balticsea knowledgeregion

Regions of Knowledge Pilot Action

KNRG-CT-2003 000023

Baltic Sea Knowledge Region (BSKR)

Deliverable D5

Final (Technical Implementation) Report and conclusions of the project

This report is in a form for direct publication, but the Commission services are advised that an illustrated version of this report is under preparation.

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1. Scope and purpose of the report

This report is written as a summary of the experiences and results of the Regions of Knowledge supported project ”Baltic Sea Knowledge Region” (BSKR). The project was undertaken during the period 1 January 2004 to 31 March 2006 and funded under a Grant Agreement.

The purpose of this report is to present frankly and comprehensively the lessons learned from this pilot action. It is intended to provide practical experiences of value to the Commission in defining future programmes, and to regional actors involved in defining trans-regional activities. The report covers in summary the background, execution, results and future perspectives of the actions.

Two other reports*: Comparative Report on TT Infra-structure in Hamburg, Helsinki Region and Øresund Region (D20)* and *Comparative Report on Access to Early Stage Finance in Hamburg, Helsinki Region and Øresund Region (D15)* produced by the project provide further information about the comparisons between the regions.

2. Background and objectives of the project

2.1 Regions of Knowledge Pilot Action Call

The expansion of the European Union from sixteen to twenty-five Member States has brought with it on the one hand the evolution of stronger regional consciousness and on the other hand recognition of the need to tailor European Commission supported activities towards regional cross border initiatives. In this context the concept of "territorialisation", meaning a tailor-made research policy approach to address specific territorial conditions, has entered into research support thinking. Research policy territorialisation addresses two main issues: firstly, increasing regional awareness of national research and innovation policies and tuning them towards the socio-economic needs of the regions; and secondly, directing these policies to build research and innovation capacity in the regions, enhancing their ability to act as drivers for technology based economic development.

Among the measures introduced by the European Commission along these lines is the "Regions of knowledge" pilot action introduced in the 2003 Community budget as a "pilot-project" by the European Parliament. “Regions of Knowledge” aims to demonstrate the central role of knowledge as a driving force for regional development and to identify schemes which permit regional actors to participate effectively in formulating their regions' future. This could include regional cooperation in the area of technological development, trans-regional co-operation between universities, and research at a regional level to stimulate the integration of regions in Europe. Such actions should strengthen the regions' involvement and commitment towards the creation of the European Research Area as well as supporting the achievement of the Lisbon goals and the Barcelona objective (towards a higher investment in RTD with the target being 3% of the Union's GDP by 2010, with two thirds of the GERD coming from the private sector.

The Call (2003/C 182/08) was issued 1 August 2003 with a submission deadline of 17 September. Applicants were invited to submit proposals under three types of activity:

- Technology audits and regional foresight to cover such topics as analysis of regional economy and technology fabric and identification of future development scenarios based on knowledge based society and economy.
- University driven activities for regional development covering activities such as demonstrating how universities can play a significant role in local and regional economy.
- Mentoring activities such as networking between technologically advanced and less favoured regions and providing knowledge and experience sharing for technology based regional development.

BSKR is a project aimed at the second category.

The Call received 53 proposals of which 14 were selected for funding.

2.2 Initiation of Baltic Sea Knowledge Region proposal

Given that the Call was launched in the middle of the summer vacation period, it was acted on rather close to the deadline. Nevertheless the timing was fortuitous since following political contacts between the City of Hamburg and representatives of the Øresund region including Øresund University, an opportunity for collaborative activity had been sought. Therefore the project could be initiated quickly through established city contacts. It was conceived in about 14 days.

The proposal was initiated by Øresund University with TuTech/Hamburg Innovation representing the Free and Hanseatic City of Hamburg. Culminatum Ltd Oy Helsinki Region Centre of Expertise representing Helsinki. There was full regional public administration support in each of the three regions, but without precise objectives being set. The interest was to explore the issues rather than set specific goals and therefore the initiators of the project decided to take a risk, taking advantage of the fact that the Call was for a pilot action, and defined an exploratory project which would engage practitioners sharing experience and perspectives rather than formal study. BSKR was described in the evaluation report as a "*Ground breaking project*..". It does not follow the mould of a classical EC funded project with precisely defined specific goals and deliverables typical of R&D projects: instead it is constructed around activities to examine from a practical perspective how regional cooperation might be strengthened around knowledge based activities and what it means in practical terms to establish a "Region of Knowledge".

