Baltic Sea Region
Programme 2007–2013

INNOVATION IN SMES
Strengthening the backbone of the Economy

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More than 99% of all companies are small and medium-sized enterprises, providing most training positions and creating the majority of new jobs. Being the growth drivers, the economic and social backbone of Europe, SMEs play an important role for the development of all European regions. Thus it is no surprise that they are considered important key players by all priorities of the EU Strategy for the Baltic Sea Region.

To maintain a high level of innovative thinking and entrepreneurship is crucial for SMEs to stay competitive in the globalised world. Our companies must continue to convince with innovative products and services of high quality. Therefore, I very much welcome the successful efforts of many projects, to bring SMEs and universities closer and to do this in a sustainable way, for example in setting up (non-profit) networks like the Baltic Sea Academy.

Johannes Hahn
European Commissioner for Regional Policy
Investing in innovative minds

Only a small proportion of all innovative SMEs are, at the same time, research intensive and/or already part of a cluster. This lion’s share of (only) innovative SMEs represents a huge potential for economic growth and job creation, not least in the Baltic Sea Region (BSR). Research on innovation tells us that innovative SMEs that are cooperating in business-oriented networks will grow faster, be more competitive and internationally oriented than if developing on their own. The policy conclusion is that if more innovative SMEs are forming more business-driven networks then all these networks can be connected, first at national and then at BSR level, for the benefit of all participating SMEs.

Innovative SMEs need innovative minds – innovative entrepreneurs are the key for competitive companies. Thus, highly qualified owners and employees of companies are essential in promoting innovations within our companies. Investments in educational systems are often long term investments, but realise the best interest: Smart people for a smart region.

A closer cooperation of educational institutions and businesses is vital to identifying and creating the necessary qualifications. A good example is dual study courses: combining theoretical learning at a university and vocational training in a company both at the same time. These students are the living bridges between the academic world and the business world.

It is up to all of us who are working with the implementation of local/regional, national and transnational policies concerning innovation, education and SME development to pool our instruments as well as we possibly can while making them as effective and efficient ("customised") as possible.
Introduction

Small and medium sized enterprises (SME) play pivotal roles in the economy and make an important contribution to employment in the European Union (EU) and the Baltic Sea Region (BSR). SMEs account for around 55% of value added and 65% of employment of all companies in the BSR, compared to 62% and 68% in the EU excluding the BSR countries. This translates into over 26 million people employed by SMEs in the BSR and over 61 million in the rest of the EU – as stated in the “State of the Region Report 2013: The Top of Europe – Plowing Ahead in the Shadows of a Fractured Global Economy”. In times of economic recession, supporting SMEs translates into supporting economic recovery and labour market stabilisation in the EU.

The innovation projects part-financed within the Baltic Sea Region Programme 2007-2013, in 2012, together formed a project cluster called Innovation in SMEs. The project cluster gathered fourteen partners representing twelve projects. An important part of the cluster work was to get to know each other’s achievements in depth. Partners looked in particular into a topic of supporting SMEs to innovate. The cluster conducted a survey to find out the core areas where support to SMEs is necessary in order to boost their innovation capacity. Consequently, the cluster drafted policy recommendations and developed a manual analysing gaps in innovation support and outlining potential support measures.

What do our SMEs need in the next few years or even the next decades? How can we maintain highly innovative SMEs in the BSR and boost the innovation capacities of our companies? This brochure looks into three core areas of innovation support:

- Internationalisation and Cooperation
- Qualification and Education
- Research and Development

We also dare to formulate some recommendations and forecast future needs in the innovations for the Baltic Sea Region.

Innovation cluster partners and the Joint Technical Secretariat Team
Internationalisation is crucial when raising SMEs’ productivity. To realise their next stage of growth, SMEs should go beyond the local market. In addition, by becoming internationalised - especially when starting exports to foreign markets - their contribution to the home economy increases.

As found by JOSEFIN, a project supported under the Baltic Sea Region Programme 2007-2013, internationalisation activity in the BSR is still dominated by larger enterprises and has only marginally reached down to SME level. Thus, cooperation among SMEs is important to deal with limited resources. Through cooperation SMEs can access external resources. By combining efforts SMEs can together perform better than they can individually.

To go international, the lack of critical resources - such as access to finance, knowledge and capabilities - has to be overcome. JOSEFIN concludes that, in the BSR, among non-internationalised SMEs there is a lack of know-how and strategy regarding market entry, internationalisation, and ways to finance themselves externally.

