LogOn Baltic Regional reports
46:2007

LogOnBaltic

EXPERT INTERVIEWS IN POMERANIA, POLAND -

Results and analysis of the intersectoral expert interviews in the field of logistics and ICT

Anna Trzuskawska

Project part-financed by the European Union
(European Regional Development Fund) within
the BSR INTERREG III B Neighbourhood Programme

LogOn Baltic Regional reports
46:2007

EXPERT INTERVIEWS IN POMERANIA, POLAND –

Results and analysis of the intersectoral expert interviews in the field of logistics and ICT

Anna Trzuskawska

Published by
LogOn Baltic
Turku School of Economics
Rehtorinpellonkatu 3, FI-20500 TURKU, Finland
www.logonbaltic.info

This publication has been produced with the financial assistance of the European Union. The content of this publication is the sole responsibility of the publisher and can under no circumstances be regarded as reflecting the position of the European Union.

ISBN 978-951-564-458-9 (electronical version)
UDC Logistics, Competence, ICT, Regional Development, Baltic Sea Region

EXECUTIVE SUMMARY

This report is part of the LogOn Baltic Project. The aim of this project is to provide an understanding and comparable results on how best to develop the region through effective ICT and Logistics activities and spatial planning means, based on user needs of manufacturing and trading firms and logistics service providers. The project, which is part of Baltic Sea Region (BSR) INTERREG III B Programme, is co-funded by the European Union (EU) and national project partners.

One of the methodologies used in the project expert interviews, the results of which are presented in this report. The objective of the interviews was to investigate regional strengths and weaknesses from the perspective of different companies and institutions as well as expectations and future visions.

The following report concentrates on results of interviews conducted in the Pomerania region within the Pomorskie voivodeship and is divided into four chapters.

The first chapter of this study gives an overview on the LogOn Baltic project, the partners involved and the aim of the expert interviews.

The second chapter describes the methodology used, the interview design and the sample of participating experts.

The main part of the report is the third chapter, in which the results of the interviews are presented and interpreted. The main topics covered here are:

- Trends in logistics and ICT
- Business connections in the BSR
- Regional development
- Education and skills in the region
- Company expectations

The last chapter of the report summarizes the results and gives an outlook on future regional development issues. The main results show that the economy growth in Poland drives requirements for logistic services, processes and systems development base on ICT. Currently the major constraint is the transportation infrastructure and low ICT awareness. There are many opportunities in building partnership between local authorities, development agencies and business.

STRESZCZENIE

Niniejszy raport został przygotowany w ramach projektu LogOn Baltic. Celem projektu jest dostarczenie wiedzy oraz wyników badań na temat tego, jak najlepiej rozwijać regiony poprzez efektywne działania w obszarach technologii informatycznych, logistyki oraz planowania przestrzennego, w oparciu o potrzeby przedsiębiorstw produkcyjnych, handlowych i firm świadczących usługi logistyczne. Projekt LogOn Baltic jest elementem Program Region Morza Bałtyckiego (Baltic Sea Region - BSR) w ramach programu INTERREG III B, jest współfinansowany przez Unię Europejską oraz partnerów w poszczególnych krajach.

Jedną z metod wykorzystanych w tym projekcie jest prowadzenie wywiadów z ekspertami, których rezultaty są prezentowane w niniejszym raporcie. Celem przeprowadzonych wywiadów było zbadanie słabych i mocnych stron regionu, widzianych z perspektywy różnych przedsiębiorstw, instytucji oraz zbadanie ich oczekiwań i wizji na przyszłość.

Niniejszy raport dotyczy wywiadów przeprowadzonych na terenie województwa pomorskiego i zawiera cztery rozdziały.

Pierwszy rozdział przedstawia ogólne informacje o projekcie, o partnerach, którzy wzięli udział w badaniu oraz o celach wywiadów.

Drugi rozdział opisuje metodologię badania, projekt wywiadów oraz próbkę ekspertów, z którymi przeprowadzono wywiady.