The overall goal was defined in general terms as *"To establish greater inter-connectivity between the activities of Hamburg, Øresund and Helsinki in supporting knowledge based clusters"*

The objectives of the activities defined were as follows

- to improve outreach of regionally based clusters and their achievements
- to improve access to early stage finance
- to establish an improved dialogue between actors responsible for innovation in the region
- to prepare to expand the membership to other Baltic Sea metropolises

The *vision* is to create a degree of inter-action such that each technology transfer hub can provide a seamless link to the other regions when this could provide the best route to exploitation, making best use of the strengths of each region. So, for example, someone in Helsinki who has an invention relevant to the aerospace should have a seamless route to support in accessing Airbus Industries in Hamburg, say, and vice versa someone who has an ICT invention in Hamburg may have equal support to access Nokia. The difference in what BSKR aspires to achieve in the long run from existing more general networks (such as the Innovation Relay Centres, of which TuTech and Culminatum are partners) is deeper institutional and regional government cooperation to support this systematically and with the possibility of regional funding in support of these developments. This can only be achieved by stepwise development of trusting relations involving all actors and clear ideas about what can be achieved. The goal of BSKR was to look at how inter-regional cooperation could be strengthened by identifying areas where there could be a strong motivation for cooperation, to understand in more detail what barriers might exist to making cooperation really work and through the bringing together of practical experience working to overcome these.

2.3 Participating regions

The partners of BSKR represent the regions of Hamburg, Øresund (the region around Copenhagen on the Danish side and Malmö-Lund on the Swedish side) and Uusimaa metropolitan region around Helsinki. These regions represent leading centres or "hotspots" for innovation in Europe according to studies such as the *European Competitiveness Index*[1]. These regions are similar in terms of economic development, while contrasting in other respects, and which have a high level of investment in R&D.

[1] European Competitiveness Index 2004 by Robert Huggins Associates

Hamburg is a metropolitan region, but also an independent state within the Federal Republic of Germany. As such, many institutions relating to technology transfer (TT) including universities are the direct responsibility of the regional government. Øresund represents a cross-border region for which new institutions such as Øresund University and Øresund Science Region have been created to enhance transnational co-operation between the universities and provide a focus for cluster development. Helsinki is a capital city of a country regarded as one of the most successful knowledge based economies in the European Union. As the capital city it is also the centre of economic activity at a national level and close to the decision making for national as well as regional policies.

Hamburg

The **Free and Hanseatic City of Hamburg**, one of the 16 states of the Federal Republic of Germany, is the second largest city in Germany with a population of 1.7 million. Hamburg is well known as a city of trade being the world's seventh largest port. The basis of Hamburg's economic strength has historically lain with the fact of its strategic location between the North Sea and the Baltic Sea. Hamburg's hinterland encompasses the Baltic and Central and Eastern European regions including over ten countries with a total population of 75 million and responsible for about a third of the European export volume. Hamburg's long standing trading tradition means that there are deep rooted contacts to the USA, S America and the Far East.

With 2 per cent of the total population in Germany, Hamburg produces 4 per cent of the GNP. Trade rather than manufacturing forms the dominant basis of the economy, but Hamburg as home to Airbus Industries has a genuine cluster relating to aerospace. It is also home to a number of significant medical technologies companies such as Philips Medical Systems, Eppendorf and Ethicon.

Hamburg has many public and private R&D performers covering almost every field of research with particular emphasis on materials technologies, life sciences and related technologies, microelectronics, transport and logistics. Hamburg has four main university and higher education establishments, it is home to a major European research facility, the Deutsche Electron-Synchrotron DESY and three Max Planck Institutes are also located in the City.

Helsinki

Helsinki Metropolitan Region forms an area of 1,3 million inhabitants and includes the capital, Helsinki, and the neighbouring cities Espoo and Vantaa with 22 other surrounding municipalities, within a wider region, Uusimaa. In the national context Helsinki Region is by far the largest and most significant centre of business, science and technology, education and culture. The Helsinki Region produces approximately one third of the national gross value added (GVA) economy with a little less than one quarter of the population of Finland.

Half of Finland's research and development facilities are based in Uusimaa Region. One fifth of the region's population of working age has an academic degree and the student population is about 100 000 at 9 universities and 9 polytechnics / universities of applied sciences (65 000 at universities and 35 000 at polytechnics). The region has been widely recognised for creating and cultivating a world-class cluster of businesses and research organisations in the field of information and communication technology, and high-tech manufacturing plays an important role in the Finnish economy.

The national and regional authorities have played an active role in supporting research and technology-based business in Finland and in Helsinki Region from the early nineties. This

new role was adopted mainly due to the exceptionally severe economic recession in that time. The Centre of Expertise Programme was started in 1995 with the aim to pool local, regional and national resources to utilise high-level expertise in selected fields of science and technology.