**Clustering and knowledge partnerships**

SMEs face competition against large international or national companies. For SMEs to survive formation of clusters is one of the answers. International clusters, in particular, are gaining importance. Enterprises operating in a cluster have access to information about a business environment; they can assess their capacities, as well as get better access to suppliers and companies providing specialised services. Moreover, clustering fosters intellectual capital growth in SMEs.

Project **BaSIC** developed transferable tools and instruments for a quick, improved, harmonised market access to help innovation centres and clusters to connect and work together. As a part of the project’s achievements, partners prepared a market access guide and installed Market Access Points in all partner regions that help SMEs to learn more and more easily access regional markets around the Baltic Sea. The guide examines regional research potentials, competences and technologies in the regions as well as differences in tax and legal systems while the Market Access Point offers a chance for an SME to test out markets in partner regions.

BaSIC organised several direct meetings between companies from partner regions. One of the encounters resulted in cooperation between Polish and German companies in the field of laser and photonics. The Optics Cluster Berlin-Brandenburg (OpTecBB) and the Polish network Optoklaster met during the Laser Optics Berlin in 2010. The first encounter developed into the long-term
cooperation: the so called Phoenix project (Photonics and Optoelectronics Network). The high level agreement was signed in 2012 by the Mayor of Warsaw (Hanna Gronkiewicz-Waltz) and the vice-Mayor of Berlin (Harald Wolf). The agreement makes the cooperation of companies from the regions of Warsaw and Berlin much easier. For example, Polish companies, members of the Optoklaster, can access reliable information and get advice about companies and the market situation in Germany. They participate in fairs, conferences and meetings organised by the Optics Cluster Berlin-Brandenburg, or directly address potential partner companies that are members of the Optics Cluster Berlin.

Project JOSEFIN developed and implemented an integrated support package for the internationalisation of SMEs linking information, contacts, coaching and finance. As one of the project’s outcomes, an Innovation Loan Guarantee Model has been implemented in nine partner regions under different types of financial instruments.

Pumacy Technologies AG from Berlin is one of the companies that received support. Pumacy Technologies provides national and international companies (manufacturers from the aerospace and automotive, as well as the plant and machinery industries) with knowledge, innovation and process management solutions.

The company received a loan of 500 TEUR from a commercial partner bank. The loan was granted thanks to the 60% guarantee by IBB (Investitionsbank Berlin, Lead Partner of JOSEFIN) in the context of a new product “Berlin Kredit Innovativ” developed by JOSEFIN. Pumacy was increasing its research and development activities and used the loan for investment in the Innovation Centre for the Product Lifecycle Management. The loan was substantial component of a financing package facilitating growth of the entire company.

"BaSIC has brought BSR capital regions closer to one another; it has successfully created long term Market Access opportunities. Moreover, the project created much closer cooperation and business between companies, as the PHOENIX example shows for the Photonics industry and the regions of Warsaw and Berlin."

Helge Neumann, Executive Manager for International Business Development at the WISTA-MANAGEMENT GMBH Berlin

“Too many good project ideas fail and are not implemented because the development of an appropriate financing package takes too much time. With „Berlin Kredit Innovativ“, the IBB service offered a financing that can be used very quickly. With a guarantee of 60% provided by IBB we were able to convince our house bank of the benefits of this project.”

Toralf Kahlert, CEO of Pumacy Technologies AG
Ensuring the access

Interview with Zane Zeibote, University of Latvia, partner in the Baltic Supply project

What is the background of Baltic Supply?
Baltic Supply set out to promote small and medium enterprises in the Baltic Sea region and enhancing their innovation capabilities by connecting them with other companies, universities and public administrations of different countries. The project focused on the European supply markets and on setting up supporting structures for Baltic SMEs in order to give them better access to interregional supply markets in North-Eastern Europe.

What are the biggest challenges for companies when going international?
One of the biggest challenges is always the language. In particular SMEs are mostly familiar only with their own national language. To get international contacts, it is important to have some knowledge of English, be able to write e-mails in English etc. Another issue is always trust. It takes some time to build up real trust between companies, universities and public administrations, but it is essential to have all sectors – private, public, academic – on board. One cannot underestimate the importance of face-to-face dialogue, when building up a strong and trustworthy network.

Do SMEs need support in becoming more international?
Yes, absolutely. Unlike major firms, SMEs do not have departments that can analyse possible interesting foreign markets and their regulations. During the day to day business it is very hard for a small company to get this information. This is where the European Business Support Network that we created comes in. We provide the necessary information to the companies.