Główną część raportu stanowi rozdział trzeci, w którym zaprezentowano wyniki wywiadów i ich interpretację. Główne tematy poruszone w trakcie wywiadów to:

- Trendy w logistyce i technologiach informatycznych
- Powiązania biznesowe w regionie Morza Bałtyckiego
- Rozwój regionalny
- Edukacja i kwalifikacje zasonów ludzkich w regionie
- Oczekiwania przedsiębiorstw

Ostatni rozdział raportu podsumowuje wyniki badania i przedstawia przewidywania dotyczące problemów przyszłego rozwoju regionu. Wyniki badania pokazują, że intensywny rozwój gospodarczy Polski wymusza rozwój procesów, systemów i usług logistycznych w oparciu o technologie informatyczne. Obecnie głównym ograniczeniem rozwoju

regionu jest jakość infrastruktury transportowej i niski poziom znajomości i wykorzystanie technologii informatycznych przez społeczeństwo i przedsiębiorców. Budowanie silnych związków i współpracy pomiędzy samorządami, agencjami rozwoju i przedsiębiorcami daje wiele możliwości dla rozwoju regionu.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

1 INTRODUCTION

1.1 Project introduction – LogOn Baltic

The LogOn Baltic project was approved within the Baltic Sea Region (BSR) INTERREG III B Neighbourhood Programme, which is sponsored by the European Regional Development Fund (ERDF), as part of the Structural Funds, and co-financed by national project partners.

The purpose of LogOn Baltic is to present solutions to improve the interplay between logistics and Information and Communication Technologies (ICT) competence and spatial planning and strengthening Small and Medium-sized Enterprises (SMEs) competitiveness in the BSR. This is primarily done by the production and dissemination of information for regional development agencies on how to support enterprises in the participating regions in the field of ICT and logistics, thus improving regional development.

The following regions are participating in the project:

- South-West Finland
- Östergötland (Sweden)
- Denmark
- Southern Metropolitan Region of Hamburg (Germany)
- West-Mecklenburg (Germany)
- North-East Poland
- Lithuania
- Latvia
- Estonia
- St. Petersburg (Russia)

LogOn Baltic provides an overview of logistics efficiency and logistics information systems and their exploitation, in order to improve the interaction between SMEs and other public/private actors.

On the one hand, the empirical activities of LogOn Baltic compare the existing logistics services and infrastructure with the logistics needs in the participating regions, making it possible to develop perspectives and action plans for strengthening the logistics competence in the

regions. On the other hand it describes the existing ICT infrastructure and services, revealing up to what extent they meet with the companies' needs for further development. In this way, LogOn Baltic focuses on:

a. identifying development agencies and evaluating their performance in each region
b. evaluating the level of logistics and ICT efficiency
c. suggesting concrete actions for regional and local public sector bodies

Data are gathered in each participating region using four tools, Development Measure Impact Analysis (DEMIA), Logistics survey, ICT survey and Expert Interviews; each of these is presented in a separate report. These results together with secondary data is presented in a regional report, that will describe the state of affairs in the region, with recommendations on what and how the region needs to develop. The regional reports are used as a basis for making an interregional comparison which is reported in an inter-regional report. All reports are available on the project homepage, www.logonbaltic.info.

1.2 Regional partner introduction

The regional partner in Poland, in Pomerania, is The City of **Pruszcz Gdański.** The city of Pruszcz Gdański is situated in the South part of the conurbation formed by Gdańsk, Gdynia and Sopot, so called: the Tri-City Agglomeration. Pruszcz Gdański is only 10 km from the city centre of Gdańsk. It occupies area of 16.5 sqr km, and is inhabited by 23 000 people. The city is an important node in the country road and railway transportation system. In the nearest neighbourhood there is the Tri-City ring and the newly constructed A-1 motorway.