Øresund

The **Øresund Region** comprises the land areas in eastern Denmark and southern Sweden. The opening of the Øresund Bridge between Denmark and Sweden in the summer of 2000 provided a fully inter-connected region in which policies to foster clustering are aligned across national boundaries. The Øresund Science Region now forms the backbone of regional development.

The Danish side of Øresund Region is by far the number one centre of business, science and technology, education and culture in Denmark. The Swedish side is in a rather different position in the Swedish context in that is only one of a number of Swedish regions which can claim strengths in science, education and business. It is to a certain extent in competition with the Stockholm Region. The Øresund Region is an exceptional initiative with the aim to integrate economic activities, labour markets, educational and research activities situated within areas of two separate countries. The bridge potentially enables the two parts of the region to become a fully integrated cross-border region. Deeper integration still calls for e.g. further harmonisation in legislation, taxation etc.

Øresund is home to 14 universities – ten on the Danish side and four on the Swedish side - with more than 140 000 students and approximately 10 000 of scientific staff. Universities cover practically all fields of research and education. There are six cluster programmes in the region which aim at promoting research and science-based business within their scope. The clusters are life sciences, ICT, food, environment, logistics, and design. Selection of clusters is based on the scientific excellence present in the region and business prospects identified.

The role of local and regional authorities has been crucial in introducing the Øresund Region model. The process towards an integrated cross-border region started in 1993 when the Øresund Committee was set up as a political platform. The consortium promotes co-operation across university boundaries by stimulating contact, removing barriers and facilitating mobility. Øresund University is owned and financed by the 14 universities. Øresund Science Region is an organisation set-up with the purpose of developing a knowledge based economy in the region. ØSR was initiated by Øresund University and is run by a board with equal numbers of representatives from university, regional public authorities and business. ØSR is financed by university, regional public authorities, national funding and private sector.

2.4 Participating organisations

The founding partners of Baltic Sea-KR are three organisations representing different facets of support organisations involved in the development of technology based clusters.

Hamburg Innovation GmbH is a newly formed technology transfer company serving the interests of the universities in Hamburg. Hamburg Innovation has been formed as an extension of the Hamburg University of Technology's highly acclaimed management and technology transfer company, TuTech Innovation, formed as a limited company in 1992 whose staff it uses. TuTech has been actively involved for over a decade in managing projects involving actors from the public, private and research sectors.

Culminatum Ltd Oy Helsinki Region Centre of Expertise, founded in 1995 is a regional joint development company responsible for supporting the development of the Helsinki Region to become a world-class innovation centre, the Ideopolis. The company is owned by the Uusimaa Regional Council, the city authorities of Helsinki, Espoo and Vantaa and the universities, polytechnics, research institutes and business community of the region.

Øresund University is a consortium of 14 universities and university colleges located in southern Sweden and eastern Denmark. The consortium promotes co-operation across university boundaries by stimulating contact, removing barriers and facilitating mobility. Øresund University is owned and financed by the 14 universities. Øresund Science Region is an organisation set-up with the purpose of developing a knowledge based economy in the region. ØSR was initiated by Øresund University and is run by a board with equal numbers of representatives from university, regional public authorities and business. ØSR is financed by university, regional public authorities, national funding and private sector.

2.5 Methodological approach

Various regional innovation performance indicators put Hamburg, Helsinki and Øresund in the top European league of regions which appear to be extremely successful in generating wealth from the knowledge based economy. However, prior to BSKR little been done to compare at a practical level different approaches from the perspective of those involved in such activities in Helsinki, Hamburg and Øresund, nor how these might benefit from stronger relationships.

BSKR as a project was therefore constructed to allow a fairly free examination of four themes relating to developing knowledge regions translated into action lines which address various facets of possible means to achieve inter-connectivity between regions.

Action Line 2 "Development of the BSKR Knowledge Exchange Tool"

It was foreseen that a knowledge management tool would be required to provide a repository for all the names, contacts, institutions, reports in the respective regions. One of the issues in establishing inter-connectivity is to somehow collect all the tacit knowledge of who does what that a regional TT advisor might possess, but someone external to the region will find difficult to find. The knowledge tool makes this information accessible for people outside the region.

Action Line 3 "Networking for early stage financiers"

This activity was proposed on the assumption that a tangible benefit of operating at an inter-regional level could be to improve access to early stage funding for knowledge based enterprises e.g. by generating a greater critical mass of contacts. In the course of pursuing this activity line it was found that is that an alternative approach was needed. This is described below.