In what way is the project unique?
The project is unique, since it was running at the same time in the North Sea Region, entitled North-Sea Supply Connect. Both projects connected two of the big European macro regions and allowed transfer and contacts beyond the borders of the Baltic Sea. This was a very fruitful cooperation.

What happened after the runtime of the project?
The project ran for three years, until December 2012. However, the cooperation is still going on. One of the results during the project was the creation of the website www.eubizz.net. This website provides a wealth of information on upcoming events, has an online registry, gives contact information etc. It is very important for us and the companies to keep this network alive and we are dedicated to this.
Qualification and Education

The SMEs have a winning chance in the national and international competition if they are innovative and offer services and products of the highest quality. To succeed, appropriate education and continuous qualification of entrepreneurs, managers and employees are necessary. As the outcomes of the survey ran by the cluster “Innovation in SMEs” show, the respondents have identified that a lack of a skilled workforce and the qualification level of managers are the biggest hindrances for effective promotion of innovation in SMEs.

Studies and Vocational Training

The attractiveness of vocational training has decreased sharply in all Baltic Sea countries. Take Poland as an example, where almost 70% of all school graduates choose to enter university studies, while only 12% opt for vocational education regardless of the fast growing demand. Vocational training that is directed specifically at individual needs of the company should be further promoted, and the participation rate in vocational training raised.

Competition for Best Talents

The demographic developments only add growing competition for skilled staff among SMEs. At the same time, the number of employees retiring is constantly increasing. As an additional challenge, in some countries a considerable proportion of the working population has migrated to other countries, in particular this is an issue for Latvia and Lithuania. Consequently, SMEs and major companies are increasingly competing for the best talents.
Quick IGA project supports BSR-wide transfer (particularly North-South transfer) and implementation of Best Practice measures for the promotion of innovation through equal opportunities for women and men and elderly in SMEs. To do so, the project organised a number of training courses.

One of the training courses took place in Brest, Belarus in October, 2012. The course was organised by the Belarusian Chamber of Commerce and Industry in cooperation with trainers from the Lithuanian University of Educational Sciences in Vilnius.

The participants of the training course represented universities, chambers of commerce and private companies; mostly from Belarus. They learned how to coach and mentor female and elderly entrepreneurs and how a more mixed team can boost innovation capacity of companies. The agenda comprised topics on demographic development, the labour market, the special situation and employability of women and elderly, as well as on necessary leadership and management skills. To raise the awareness and secure promotion of this important topic in the long run, we also created a national Memorandum of Understanding.

BSHR HealthPort project helps develop competence in innovation and raise the entrepreneurial spirit. One of the results is a series of courses for students and professionals in SMEs and health care providers that enhance proficiency in innovation and entrepreneurship in health care.

The courses follow the structure and value chain of an innovation: from the birth of an idea until the moment the product goes on the market; in other words from the moment of inspiration to do “something” up to the phase of selling a product to a healthcare organisation.

“In the Scandinavian countries, the participation of women and older people in the labour force is significantly higher than in the countries south of the Baltic Sea. At the same time, SMEs in the Nordic countries achieve significantly higher productivity and innovation levels. We are interested in transferring this and have developed train-the-trainer courses.”

Maxim Khmelnitski, the Belarusian Chamber of Commerce and Industry, Brest Department
Most of those involved in healthcare do not understand what an innovation may be. Therefore, to get people interested an “inspiration course” informs, inspires and helps change both the understanding and the attitude. The next step is to understand what the “values” of the new idea are, how to build the value further and what methods can be used: this is the domain of the “idea evaluation course”.

Further, the idea has to be verified in clinical trials or verified in other ways: here, a course on “how to run clinical trials” comes in handy. The idea-owners raise funding and potentially form a company. But before people can rely on a product it has to be tested in the respective environment (clinical), in the case that it should be used for patients. One has to determine how to verify the product in a clinical setting, how to order clinical tests from an external company and understand the legal consequences of not performing the tests for example.

A course in “project management” helps to manage the process. Equally important is to understand how the innovation system works and how to write a business plan. Therefore, the next course on the list is “venture creation and entrepreneurship”. Here the participants learn how to form a company. And finally, the course in “sales” will help sell products and learn about the procurement rules.

The courses are in English. Most are e-learning courses, but some are traditional face-to-face courses, e.g. “idea evaluation course”. One can find information on how to join the courses at the University of Gothenburg or BSHR HealthPort website. The demand is very high; in 2013 more than 300 were interested in joining only the course on clinical trials. The courses have been very well received by the participants and are continuously adjusted based on their feedback.

