integration in the Baltic Sea region by strengthening Euroregions as competent partners with national authorities and international institutions, and by building a network of Euroregions. The conference session objective was to discuss the role of scientific and higher education cooperation in promoting the spatial development and territorial integration. Nowadays the knowledge is replacing physical resources, as the main drive for the economic development and the role of science and higher education in promoting the development of border areas is high and continuously growing.

Overall development of the knowledge base in border regions through strengthening scientific capacity and quality of higher education in border regions is important. Promoting cross-border research and higher education cooperation is important as well since such cooperation supports territorial integration of transborder areas.

### 1.1. Definition of cross-border cooperation in research and higher education

It was considered that the cross-border research and higher education cooperation could be defined as cooperation between organisations and experts in neighbouring states addressing issues of regional social and economic development as well as environmental situation in a transborder area of those neighbouring states. This cooperation occurs most frequently in the fields of social and human sciences (political science, sociology, ethnography, cultural studies, etc.) as well as environmental sciences. Cooperation between research institutes and universities situated in the countries that do not have shared borderline is named “transnational” cooperation.

### 1.2. Availability of skilled human resources as a factor of the development of border regions

How to promote research and higher education in border regions was one of the major topics of the discussions at the session. **Dr. Gulnara Roll**, Estonian University of Life Sciences and Peipsi CTC, outlined an importance of promoting involvement of students and scientists into cross-border research and higher education cooperation; such cooperation allows students to obtain new knowledge and skills of working internationally and eventually helps to develop scientific capacity at universities and other research and higher education institutions in border regions.

According to **Mr. Madis Võõras**, Director of Innovation and Technology Development at Enterprise Estonia, how fast the economic development takes place in a city or a region, depends on an ability of a city or a region to attract and retain skilled and talented people to work. This ability is a function of three main factors, including, firstly, technological infrastructure, i.e. high-technology industry, growth, average annual-patent growth, WIFI, 3G, digitv, satellite radio, etc.; secondly, talents: high relative importance of creative professions in the given location based on occupation and employment surveys; and thirdly, openness and tolerance of the place to newcomers that could be measured according to different indexes, including the Gay Index, the Melting Pot Index, the Bohemian Index, Racial Integration Index, etc.

### 1.3. Cross-border research and higher education cooperation – benefits and challenges

The cross-border cooperation in research and higher education takes place when there are common problems which universities and other organisations on different sides of the border face or have common issues of interest.

**Mr. Aret Vooremäe**, Head of the Department of Academic Development, Estonian University of Life Sciences, presented the case of the BOVA – NOVA – Nordic and Baltic cooperation programmes between agricultural universities. The Baltic and Nordic universities faced two major difficulties that they tried to overcome by the means of establishment of the cooperation, those include, firstly, lack of competence in some scientific areas and, secondly, a limited number of MSc/PhD students in specific study areas at the universities. Establishing cooperation between the universities gave opportunities to set up joint courses and joint degree programmes for graduate students at Nordic and Baltic universities; to organise exchanges of lecturers/professors between the universities involved and to recruit international teaching staff.

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**Dr. Katri Raik**, Director of Narva College of University of Tartu, Estonia, discussed the cooperation of the Narva College with St. Petersburg Pedagogical University and Pskov Pedagogical University in Russia. The Narva College is one of the very few state higher education institutions in Estonia that prepares teachers of Russian language for schools; at the college head office for Estonia for testing of Russian language as a foreign language skills was established. Many of the college professors obtained their higher education at pedagogical universities in Russia. To promote higher quality of education in Russian language, Narva College regularly organises exchange of professors and students, joint scientific conferences and publications with its partner universities in Russia.

**Dr. Eduard Moppel**, Rector of Pskov Volny Institute, Russia, presented the experience of the research and higher education cooperation of Pskov Volny Institute, a private higher education institution located in Pskov, Russia. In the Baltic Sea area, the Volny Institute cooperation partners include universities in Estonia, including Tallinn University and Tartu University Eurocollege; in Finland - Abo Academy University; in Sweden – Vaxjo University and Swedish Institute of Management. The cooperation includes organisation of international summer and winter schools for students; scholarship for Pskov students to study abroad; organisation of training in management for businessmen, participation in research projects mostly in social sciences, other.

**Dr. Elve Lode**, Hydrologist of wetlands and surface waters, Forest Soils Department, SLU – Swedish Univ. of Agricultural Sciences, presented experiences of the cross-border cooperation between Estonia, Sweden and Latvia on studies of wetland areas in those countries. The studies included student courses (lectures and field studies) as well as interdisciplinary research on wetlands that also resulted in preparation of recommendations to decision-makers. The presentation demonstrated importance of joint field work of scientists and students on studies of shared natural resources; this kind of joint studies are not only important for education of students but also usually have practical outcomes, including recommendations to authorities on sustainable management of shared natural resources in transboundary areas. These kinds of studies are quite time-consuming and require lots of efforts to collect and process large amounts of empirical data.

The above mentioned examples of the cooperation in higher education and research demonstrated that such a cooperation is beneficial to the partners involved as it helps to raise quality of courses and research programs, it attracts foreign students to study in the partner institutes, provides opportunities to students to obtain wider experiences and gain personal contacts with scholars and students in other countries and through that to promote students' and scientists' mobility.