Pruszcz Gdański is one of the most attractive cities in the Northern Poland for investors. This opinion is proven by investors directly as well as the country wide economic rankings. In the recent years the local authorities of the city of Pruszcz Gdański have been ranked in "The Gold Top 100" – the best cities for investors in Poland. Pruszcz Gdański has been awarded with the 3rd position and with the statue of the Polish King Kazimierz Wielki in the Polish cities investor ranking.

Pruszcz Gdański continuously develops: currently there is the new city centre constructed and a lot of effort and focus directed into the road system development investments. Few years ago the industrial park was created in the neighbourhood of A-1 motorway and it is still

growing – a lot of known companies located their plants there or have plans to locate soon.

The City established cooperation with the **Department of Logistics, University of Gdańsk**, and Faculty of Economics in order to perform the LogOn Baltic Expert Interviews. The Department of Logistics at University of Gdańsk is one of the leading academic institutions in Pomerania and in Poland in research and education within the field of logistics. Courses are given both at the bachelor and master programmes at the Faculty of Economics as well as at the International Business and Master of Business Administration programmes. The Department of Logistics gathers 7 experienced researchers engaged in government (mainly Ministry of Transportation) and business logistics projects. The team has participated in EU (European Union) founded research projects such as: Trans-European Mobility Scheme for University Studies (TEMPUS), Poland and Hungary: Assistance for Restructuring their Economies (PHARE), INTERREG II and Networking Logistic Centres in the Baltic Sea Region (NELOC). Beside the research work the team concentrates on academic teaching and developing the programs for education in logistics.

1.3 Expert interview introduction

Some of the main methodologies used within the LogOn Baltic project are expert interviews and empirical web-based surveys based on a large number of respondents. While the surveys mainly focus on the current status and needs of the logistics community and allow for a quantitative analysis, the expert interviews mainly follow a qualitative approach. The aim is to investigate regional strengths and weaknesses with respect to logistics and ICT. Nevertheless, expectations and future visions of different kinds of institutions and companies are to be determined as well.

The willingness to answer questions in a greater depth and in an open discussion can only be achieved by personal and individual conversations with selected interview partners. Furthermore, it is not only the aim to analyse the current situation but also the background and causes which lead to this situation as well as to give recommendations and to determine future trends of regional development. Thus, the complexity and multifariousness of the research questions require personal interviews and a qualitative

approach. With ten to fifteen interviews it is possible to cover the major views on regional development regarding logistics and ICT.

The expert interviews will play an important role in the stage of the project when it comes to the development of a comparative report on the Baltic Sea Region (BSR). Since expert meetings will take place in all participating regions around the Baltic Sea, best practices and recommendations will be deduced for the regional decision makers.

2 INTERVIEW DESIGN

2.1 Target group and sample

The objective was to choose a heterogeneous target group, in order to guarantee for an analysis from as many perspectives as possible. In each region, ten to fifteen interview partners were selected, representing seven different institution or company groups. Another aspect in selecting the companies or institutions was the possibility to contact potential interview partners on a higher management level. Through this it could be assured that the interview partners had the willingness to answer the questions and had a good overview of the development of the industry in the region.

The private sector is represented by four different company groups: The manufacturing industry, the retail industry, logistics service providers and logistics consultants. The latter two were chosen because their employees normally have experience with a lot of different clients and/or projects.

The public sector is mainly represented by the local authorities who are responsible for regional development. Support initiatives may either belong to the private or the public sector or are public-private-partnership. Both institutional groups have experience in initiating, financing and executing regional development activities. Last, representatives from research institutions complete the target group by an independent and research-oriented perspective. The following figure shows the target groups distinguished by the public and private sector.