Raising qualification of personnel

Interview with Joachim von Kiedrowski, Director of the Berufskademie Hamburg (University of Corporate Education), partner in the BSR QUICK project

Why is education and qualification important for innovative SMEs? Innovative companies need innovative managers and employees. Qualified personnel are essential for any innovative company. There is an increasing lack of qualified personnel in the Baltic Sea Region, which is becoming worse due to demographic development. The small and medium companies need more personnel that correspond to their practical needs.
What was your main task in the project?
During the first milestone we founded the Baltic Sea Academy. We created curricula and put them to action. The most important step was to achieve the long term goal of having better qualified personnel in the Baltic Sea Region. Together with all partners we realised 75 tangible R&D solutions and more than 500 Business Plans for SMEs, which can be considered as short-term results and likewise important for the individual companies.

What is the Baltic Sea Academy?
The Baltic Sea Academy is a unique network of 16 universities and polytechnics from 9 countries. We realised the need to establish the network as an association like this, so it can be active even after the end of the project and can coordinate new projects and tasks.

Any measures that you consider of special importance?
The developed and implemented dual study courses. The advantage of these curricula is that the students get Credit Points for their academic work at the university and, at the same time, for the practical training in a company. The students graduate as “bachelors” (that allows them to pursue an academic career such as master studies) and with a skilled worker degree.

What is the benefit of dual study programs for the SMEs?
The SMEs are highly appreciative for these students that already have practical training. Usually all graduates have excellent job offers before graduation. Also, the students are the living bridge between the SME world and the university, allowing a constant exchange of information; one of the best ways to realise an on-going exchange between the business and academic sector.

What factors are most critical for the success of dual study programs?
Sometimes it can be quite a challenge to get the companies on board. Investing work, time and money in the qualification of students for three to four years asks for a long-term commitment. Usually SMEs plan for 6 – 12 months and only few are willing to invest in the long run and think 3 years ahead. However, thankfully more and more companies realise that they already benefit a lot of the students working in their companies during the education and the number of SMEs participating is growing strongly.

Any visions for the future scenario regarding the cooperation of SMEs and educational institutions?
I look forward to sharing curricula as best practices between the regions, building up international dual study courses, where students get academic education at partner universities and at the same time practical, vocational training at a company in the partner region. Cross-border dual study courses could be very interesting for the students, the universities, the companies and, last but not least, they help to shape a common identity in the Baltic Sea Region.
Future needs and Recommendations

The cluster took a closer look, by asking all projects and their partners, at the upcoming demands from their perspective. Additionally, the cluster conducted a survey with more than 600 participants. Universities, Business Chambers, Public Administrations and companies from all countries around the Baltic Sea Region participated. Forty six percent, almost half of the respondents, were SMEs themselves thus allowing for a substantial analysis. Seventy eight percent of all companies have no doubt that being innovative is the key to staying competitive in the future and more than twenty percent consider it at least helpful.

SMEs – on the Vanguard of Innovation

It is no secret that, already, today most new patents are registered by small companies. The survey confirms that small and medium-sized companies have the following advantages that empower them to be innovative:

- Due to their small size of, on average, less than 9 employees, they are very flexible and can adapt to changes much faster
- The vast majority of all SMEs is managed by their owner, allowing short and fast decision making
- A usually low hierarchy acknowledges input from employees and a high level of identification with their company
- The contact between SMEs and their customers runs on a very direct and often personal level. In particular in the service industry, customers value a constant contact person and fast support.

Innovation – more than a technical solution

Even though somewhat difficult to grasp, the term “innovation” is heavily used. The cluster elaborated on three types:

- **Product innovation** refers to a new or a significantly improved product or service.
- **Process innovation** refers to a new or significantly improved production process, distribution method, marketing or support activity for goods or services.
- **Organisational innovation** refers to a way in which the staff work together in a company, how the potential of every employee is used, the work atmosphere, innovative thinking of managers, etc.

A truly noteworthy finding is that the companies are not interested in product innovation only, but they expressed a keen interest in process innovations and organisational innovations as well, so-called non-technological (soft) innovation (see Fig. 2).

![Fig. 1: Participants of the survey “Innovation in SMEs”](image-url)
In particular, northern countries of the Baltic Sea Region such as Denmark or Sweden - rated non-technological innovation very high. Similarly, innovative companies consider process and organisational innovation as underestimated. Non-technological innovation provides high potential, as it is equally important to almost any company, independent of its sector or country.

Collaboration

Strong support for innovation in SMEs is needed, consisting of academic institutions, public administrations and business chambers representing the private sector. The majority of respondents are convinced that close cooperation with universities and other academic institutions is helpful to develop innovative solutions.