According to the presenters, there are challenges in the cross-border higher education and research cooperation where support from relevant authorities (first of all, ministries of science and higher education but also regional and local authorities) is needed in order to address those challenges. The presenters outlined the following challenges:

- Despite the declared possibilities for higher education credits' approval across Europe for international programmes, the actual recognition of merits is still unsatisfactory, being an important hindrance for collaboration between higher educational institutions in different countries;
- An international legal framework for the joint doctoral programmes is missing;

- There are no common procedures for quality assurance on institutional level in partner countries (admission requirements, content/quality of courses given by partner institutions, logistics and housing).
- Differences in educational systems and study periods in partner countries. For instance, in Estonia a system of three years of Bachelor plus two years of Master level education is accepted while in other countries, such as Latvia and Russia, the earlier system of four (Bachelor) plus one (Master) remains.
- Issues of a continuous financial support to cooperative programmes in research and higher education.
- While within the European Union, the certificates of higher education are mutually accepted among the EU member states, this is not always the case for the cooperation with countries outside of the European Union. For instance, Russia does not accept Estonian higher education certificates, which makes the cooperation more difficult; negotiations to ensure mutual acceptance of higher education certificates between Estonia and Russia are undergoing.

#### **1.4. Cooperation versus competition between universities and higher education institutions**

It is clear that in transborder areas not only cooperation but also often competition takes place as universities compete with each other for students and research grants.

*Dr. Mauri Kaipainen*, Professor of New Media at Department of Informatics, Tallinn University, spoke about developing Master of Sciences programme in Media Studies. The programme is being developed taking into account existence of similar educational programmes in the Baltic Sea area and needs of the international job market in media experts. The developing programme is likely to bring to Tallinn students not only from Estonia but also from other countries since the educational programme according to preliminary assessment is of a great interest to potential students. Tallinn University in this case is competing for students with other universities in the Baltic Sea area. This example of the development of a new competitive education programme outlined an importance of having a vision of new, untraditional and innovative projects and ideas that can help universities in border regions to create a competitive advantage.

#### **1.5. Who is responsible for the promotion of the cross-border research and higher education cooperation?**

The session presentations by the universities demonstrated that the universities are important players themselves in promoting cross-border research and higher education cooperation. Multiple studies show that this kind of cooperation between individual actors such as universities is effective.

However, it should not be forgotten that there are also other players in the cross-border cooperation. Regional authorities are as a rule responsible for the development of their regions; this includes a responsibility for the economic development, promoting trade, SME development; setting up the physical infrastructure that also supports higher education and research. The levels of competencies of regional and local authorities varies from country to country; it depends on the countries' political and administrative structure as well as on capacity of regional authorities for the development and implementation of different economic and social development activities.

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The capacity of Euroregions also varies a lot from country to country. In border areas shared by new EU member states as well as Russia and Belarus the capacity of Euroregions for the support of science and higher education is quite low while in Northern Europe there are strong Euroregions that support the research, higher education cooperation infrastructure development and networking.

**Ms. Johanna Backman**, Project Manager at UniZon Kvarken, the Kvarken Council, Sweden, shared a success story of the Kvarken Council activities on organisation of research and educational cooperation that involved eight universities in the Swedish – Finnish border area. The Kvarken Council, founded in 1972, is a co-operation body joining the authorities in Västerbotten and the municipality of Örnsköldsvik in Sweden and the municipalities and regional councils in Ostrobothnia in Finland. The Council runs eight Interreg III A projects which concern communications and infrastructure, know-how and the market and shared values. The Kvarken Council was able to attract local, national and European funding to support preparation of joint educational courses, network building, organisation of scientific meetings and research projects. The Council also supported the development of an Internet based communication system that joined scientists and students in the universities involved in this cooperation.

*Role of state/federal authorities* in cross-border higher education and research cooperation is high. Traditionally there has been a strong separation between policies dealing on the one hand with regional development and SMEs and on the other hand with research excellence and industrial competitiveness, for which state/federal authorities are responsible. Development of research was in a jurisdiction of states. Generally, there has been an argument that the regionalisation of science and technology policy would lead to a fragmentation of resources and competences (See more in Enlarging the ERA, 2005). Therefore, regular communication and cooperation between state organisations and agencies responsible for the development of research and higher education in border area and regional authorities is of utmost importance to help development of border regions through science and higher education.

*Role of EU in the cooperation.* EU involvement is important in supporting the cross-border cooperation, especially on the external EU borders where specific policies are being implemented with the EU support; this includes the European Neighbourhood Policy, the “Northern” Dimension. Europe also supports the 'big science' questions important across all Member States through its Framework Programmes for Research, Technological Development and Demonstration Activities.

Session recommendations to Euregios

1. There are different actors – state and regional authorities, the EU and other international organisations, universities, other institutes are involved in cross-border cooperation on research, higher education and innovation. Regular communication and cooperation between state organisations and agencies responsible for the development of research and higher education in border area and regional authorities is of utmost importance to help development of border regions through science and higher education.

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2. University to university cooperation directly showed to be quite successful and should be encouraged. The research and higher education cooperation occurs when there are common interests. Euregios should communicate to universities to discuss development of agendas that are important for the development of border regions.
3. Role of regional and local authorities is focused mostly on the creation of physical and other infrastructure for the cooperation – please see a success story of Kvarken Council in Swedish – Finnish border area. However, one should keep in mind that the capacity of regional authorities and Euregios is quite different from region to region – high in Skandinavia and quite low on the Eastern fringe of the EU. Development of the capacities of the regional authorities is important.
4. Role of state and federal authorities is important in the CBC on higher education and research. There are a number of challenges to the cooperation that could be addressed only in cooperation with state/federal authorities; therefore, a regular communication with the authorities shall be maintained.
5. More efforts should be put into promoting the cooperation on the external EU borders where legal and institutional systems of education and research organisations could be very different across the border; as well as research culture.