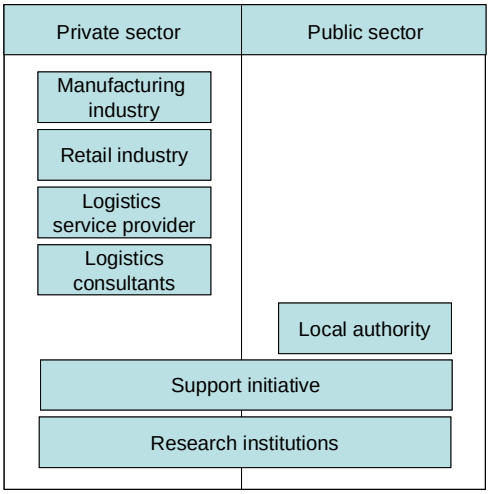

Figure 1 The Expert Interview Target Groups

For the Pomerania region, the distribution of the interview partners can be withdrawn from the following table.

Table 1 The interview partners

Group	Name of company/institution	Interview partner
Local Authority	Office of the Marshal of The Pomorskie Voivodeship,	Director, Department of Regional and Spatial Development
	The City of Pruszcz Gdański,	Vice Mayor
Logistic Consultant	Polska Izba Spedycji i Logistyki (Polish International Freight Forwarders Association)	Chairman
Logistics Service Provider	C.Hartwig Gdynia S.A.	Key Account Manager
Manufacturing Industry	Jabil Circuit Poland (Electronic Manufacturing Services)	Senior Subject Matter Expert
	Polpharma S.A. / pharmacy	Implementation Specialist (logistics)
	Invest Komfort S.A. / construction	Vice Managing Director
Retail Industry	Rabat Pomorze S.A. (wholesaler of foodstuffs & retail shops network)	Manager Operations, IT Manager
Research Institution	Instytut Badań nad Gospodarką Rynkową (The Gdańsk Institute for Market Economics)	Research Area Manager - Companies & Innovations
Support initiative	Agencja Rozwoju Pomorza S.A. (Pomerania Development Agency Co.)	Project Manager, Entrepreneurship Development Dept.

2.2 Main topics covered in the interview

The interviews were conducted according to a half-standardized interview guideline. Most questions were open end questions. A quantitative scale was used in addition to qualitative answers, when it seemed useful for a later comparison of the interviews.

The interview guideline comprises five major parts. The first part covers general trends regarding logistics and ICT. The second part deals with current and planned business contacts in the BSR. Furthermore, barriers and problems of doing business in the BSR are discussed. Part three analyzes regional development measures. Starting from key issues and from the evaluation of regional development activities, the strengths and weaknesses of the region, the competence level with respect to logistics and ICT and proposals

for improvements are examined. Part four addresses the qualification level in logistics and ICT as well as future needs for education. The guideline finishes with expectations, wishes and concrete recommendations of the interview partners.

3 FINDINGS FROM THE INTERVIEWS CONDUCTED

The structure of this chapter follows the structure of the interview guideline. Therefore, sections 3.1 to 3.5 refer to the five parts of the guideline. Section 3.6 summarizes and interprets the most important results.

3.1 Findings regarding trends in logistics and ICT

This chapter presents the trends that have been observed by the interview partner in the global, European and local market, that will or could influence the partner organization, company or institution as well as the Pomerania region. The trends described by the interviewed partners could be divided into two groups: a) mentioned by every interview partner, b) mentioned by only some of the partners. The below chapters provide the detail outcome or the research.

3.1.1 Trends in logistics

The trends that were mentioned by every interview partner relate to the current economy situation in Poland. The growing GDP represents the growing market demand in Poland for goods, services and properties. The booming economy drives local and foreign investments. There are many government, local authorities and private developments such as new manufacturing, logistics plants, wholesale and retail centres. The demanded but very competitive market requires from business higher speed and quality of performance therefore the companies are forced to develop new, more advanced logistic processes and systems.