Most stakeholders agree that innovation related projects that target SMEs should focus more on the needs of the companies. It was pointed out that SMEs should rather be represented by their umbrella organisations, since the administrative burden is too high for individual companies. Implementing projects takes several years, whereas SMEs usually plan only a few months ahead. Therefore, involvement of SMEs in the cooperation programmes part-financed by the EU should be result-oriented, making SMEs beneficiaries of the results.

Reaching out across the borders

For SMEs, not only the cooperation with other stakeholders is important, but also with other markets.

The survey clearly shows that companies which indicated themselves as innovative have a wider reach and are more likely to cooperate on an international level. In particular, SMEs need support from transnational networks in order to reach out to new markets.

It’s all about “personnel” - getting the best out of every employee

The survey clearly concluded that the biggest bottleneck for innovative companies is a lack of a qualified workforce. This lack will increase due to the demographic developments in the Baltic Sea Region. It is therefore vital to use the potential of every person and combat the growing gap between the lack of a skilled workforce and the rising number of unemployed youth.

The metadata also revealed that financial support is more important to companies that are not yet innovative, while already innovative firms believe financial assistance is less essential. Already innovative companies pointed out that the work climate is a crucial factor for
innovations. In this sense the work climate refers to the physical and social environment of the workplace, in particular the internal cooperation between colleagues.

Outlook

It is evident that SMEs in the Baltic Sea Region have a huge innovation potential. However, sound support of innovations in small companies needs long-term structures and cannot be achieved in just a few months. More so than other companies, SMEs demand partnerships based on trust. Companies need one-stop-solutions, one local contact point that is well trained, informed and connected. Reliable networks must be established, enabling sustainable cooperation. Rather than establishing new organisations, it is a challenge of bringing the existing institutions together, for example business organisations representing SMEs and universities representing the academic and R&D sector. Joining forces, identifying regional strengths and establishing transnational alliances for the future markets will strengthen the innovation in SMEs and thus the region as such.

Furthermore, the Programme aims at bringing together all the necessary stakeholders to support development and implementation of smart specialisation strategies. To respond to the identified need for more support for non-technological innovation, the Programme has foreseen a set of targeted actions to stimulate uptake of non-technological innovation by all the relevant players.

“The Baltic Sea Region Programme supports SMEs and cooperation for innovation. Only through joint efforts can joint solutions be reached.”

Kadri Jushkin, Estonian Ministry of the Interior, Chair of the Joint Programming Committee in 2013

Baltic Sea Region Programme 2014–2020 supports innovation and SMEs

Acknowledging the Europe 2020 Strategy, also referred to as Europe’s Growth Strategy, the Baltic Sea Region Programme, in the period of 2014-2020, is looking into reaffirming the participation of the private sector in transitional cooperation. The Programme is extending in order to include members of the private sector as full partners in its supported projects. In addition, the Programme will promote more targeted actions to involve the private sector, in particular SMEs. Specifically, the Programme is directing its support to solving issues that require the participation of the private sector. In particular, in the Priority “Capacity for Innovation” the Programme is addressing the need of necessary cooperation between public, academic and private sectors in order to strengthen transnational links among research and innovation infrastructures.

Fig. 4: Importance for innovation in companies (0 = Not important, 5 = Very important)
Small and medium sized enterprises (SMEs) are powerful players in promoting innovation, and Research and Development (R&D) activities are critical for the survival and growth of innovative SMEs. Although according to the definition of the European Union, a SME is a company with less than 250 employees, the majority of SMEs are micro or small companies with less than 5 employees. Thus, unlike big companies, almost no SME has a department that is devoted to R&D activities.

**Joining Forces**

Yet R&D is expensive, and SMEs cannot spend at the same level as their bigger competitors. Instead, SMEs need external expertise and advice. Here, various cooperation mechanisms and incentive schemes to bring an SME and an R&D organisation together are on the table. In addition, by joining forces SMEs can become a compelling partner with a research facility. To facilitate the process, business organisations such as Chambers of Crafts and Commerce may play the role of mediator, and hence bring both parties together. As a result, R&D Institutions get a critical mass for evaluation; and enterprises profit from the research and development activity.

A number of projects taking part in the cluster “Innovation in SMEs” were developing and implementing solutions for better cooperation between SMEs and R&D organisations and ultimately transfer research into business activities. The following two cases illustrate the project achievements of the cluster in developing such solutions.

**Bonita** project helps to transfer knowledge and technology from research to the market. A major achievement of the project partners is innoSPICE™ – an ISO 15504 conformant model that allows assessing how well a research organisation is able to transfer technology or research that it has produced into practice. The model also helps increase the innovation capacity of an organisation.