Action Line 4 "Dialogue with Regional Policy Decision Makers responsible for innovation"

The main thrust of the project was to achieve two main objectives: firstly to allow the participants to become familiar with the innovation support set up in the other regions and secondly, to pin point areas of potential cooperation. This second point was anticipated as being challenging because there has been a proliferation of "Baltic Sea" activities initiated by all sorts of organisations aimed at engaging with the New Member States. The goal of BSKR was to find the niches in which deeper knowledge based cooperation could be made to work and to identify where Regions of Knowledge can make a difference. One of the distinctive

features of BSKR was the small partnership from mature and successful centres of economic development.

Action Line 5 "Expansion of the Membership"

This activity had as its goals to look into how the inter-connectivity could be extended to include other regions. However, it should be noted that the provisions of the Call meant that funding of the then candidate countries was not possible. Hence expansion of the network was seen more in the context of relations to other activities encompassing larger networks and looking at the issues in more general terms rather than looking at specific integration goals.

2.6 The project team

The core project team comprised of the following persons all of whom have significant experience of regional innovation system development and support.

Hamburg: Ms Monica Schofield Head EU Office TuTech Innovation (BSKR Coordinator)
Mr Axel Wegner EU Office TuTech (BSKR Project Manager)

Helsinki: Ms Heini Noronen, Director Culminatum Ltd Oy (left end November 2005)
Mr Kimmo Heinonen, Project Manager, Culminatum

Øresund: Mr Bengt Streijffert, CEO, Øresund Science Region
Mr Bjarke L Frandsen, Deputy CEO, Øresund Science Region
Mr Michael Tharin Project Manager, Øresund Science Region

Other individuals also contributed to the reports and activities, but the above met at least at quarterly intervals to review progress of the project.

3. Project Execution

BSKR set out as a project without specific goals other than to explore what might be the route to construct an integrated Region of Knowledge. Specific measures of success were not defined *a priori* as the goal was to identify what actions can and should be carried out inter-regionally essentially through getting to know each other's context of operation. The project also had to take into account other activities being developed in parallel in their respective regions and the political context of these. (It could be considered a feasibility study). This on the one hand makes the project difficult to monitor in terms of quality and performance, but on the other hand allows much greater potential to develop new insights based on practical experience on how to achieve inter-regional/cross border collaboration around knowledge clusters. The project has allowed for much greater and deeper reflection than many other attempts at enforced collaboration. It could be described as experimental frontline best practice.

3.1 Summary of key activities

The main activities of the project are described below. In order to provide a more systematic approach to the topics examined, at commencement of the project it was decided to focus on three thematic areas of interest to all three regions: logistics (as an emerging topic), medical technologies and software for ICT. It has however to be said that in keeping with the exploratory nature of the project, the "horizontal" issues or activity lines were largely addressed without following rigorously these selected areas.

Exchange of experience concerning regional innovation support

A key element of the project was to learn about the innovation support systems in each other's region. This was carried out by visits arranged by the hosting partner (and which could not have been easily achieved without BSKR) which provided an opportunity to meet and discuss with various regional actors: The three key visits were

- A visit by the First Mayor of Hamburg and delegation to Helsinki June 2004. BSKR was presented by Culminatum and TuTech jointly during this important visit. A spin off of this visit was subsequent closer cooperation between the Mayor's Office and TuTech for the planning of further activities concerning the Baltic Sea Region.
- A visit by TuTech and representative of Hamburg's Mayors Office to Øresund in September 2004. A comprehensive two day tour was undertaken which provided very useful insights into the operation of the Øresund region.
- A visit by delegates from Øresund and Helsinki to Hamburg August 2005. This two day tour included presentations by Philips, Airbus Industries, and Hamburg Container Terminal. The participants gained a new perspective of Hamburg as a base for some leading technology enterprises.

A comparative report on technology transfer in the three regions has been written aimed at a general readership and will be available from the BSKR web site as a public document in the coming months. A similar report on access to early stage finance is also provided.

Baltic Sea Venture Final

A key goal of BSKR was to establish activities which encourage trans-regional networking in such a way that these are meaningful for entrepreneurs and those wishing to exploit knowledge in some form. The particular focus of the action lies on the interest to exploit knowledge generated through research, for example university spin-out enterprises. A pilot

event which brought investors, entrepreneurs and business development advisors was held in Copenhagen in January 2006. This gave entrepreneurs from the three BSKR participant regions the opportunity to present their business plans to a jury also with representatives from each of the regions, the aim being to improve trans-regional networking and provide a valuable forum for companies to get better known outside their immediate regions. A workshop was also held to discuss with the entrepreneurs what could be done to improve access to finance on an inter-regional basis.