Most of the experts underlined that the fast business growth required developments and improvements of the infrastructure such as good quality transportation connections – mainly road and railway, as well as logistic centres supporting the goods and information flows. It was also mentioned the business development is accompanied by growing demand for public transportation. Unfortunately in Poland and

especially in Northern part of the country the quality of the available infrastructure was far below the required level and it became a barrier for building strong competitiveness of the companies located in this region. Trade company expert presented examples of delayed deliveries due to traffic jams. The electronic manufacturing expert mentioned the lack of public transport as a main reason for human resources shortages in their plant. The experts proved the positive impact of good infrastructure on the regional development by providing the examples of the very fast growth of many companies situated along the new motorway that was being currently constructed in Pomerania. The A1 motorway planning and building drives trend of locating logistic centres and distribution centres in Pomerania.

Every expert mentioned the same trend in the market requirements for comprehensive product/service solution so called end-to-end solution. This was described in different dimensions and contexts. For example the expert representing the local authorities explained the requirement for the local authority offices to provide to the customers a comprehensive service that required minimum number of documents and one or even zero personal visit in the office. The logistic company as well as the research institute experts mentioned the market requirements for providing comprehensive logistic service combining the transportation, freight forwarding, warehousing and other supporting services. The manufacturing expert presented the trend on the pharmacy market, where the distributors were replaced by logistic operators who were more experienced in providing complex logistics services. The electronic as well as the construction and pharmacy industry observed the trend that suppliers not only supplied the product but also assured so called vendor managed inventory, often in a form of consignment. Another trend observed on the electronic manufacturers market was the extension of the key competency's scope beyond the manufacturing services and inclusion of logistic and design services into EMS's offer.

The requirement of the comprehensive solution is related with the fact the competition forces the price and cost reductions, driving the outsourcing and then creation of more complex supply chains. The logistic company and the manufacturing experts explained the increasing demand for logistic services as a result of outsourcing trend, companies outsourced their logistics activities. As an effect the freight forwarders transformed their companies to become logistic operators and 3rd party logistics providers. The outsourcing is observed also in other businesses and industries.

The supporting initiative's expert also mentioned that the companies build their competitiveness by clustering and networking, often cross the different industries.

The trade company experts as well as the manufacturing and logistics experts pointed the growing importance of supply chain integrations achieved by:

- using advanced information technologies, specially electronic data interchange (EDI) and track & trace solutions
- creating partnership and group of companies e.g. transport groups

When discussing the logistic trends influencing the Pomerania region, most of the experts talked about the increased volumes turned in the see ports in Gdańsk and Gdynia, especially in the containers terminals. The two container terminals in Gdynia and the new built in Gdańsk will offer capability of 1 mTEU.

70% of the experts stressed the fact that two thirds of Polish population lives South from Warsaw. This fact drives a trend of having almost 70% of consumers very far from Pomerania what in consequence drives investments and developments of logistics centres, road infrastructure etc. on a higher level in South regions. Slowly but clearly there is a gap created between the quality of the infrastructure in Pomerania and in South of Poland. The logistic consultant pointed that recently we saw a bit more logistic centres activities also in Pomerania – the expert called it a de-centralization trend because so far the logistics infrastructure was developed in central Poland.

All the experts mentioned the trends created by the fact that Poland had been awarded as the organizer of European Football Championship - Euro 2012. This brings obligations to Poland to build required infrastructure to support the stadiums, the football teams and the spectators. Being an organizer of Euro 2012 brings a tremendous chance for Polish business. In the experts opinion there is a lot of concerns mainly related to shortages of materials and human resources as well as related to the fact, that prioritization for the Euro 2012 might slow down and negatively impact all other required developments in Pomerania.

3.1.2 Trends in ICT

The general, global trend regarding requirements to have easy, fast and remote access to information and data was pointed by all the experts during the interview. The trade, logistic and manufacturing company's experts mentioned the above trend also in the context of growing companies, extending their supply chains and in consequences the volume of information increased and the required customer service / response lead time became shorter.