Research organisations face manifold expectations: on the one hand the general public expects that the research is “useful” for society, on the other hand to receive new funds for research, the organisations have to prove to their cus-
tomers that their research reaches the market. Scientists are often concentrating on their research. Transferring the research results to those who can practically apply it, needs certain preconditions: organisational processes and motivation. Bonita has shown that these “preconditions” are universal: you will find similar requirements in all organisations that are successful in developing technologies and transferring them to the market. An organisation needs for example people who are generating new knowledge, taking care of prototypes, maintaining contacts with customers, managing contracts – altogether more than 350 “aspects” that can be analysed. Using the innoSPICE™ assessment model, an organisation can check if its processes allow for effective technology transfer and what can be improved. It is a first step towards an ISO-certified “knowledge and technology transfer audit” of an organisation. The assessment reveals the strength and the challenges within an organisation from the technology transfer perspective. An innoSPICE™ certificate can also provide proof that an organisation is a reliable research partner.

Bonita partners performed more than 30 assessments on European organisations when developing and testing the model. The official assessment can be performed by accredited Bonita partners and, by using the innoSPICE™ model, also by other interested organisations. innoSPICE™ assessments are based on the ISO/IEC 15504 standard requirements.

**PlasTEP** project helps treat exhaust gases and surface water with plasma based cleaning technologies. The results of these real condition field tests were presented to SMEs at PlasTEP workshops in eight countries. These workshops proved to be the most effective way to get in contact with stakeholders from industry and politics and to initiate technology transfer.

PlasTEP project partners developed mobile plasma units. One can take the unit to the place where the pollutants are, e.g. exhaust gas stream in a factory, build a bypass, connect the mobile plasma unit and test how much pollutant is extracted and how much is left. One of the field tests was performed in Poznan, at the Aquanet water treatment plant. The odours released into the air by the water plant were filtered. The best result was achieved when the plasma treatment was combined with other technologies such as biological treatment or absorbers. One of the advantages of plasma technologies is an easy controllability and the adaptation to existing conditions.

Plasma can be applied especially to clean air from odour or other organic pollutants. One can also use the plasma technology to clean polluted water in harbours. Instead of pumping the polluted water to the coast and cleaning it there, it is possible to turn the polluted water into gas and clean this gasified oil with plasma filters. Yet the industry and other stakeholders have to be convinced that this technology actually works.

To perform the field tests PlasTEP partners developed mobile plasma units. One can take the unit to the place where the pollutants are, e.g. exhaust gas stream in a factory, build a bypass, connect the mobile plasma unit and test how much pollutant is extracted and how much is left. One of the field tests was performed in Poznan, at the Aquanet water treatment plant. The odours released into the air by the water plant were filtered. The best result was achieved when the plasma treatment was combined with other technologies such as biological treatment or absorbers. One of the advantages of plasma technologies is an easy controllability and the adaptation to existing conditions.

The plasma cleaning technology can be used in multiple industries: the field tests are performed in a shipbuilding company or a polymer-concrete plant. After the test, the polymer-concrete plant in Szczecin decided to invest into the technology. The PlasTEP project is helping the plant to prepare the investment. Because the plan is located in the city, this will directly increase the air quality for the inhabitants.

“It is still a long but worthwhile way to use the growth potential of plasma technology for exhaust gas cleaning and odour reduction.”

Alexander Schwock, Project Manager at the Technologiezentrum Fördergesellschaft mbH Vorpommern, Lead Partner of the PlasTEP/PlasTEP+ projects
Investing in region’s strengths

Interview with Henrik Lundblad, Project Manager Mobile Vikings, Mobile Heights AB

The Mobile Vikings is part of the StarDust project and deals with joining strong clusters and innovation milieus within Telecom/mobile applications into new ways of innovation activities. It experiments on how new innovation policies such as open innovation, open source, demand and user driven innovation can be implemented in cooperation between innovation milieus in the Baltic Sea Region.

Henrik Lundblad discusses the approach of Mobile Vikings.

What are the “Mobile Vikings”? The purpose of this project is to leverage the industrial strongholds within the sector by supporting open innovation, student innovation and helping SMEs in their internationalisation through matchmaking and the business roaming agreement.

What is so special about Mobile Vikings approach? Our region is very strong within ICT, that is why we have focused on leveraging, sharing and investing in our strengths, more than coming up with new approaches, building an in-depth trust between all members.