Although modest in scale, the benefits of such an event were evident. The positive feedback received means that it has now been decided to set this up as an annual event with the support of the Venture Cup organisation.

Knowledge exchange tool developed

The web site www.bskr.org has been developed to provide a repository for information and contact addresses. It will continue to be maintained post-project.

Workshops, presentations and links to other projects

A workshop was held at the Baltic Development Forum Meeting September 2004 to discuss with leading regional stakeholders how to better harness knowledge providers such as universities into regional development.

Another workshop was held in Vilnius November 2005 to discuss technology transfer.

Presentations were given at the Europe of Knowledge conference in Liege April 2004, the Baltic Dynamics conference held in Riga September 2004 and the IRE conference in Ljubljana June 2005. Many smaller presentations were given to ensure a general awareness as to the existence of the project.

BSKR was declared a sister project to the Interreg III B project BaltMet Inno and has maintained strong links to ScanBalt.

3.2 Summary of experiences

What worked well

BSKR was an experimental project which used the opportunity of a pilot action to take an exploratory approach towards the actions pursued. It has been very much driven by the individuals participating and the personal relations established in the project have worked very well in a challenging undertaking. When difficulties were faced all participants worked constructively and professionally to resolve matters. Much of the credit for this is due to the fact that only three organisations were involved and the individuals participating were very much committed to the overall ideals of the project.

As a consequence the networking opportunities provided were also very good. Use of these has extended beyond the immediate needs of the project and has started a process of much closer cooperation.

There is no doubt that all participants gained insights into each others regions which they did not previously hold. Towards completion of the project there was a very open exchange of experience and willingness to be more frank and self critical about the success of regional policies. The insights gained are being built on and there is a longer term commitment to closer cooperation.

There was also very good regional political support for the project. This was particularly in evidence in particular by the support for the visit of Hamburg's first mayor to Helsinki, but also in the willingness to be involved in discussions concerning future activities.

A very solid platform for establishing future activities has been achieved. Some proposals for these identified and discussed at the final project meeting held in Hamburg's City Hall 9 March 2006 and which involved regional Government representatives as well as senior management of the participating organisations.

Proposals for future collaboration

BSKR was set up as a pilot action very much to see what could be learned from the three regions and to identify areas of future collaboration. Moving beyond networking into specific areas of deeper collaboration is not easy. The main role of regional Governments and those organisations funded either directly or indirectly is to serve direct regional interests often with limited means. Networking is usually well provided for, but provision of significant resources for activities which cannot be shown specifically to benefit regional interests is difficult.

A significant achievement of BSKR is that areas have been identified in which there is a definite interest in pursuing further. The key areas are described in outline below – specific details are under discussion and therefore cannot be presented here.

Aircraft Technology

Thanks to the presence of a production site of Airbus Industries, Hamburg has a strong aircraft technology cluster. However, a challenge for Hamburg is that its key decisions are now being made in Toulouse and there is a risk that despite generous regional policies in favour of Airbus there is a feeling of vulnerability. Hamburg seeks to show that it makes sense to stay loyal to the region. One means to do this is to assist Airbus in finding qualified engineers and to build strong relations to a wider circle of universities. Both Helsinki and Øresund have an interest in aircraft technology. TuTech has much experience in negotiating contracts with Airbus, agreements which could be extended to the universities in the other regions.

In effect, widening the aircraft technology cluster based in Hamburg to include the other regions as a hinterland makes a lot of sense. Measures are planned to follow this up.

Logistics

Logistics is an emerging topic in all three regions. Emerging topics have an advantage that it is possibly easier to establish collaboration before individual support programmes are well developed which naturally leads to competition. All three regions are strong trading hubs and have initiated various forms of logistics cluster activities. In Hamburg this includes the setting up of the Hamburg School of Logistics providing privately sponsored MBA education, attracting students worldwide; Helsinki is investing in becoming a centre for air logistics and within Øresund a newly formed Logistics Cluster as part of Vinnova's centre of excellence programme is being established.

The recent political decision to support the building of a bridge across the Fehmarn Belt will bring all regions physically closer together and increase the role of logistics in the economy. It is proposed to organise a regional workshop to explore a common approach to logistics research in the region.

TT staff exchange

Genuine collaboration takes place when people are able to use their personal relationships to good effect. Broadening innovation support across the region requires TT professionals to feel at ease in working across borders. One of the outcomes of BSKR is to note that it is very difficult to breakdown pre-occupation with one's own region. To achieve inter-regional collaboration, people need to have direct experience of working in the other regions and in mixed teams. All three participating organisations have agreed on organising a staff exchange in the field of TT. Initially this will be run as a pilot 2-3 weeks.