The size of companies and supply chains drives a requirement for capability to manage processes and systems remotely. The logistic consultant provided examples of remote control of the processes in the see ports or remote management of cargo flows. The electronic and pharmacy manufacturing experts talked about the trend of implementing information systems such as Customer Relationship Management (CRM) or Warehouse Management System (WMS) that allowed virtual cooperation with customers or logistic service providers. The remote, virtual cooperation leads to paper documents elimination and this trend was mentioned by most of the interview partners. The logistic and pharmacy manufacturing experts and the logistic consultant stressed the importance of track & trace systems that allow remotely monitor and control the cargo shipments.

Besides the above dedicated software applications the experts pointed the increasing role of Internet communication via internet portal and services. The electronic manufacturing expert presented the portals for managing customers and portals for managing suppliers. The construction industry experts talked about easiness of purchasing materials from foreign suppliers due to their internet data bases - more advanced comparing to local Polish companies. Also the two local authority interview partners, support initiative and research institution representative talked about the growing demand for electronic documents and electronic signatures as well as the mega portals for regions, cities and institutions.

Both the software applications such as CRM or WMS as well as Internet based solutions require electronic interfaces for automated data exchange. The manufacturing and logistic interview partners mentioned the trend of increased number of transactions via EDI or other XML based interfaces.

Among the trends of growing companies and supply chains managed remotely and virtually with the usage of software applications, electronic interfaces and Internet. Three of the experts

pointed on the growing demand for mobile communication solutions such as laptops, mobile phones and wireless access to Internet network.

The above trends impact Pomerania region because:

- bring requirement to have society familiar with ICT
- create demand for human resources experienced with different types of business applications of ITC in companies

According to the experts Pomerania does not have sufficient number of ITC business experts available due to the history of the country and education system is far remote from business best practices in ITC. The same lack of ITC competencies is observed among the local politicians and local authority offices. Therefore the manufacturing, support initiative and research institution's experts mentioned that the ITC awareness and experience is mainly built by foreign investment companies and then transferred to their local suppliers or via people moving from one to the other company.

Another trend, mentioned by experts, was the market supply of more and more different types of software products. There is a significant development of software, bringing changes and new solutions almost every day. However the Pomerania local companies often don't benefit from the market offer due to the fact the cost of software as well as implementation cost and time are not affordable for the Polish companies in many cases. So in summary the experts stated that the combination of high costs of ITC and very low ITC competencies drive to a situation where very low percentage of Polish capital companies, such as SME, use ITC as a competitive advantage. The research institution research results show that most of the companies don't use ITC besides Internet and e-mail.

Specific trend observed in Pomerania is the foreign and Polish software companies plants localized in this region. Most of the key software companies such as Intel, YDP, and Prokom opened their software research centres in Pomerania. There is a very strong ICT cluster working in Pomerania.

3.2 Findings regarding business connections in the Baltic Sea Region

3.2.1 Current business contacts and projects in the BSR

The interview partners provided information on their business, cooperation and partnership contacts with companies, institutions, organizations in other country in the BSR. The below table summarises all the answer provided, however it is important to underline that the local authority, support agency and research institution's experts referred to partnership cooperation contacts that were not pure business contacts. They provided examples like e.g. participating in EU funded projects or cooperating in research projects.

Another important aspect was the fact that many of the experts mentioned they didn't have any contacts at all, those answers were marked in the column "0-5" of the below table.

Table 2 Business contacts to the Baltic Sea Region – the summary of answers

Number of contact	0-5	6-15	16-25	>25
Federal Republic of Germany	5	3	0	2
Poland and Baltic States (Lithuania, Latvia, Estonia)	8	1	1	0
Russia	10	0	0	0
Scandinavia (Denmark, Sweden, Finland, Norway)	6	2	2	0

In summary the manufacturing, trade and logistics service companies don't have many business contacts in BSR and if they have the business are located in Germany and Scandinavia. The lowest number of business contacts is established with Russia and Lithuania, Latvia, Estonia. There is no direct business contact established. Only the construction company randomly buys material via distributor whose supplier is in Lithuania and the pharmacy manufacturing partner sells finished product via another distributor in Lithuania, Latvia.