What can others get from that? We have supported the various tools and innovation platforms from our partners that other organisations can utilise, such as the student innovations platform Demola, matchmaking events and the business roaming agreement, where any company can utilise each other’s offices globally.

Who is particularly invited to make use of this experience? Mobile Vikings encourage all organisations to leverage from our experience and our various tools. ICT is, according to us, a key enabler for innovation and entrepreneurship in many fields and an important component in addressing the grand challenges. That’s why we invite not only traditional ICT related organisations but all organisations that share our vision!

Who are you trying to help? What is the problem you are trying to solve? We focus on SMEs as we see them as crucial for innovation both by the self but also as larger corporations will leverage more on innovation from smaller organisations. We want to speed up innovation.

How can an SME get help from “Mobile Vikings”? Get in contact with any of our member organisations. They would love to help out!

Where are the Mobile Vikings moving next? In 5 years? 10 years? We will continue with our ambitious goals, perhaps focusing more on how the public and private can leverage from each other.

You worked with open innovation method. What are do’s and don’ts? Open Innovation is extremely important, to some extent very difficult and to some extent very simple. It’s very much about a corporate culture and mindset. I think it’s better to focus on do instead of don’t!

More info at http://www.bsrstars.se/project/mobile-vikings/
Who are we?

BSHR HealthPort, coordinated by ScanBalt, brings together innovative SMEs and health care organisations to strengthen the Health Economy and fight the bottlenecks in health care innovations. This sector is not only a cost for society but also as a driver of a competitive and knowledge based health economy. What is tackled is the insufficient exploitation of ideas from health care researchers and practitioners and procurement practices that limits the access of SMEs to the health care market.

BSR QUICK, coordinated by the Hanse-Parlament with 40 formal partners and 42 associated partners is one of the biggest projects, bridging the academic world with SMEs by establishing the Baltic Sea Academy at the very beginning of the project in 2010. This unique network of 15 universities and polytechnics realises tangible R&D solutions and transfer of innovation, and creates training and study curricula specifically for the needs of SMEs in the region. Already during the project concrete investment plans and R&D solutions for more than 680 SMEs were realised, training courses and study courses were developed and put into action. The Baltic Sea Academy is cooperating very closely with the Hanse Parlament, building a powerful innovation platform between SME representatives such as chambers of commerce and universities for the benefit of the companies in the region.

BalticSupply, a project led by the Bremen Ministry of Economic Affairs, Labour and Ports, aimed at strengthening the supply economy. This project was unique since a sister project was implemented at the same time for the North Sea Region, North Sea Supply Connect. Both projects joined forces to set up a European Business Support Network2 that offers support to SMEs offline and online. The online platform, that is also linked to the Enterprise Europe Network, is still growing and active after the project end, hosted and administrated by the Hanse-Parlament.

BONITA, led by the University of Bremen, aimed at bridging the knowledge gaps between universities, laboratories, industrial actors and policy makers. The project has a focus on scientific technology transfer. The ISO/IEC15504 standard based model innoSPICE, as a result of the project, provides the base for improving the processes of organisations working in the field of innovation, knowledge and technology transfer.
JOSEFIN, represented by Teknikdalen, identified a lack of access to suitable finance as a main barrier to internationalisation for innovative SMEs from the Baltic Sea Region. The goal of the project was to promote innovation and internationalisation in SMEs by facilitating better access to finance. The project was based on two main pillars; the individual coaching of SMEs and the provision of financial support.

www.josefin-org.eu

IBI Net, represented by Riga Planning Authority, enhancing the cooperation of business incubators in the region. Now more than seven business incubators and technology centres from Latvia, Sweden, Poland, Germany, Norway and Belarus cooperate and communicate on a regular basis using the created internet platform. The network helps business incubators to offer business support services based on best practice examples in the region.

www.ibi-net.eu

StarDust, coordinated by Vinnova, brings together different stakeholders from the Baltic Sea Region and started to promote SMEs in five areas. The overall objective is it to find new answers for societal challenges that people around the Baltic Sea are facing. Increasing water pollution and an ageing population are just two examples of these. One of them that can be considered a good example for smart specialisation is “Comfort in Living”, linking Polish wood technology with Danish design and Swedish furniture entrepreneurs. The project develops products and services that improve the quality of life for elderly people in their homes, and has developed a strategic action plan until 2020.

www.bsrstars.se/stardust

QUICK-IGA, led by the Hanse-Parlament, identified the lack of available personnel as one of the hindrances to innovation growth. Also studies have shown that a higher diversity of work force positively influences the innovation climate in a company. Thus, the project is supporting the reintegration of elderly employees in companies and promoting a higher rate of female employees and female entrepreneurship. The project implements a north-south transfer, learning from Nordic countries that have, for example, a much higher percentage of female employees than, for example, Poland.