Baltic Sea Venture Final

All partners strongly agreed that the Baltic Sea Venture Cup should become a regular event, extended to the whole Baltic Sea region. The next event is planned for August/September 2007. It will be of a larger scale than the pilot event in Copenhagen with an intended 8-10 teams competing from each region. All agreed to keep this event knowledge and technology oriented and not to let it evolve into a general business plan competition.

All the above are expected to win local political support in each of the regions.

Other issues

Further issues under consideration are to extend the relationship to include Stockholm and thereby encompass all four of the leading innovative regions in the Baltic Sea Region.

Challenges in the execution of the project

Notwithstanding these concrete ideas which stand a good chance to be implemented, BSKR has proved to be a very challenging project and in some ways has yielded fewer immediate tangible results than originally foreseen. The lessons learned on the other hand have been extremely valuable in preparing for future projects and identifying what schemes are workable as well as those which are not.

The headings below provide an indication of aspects which need careful consideration in putting together projects of a similar type.

<u>Differing expectations of stakeholders</u>

BSKR was set up opportunistically on the basis of a desire to establish some form of collaboration between the regions. As with any collective undertaking the core interests of each of the stakeholders, which included not only the participating organisations but also indirectly regional government interests, were not always coincident. There existed a certain tension between the desire to move to specific and focussed action encompassing deeper institutional collaboration versus more general networking type activities. Due to the fact the project did not have a specific goal it was difficult to predict early on the true differences in how the goals of the project should be interpreted. The expectation, or perhaps the need, of the European Commission to show a concrete results for the concept of Regions of Knowledge were also perhaps not fully met. Corrective action was taken in the final stages of the project to ensure a greater focus on specific achievements for collaboration.

Nevertheless what should be stressed is that BSKR provided an opportunity for mature reflection of what opportunities and what challenges need to be overcome to achieve "*greater regional inter-connectivity*".

Different roles of partners within region

Related to the above, meeting the expectations of the stakeholders was made challenging by the fact that the participating organisations have different roles in their regions: Hamburg/TuTech Innovation is a university based TT organisation which also serves regional development aims because of the fact Hamburg is a federal state responsible fro funding its universities and using these effectively for regional development. TuTech is also able to act with a greater degree of autonomy in initiating and pursuing its own projects than Culminatum and Øresund University. Culminatum acts more exclusively as a cluster management company serving regional development projects for the Uusimaa region around Helsinki. Amongst its shareholders are university representatives, but it is not its primary mission to act as driver of innovation from universities. Øresund University serves as an umbrella for universities in the Øresund region and as a catalyst for the Øresund Science Region. Both organizations are working across borders, they are flexible and only lightly institutionalized. Developing a knowledge based regional and trans-national economy, however, requires a dedicated effort from existing relevant national and regional organisations and TT offices operating with a public mission can play a key role. Øresund University and Øresund Science Region have a specific mission to be pro active in developing a trans-national region, but still at an operational level have to deal with a tendency to revert to national thinking and action amongst its stakeholders.

On the one hand the different roles and set ups have provided an opportunity to learn about the pros and cons of different organisational types and the role they can play, and indeed as an exploratory project this has been an important dimension. But when it comes to actually defining common actions a greater homogeneity would have made things easier.

Different regional contexts

Despite the fact that each of the regions has politically sanctioned policies towards outreach and collaboration with each of the other regions, the priorities are in reality much more complex. Each region has many dimensions to its external regional relations, some politically motivated, some historic and many driven by personal or private interests. All three regions are targeting on an individual basis and for other purposes, collaboration with other parts of the Baltic Sea and indeed regions further afield and in doing so are partly in competition with one another. And because none of the regions can really claim to have a centralised single organisation responsible for this (though all three have tried), there is also a pre-occupation with a need to have activities undertaken somehow sanctioned by political pay masters.

The strength of interest in deepening collaboration?

Related to the above, is the fact that at commencement of the project there existed no precise focus on how to deepen collaboration, only a general political desire to do so. In fact this is the outcome rather than the input of the project to have found areas where true and lasting collaboration can be achieved without it being artificially engineered. The genuine commitment of the regions will be measured by the resources provided to turn “aspirations into action”. This is likely to prove more controversial than simply signing up to networking type projects because to be really effective it is likely to involve sharing resources and investment trans-regionally.