www.quick-iga.eu

BSR InnoReg, led by the Baltic Institute, improved strategic know-how of business development organisations operating outside metropolitan areas. The project helps business development organisations to develop their business and innovation support services for small and medium-sized enterprises. The project brought local and regional decision-makers together to discuss global economic challenges and agree on an Innovation Policy Memorandum.

www.baltic.org/bsrinnoreg

BaSIC, represented by Technopol, built a “Baltic Sea Archipelago of Innovation”. The objective is to create a seamless working environment for fast growth innovative companies, embedded in a reliable network of leading Science Parks and clusters. Emphasis is given to identify, select, train and coach SME-gazelles; to provide them with harmonised access to markets and to connect them for access to finance for internationalisation and growth. During the project a Market access guide for SMEs was compiled with market access information about all BSR countries.

www.basic-net.eu
**SCIENCE LINK**, coordinated by DESY, established a network between leading research facilities of photon and neutron sources and their users. Through this access to large-scale research infrastructure, companies can develop better products, which is of benefit to the regions. Three calls for SMEs to apply for a possibility to perform R&D experiments at research facilities were launched.

[www.science-link.eu](http://www.science-link.eu)

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**PlasTEP**

**PlasTEP**, managed by the Technology Centre of Western Pomerania, focused on dissemination and fostering of plasma based technological innovation for environment protection in the Baltic Sea region. The main objective of PlasTEP was to push plasma based cleaning technologies of atmospheric air and water treatment to a visible practical application in order to establish a market driven transfer process and an increasing number of applications.

[www.plastep.eu](http://www.plastep.eu)

More info about the cluster “Innovation in SMEs” at [www.bsr-innovation.eu](http://www.bsr-innovation.eu)
Voices from the projects

“Baltic Sea region is our home and the exchange of experiences with our neighbours is an important driver for regional sustainable development and growth.

The cluster innovation project has given our organisation new input and valuable connections with organisations in the Baltic Sea region. Bringing together partners is an excellent way to form new networks and to exchange and combine project results.”

Erika Hinz, 
CFO and project leader, 
Teknikdalen Foundation, 
Dalarna Region, Sweden

“Project clusters have been a great programme innovation and a highly useful and welcome initiative by the BSR Programme. The Innovation Cluster with its 10 projects, and their extensive partnerships and results, sends a powerful joint message about the innovation and market potential in the Baltic Sea region, and about the impact and importance of EU investments in the BSR innovation cooperation. The Cluster also helps the region’s innovation actors and their networks to take the next step towards increasingly coordinated and business need driven actions in the next EU programme period.”

Esa Kokkonen, 
Director, The Baltic Institute of Finland

„In Science Link we have the opportunity to do something new in the area of innovation – to offer free scientific analysis for companies at the participating large-scale research infrastructures (RIs). It is great to see that the companies have enthusiastically responded to our offer and that the RIs can participate in the innovation process in the Baltic Sea Region.”

Katariina Röbbelen-Voigt, 
Project Manager Science Link, DESY Deutsches Elektronensynchrotron

“Being small is our problem and fortune. It means that there is nearly no home market for our technology start-ups in their home country. It urges them to think global from day one.”

Külle Tärnov, 
Tallinn Science Park Tehnopol
“During the BSR-QUICK project more than 680 solutions for companies were realised. These kind of tangible results are very important for SMEs, but to allow a long lasting promotion of innovation in SMEs we were able to create the first network of universities that focus on education and R&D for SMEs in the BSR, the Baltic Sea Academy.”

Max Hogeforster, Hanse-Parlament, Hamburg, BSR QUICK

“Health and Bio Economy are drivers for a globally competitive Baltic Sea region. In order to create new businesses and lower costs of health care we need a common innovation agenda promoting easier access to financing for start-ups and commercialisation, facilitates the uptake of innovations in the health care system, improves entrepreneurship training and attracts talents. ScanBalt BioRegion and the EU BSR strategy flagship project ScanBalt Health Region work in this direction”.

Peter Frank, Secretary General at ScanBalt

“Projects of the Baltic Sea Region Programme provide an excellent opportunity to find and realise transnational solutions for our SMEs. In the project QUICK IGA we identified how important female entrepreneurs are for SMEs, were able to transfer many best practices and boost this important topic in our regions.”

Vytas Navickas, Lithuanian University of Science, Vilnius, QUICK IGA