Establishing a shift of perspective

Many of the deliverables of BSKR were aimed at presenting each other’s region in order to compare systems and institutions. The three regions represent some of Europe’s leading regions with regard to having mature regionally developed innovation policies. It was originally intended that the regional descriptions should be prepared by the partners from outside the region. This would have resulted in far more insights and conclusions at an

earlier stage of the project. It was only towards the end of the project that sufficient trust had developed to reveal more of the regional weaknesses rather than the strengths. To have analysed each other's region would have made the preparation of reports concerning early stage finance and technology transfer infrastructure more stimulating.

Too ambitious number of reports/motivation to produce these

Given that the primary aim of the consortium was the exploration of each other's systems at a practical level, the project was much too ambitious in terms of the number of reports to be produced. The individuals involved in the project all have operational roles and were not academic researchers. To a certain extent the demand on writing simple straightforward presentation of the regions of interest to third parties was underestimated.

However, in the course of preparing the reports, and especially in gathering information from other regional actors it was noted how surprisingly little is generally known about what other regions are doing in depth. There is a need for greater education and certainly a more open and frank discussion about measures which are effective or those which prove not effective.

Overlap to other activities.

One of the challenges even at the time of submitting the proposal was to distinguish this Regions of Knowledge activity from other regional activities, especially projects supported by Interreg III B Baltic Sea Region, of which there are many also addressing similar themes. In particular, at commencement of 2005 the Interreg III B project "BaltMet Inno" was launched which included, as is typical for Interreg, a large number of partners including Øresund, and Helsinki, but not Hamburg. The project is led by the City of Helsinki with Culminatum undertaking the management.

3.3 Management and operational issues

Unusually for Commission contracts, the BSKR contract was set up in approximately three months from proposal submission to receipt of contact. While this efficiency was very welcome at the time, with hindsight more time should have been spent in discussion with Commission officials as to the expectations and constraints on the project. The contract was suspended after 18 months, largely due to misunderstandings that could and should have been picked up either during contract negotiation or in the first months of the project. BSKR was a pilot action and pilot actions require flexibility, but the form of the Commission agreement did not seem to allow for this.

The effectiveness of the contract preparation was not matched by the diligence of the Commission during the first twelve months of the project during which no feedback was provided on the content of the quarterly management reports nor on the deliverables. All this contributed to an unfortunate divergence between expectations of the Commission and those of the partners.

The change of project officer after month 13 however brought about a substantial improvement to communication and expectations. In particular the detailed feedback given on the deliverables substantially enhanced motivation to interact with the Commission and it to improve the quality of the reporting.

The participants wish to express their thanks to Mr Dimitri Corpakis and Ms Postigo-McLaughlin for their friendly and constructive support of the project.

The relatively small size of the project has on the one hand made it reasonably efficient, but also meant that insufficient funding was available to dedicate persons full time to the project. This proved to a certain extent a drawback in maintaining the position of this activity compared to other projects undertaken in a regional context such as Interreg funded projects which on the whole had significantly more funding, greater number of dedicated staff but a much larger number of stakeholders.

4. Conclusions and Recommendations

To date, most of the activities initiated in the context of developing the Baltic Sea region have taken a broad approach encompassing representatives from all the national states bordering the Baltic Sea and aimed at building extensive networks. BSKR has taken a much more tightly knitted approach to achieve a greater degree of inter-connectivity towards collaboration in the field of transferring knowledge from research to exploitation. In the course of the project the contrast between broad ranging networks and more focussed partnerships has been explored.

A widespread view is emerging that to a certain extent the Baltic Sea region is "over-networked" with a certain weariness over the number of meetings addressing very similar aims, but which do not seem to succeed in driving forward deeper collaboration. Many projects have an overhead in simply networking with other projects.

Given the "explosion" of activity, the challenge has been to find the niches in which deeper knowledge based cooperation can be made to work and to identify where Regions of Knowledge can make a difference. This has meant a lot of trawling, many meetings, much networking, not all of which has been easy to reflect in formal results, but essential preparation for establishing future collaboration.

As a pilot action BSKR has provided a wealth of experience which it has been important to attain and to transfer to regional decision-makers to assist in defining future actions. The key lesson learned is that to move beyond activities which focus on inter-regional networking towards establishment of deeper collaboration is not straightforward and takes time. It also requires a strong and clear political will and the commitment of resources to motivate the relevant regional actors to do this. The "top down view" has to somehow be fused with a "bottom-up" approach in which individuals or individual organisations feel free and able to establish partnerships.

Regions of Knowledge as a programme provides an opportunity in contrast to other programmes such as Interreg, to create more intensive sustainable partnerships on an inter-institutional basis. This distinctive profile needs to be maintained.

4.1 Conclusions concerning implementation of projects

BSKR has shown that a numbers of factors need to be taken into consideration for successful inter-regional collaboration:

The ***realpolitical*** circumstances of the project needs to be fully appreciated. In any region there will be multiple organisations competing for attention to be seen to be a key node for innovation. In reality there will be many possible contact points. Strong regions are those which somehow can persuade different organisations to work cooperatively as well as competitively. In reality it is likely that political pressures will mean that much innovation support is highly fragmented. For successful inter-regional cooperation to take place, clearly defined nodes need to be supported which are given a mandate to act on behalf of regional interests. Probably this calls for certain specialisation. They also need to be securely funded to avoid short term objectives arising out of competition for funding to take precedence.

It is an advantage to have ***homogeneity in the roles of the partnering organisations*** within the region. It is easier to get two organisations with similar roles to work effectively trans-nationally if they have the same basic operational interests. The strongest partnerships will develop where organisations tackling the same types of task work together.

There needs to be ***parity in experience*** of developing and implementing regional innovation policies. The evidence from the experience of many Baltic Sea projects is that attempts to merge the interests of the post-communist states with those of some of Europe's most successful innovative regions does not work and instead produces a lot of frustration. Mentoring type projects need to be separated from those aiming to further the development of more mature knowledge based economies.

Highly ***focussed actions*** are likely to yield more productive results than general actions. Goals need to be realistic. Despite the myriad of networking activities which have been in existence for more than a decade there is still a lot of groundwork to be covered to achieve real collaboration. The reason for this is that many networking events are politically driven and tend therefore only to attract political representatives. Translation of networking contacts into real projects requires the engagement of other types of people, usually those who are motivated by the possibility to achieve something specific not necessarily for political reasons.

The determination and interest of individuals is central in the success of an initiative. The existence of a ***personal interest*** to form trans-national or trans-regional cooperation is clearly the most effective. The real drivers of regional innovation are people not policies.

Adequate resources are necessary to allow people to be fully dedicated to achieving the goals of the project. It is important that commitment is longer term. Since it is the relationship between people which holds the key, continuity is extremely important. The problem of much project based funding is that it does not guarantee that people who work together over the period of the project will remain in place afterwards. Without this, projects have in reality little value.

4.2 Recommendations for the continuation of Regions of Knowledge

A clear positioning of Region of Knowledge vis-à-vis other programmes to avoid adding to fragmentation of innovation activities.

The Regions of Knowledge Programme needs to be clear where it is positioning itself vis-à-vis other regional development programmes. It needs to maintain a distinctive character, to avoid adding to the fragmentation of activities which are already supported in regions. This can be achieved by targeting its support for tightly focussed actions which have a strong connection to research or knowledge generation activities as opposed to more general innovation support measures.

Support for activities which move beyond networking and can intensify relationships between existing institutions.

Given the complexity of achieving deep trans-national cooperation, small partnerships should be encouraged and bi-lateral partnerships accepted. Regions of Knowledge should play a role in moving innovation support measures on from networking to implementation of specific schemes and activities, while being realistic about the time frames to establish these.

Phasing of funding to allow for a clear expression of commitment at each stage

Projects should have clear phases and milestones and funding linked to these, but with the flexibility for all stakeholders to adjust aspirations to the reality of the situation. In practice the over emphasis on project control through input performance indicators (numbers of events etc) is not really helpful for projects which are really about establishing a political will, or co-

funding of specific actions. More classical definition of project phases (feasibility study, definition and selection of actions, implementation etc) would be more appropriate.

Adding value to regional activities through external scrutiny and advice

The real value adding of the Commission's involvement lies in having firstly a partner neutral towards the regional politics and secondly which could provide access to independent advisors who through close monitoring of developments could provide regional decision-makers with broader insights into the effectiveness of their actions. Furthermore the use of independent experts from outside the region is likely to improve quality and transfer expertise.

Sufficient funding to permit efficient implementation

Although any Region of Knowledge project is likely to be strategic and involve senior decision makers, operationally it requires the support of full time staff who are not having to cope with multiple projects, nor with the uncertainty of knowing how long their contracts will run. To be successful, long term commitment by funders and staff is required. The major problem of efficiency can best be dealt with by ensuring sufficient critical mass of funding and long term commitment.

In conclusion, Regions of Knowledge has provided an interesting complement to the range of measures the Commission is supporting to encourage the knowledge based economy at a regional level, but needs to be given a clear profile and identity relative to these other initiatives. It is recommended that it be used to support projects with a very clear focus rather than large networks.