The highest number of business contacts is established in Germany, mainly by the pharmacy manufacturing and electronic manufacturing companies who have many suppliers located in Germany.

The logistics service supplier has got contacts established in all the countries but the most often used contacts are the ones in Germany and Scandinavia. This proves that still there is a low volume of goods exchanged between Polish companies in Pomerania and companies localized in Russia and Lithuania, Latvia and Estonia.

3.2.2 Planned business contacts and projects in the BSR

The interviewed experts representing business provided information regarding planned logistics projects with new suppliers / customers in the BSR in the next year(s). The summary is presented in the below table.

Table 3 Planned logistics projects – the summary of answers

Number of logistics projects	0-2	3-5	6-10	>10
	4	1	1	0

Most of the experts talked about potential projects that were not defined yet, however all of them agreed there is a great potential for business development with BSR countries. The highest number of projects was mentioned by the electronic manufacturing interview partner. All of them were related to two main initiatives lead by this company: EDI implementation with suppliers in Germany and consignment implementations with suppliers from Germany. The second biggest number of planned projects was mentioned by the logistics consultant due to the fact the consultant was invited to participate in other company's and local authorities projects related to logistics. The same situation applies to the research institution. Most of the logistics project participated by the consultant and research institution are related to transportation infrastructure.

The local authorities and support initiative's experts were asked for cross-national project – being realized or planned. The summary of the responses is presented in the below table. The highest number of projects was mentioned by Pomerania Development Agency's interview partner due to the fact the organization participated in most of the projects happening with Pomerania involvement. The project mentioned were e.g. Baltic Gateway, Via Baltica, Via Hanzeatica,

Mewa I, Mewa II, South-Baltic Arc. Also the local authorities' expert mentioned few projects such as e.g. Baltic Landbridge, SEPCO etc.

Table 4 The cross-national projects – the summary of answers

Number of cross-national projects	0-2	3-5	6-10	>10
	1	1	0	1

3.2.3 Constraints and problems of co-operations in the BSR

Most of the interview experts underlined the democracy culture and mentality difference between Scandinavia, Western Europe countries and Poland. However the difference was not perceived as a constraint, rather as an opportunity for Poland to learn and develop.

There were also differences mentioned between Poland and Russia regarding the work attitude and engagement in the cross-national projects. According to the experts the partners from Russia were interested in participating in the projects but there were difficulties with tasks execution and taking independent initiatives / decisions. However the expert commented the situation improved. The local authority's interview partners also mentioned that the political situation between Russia and EU, Russia and Poland made the cooperation more challenging.

The knowledge and competencies were assessed on comparable level between all the countries but the experts stressed the managers from Scandinavia and Germany were higher skilled in management. For example the electronic manufacturing expert mentioned very high effectiveness of German managers in solving material shortages. The local authorities' interview partner also pointed on the lower effectiveness of management and lower level innovation culture in Poland, Lithuania, Latvia comparing to Scandinavia and Germany. There were comments made that very often people from Poland, Lithuania, Latvia, Estonia were hard workers due to some complex related to the history and they wanted to level the culture and management skills gaps by working harder.

Two experts mentioned the differences in life-work balance as well as work attitude between Poland and Germany. Sometimes it is difficult for Polish employees to understand and accept the fact that even in

urgent situation German warehouses or other offices are closed after certain hours and they can't get support by having someone working overtime or taking extra step to help in urgent business situations.

Despite of all the above comments no of the experts named the mentioned differences as constraints or problems concerning business relations.

When discussing the constraints concerning institutional setup there were four areas pointed by the experts:

- the political relations with Russia – e.g. required visas, special permissions for import etc., plus existing concerns from many different Polish industries e.g. pharmacy, that Russia would block their market for certain products as they had done for the meat.
- the poor quality of Polish roads and railway that were barrier for foreign business partners and many cargo flows were directed via the routs outside of Poland,
- The customs and tax law in Poland which was still much more complicated than in EU countries and many business partners from Germany or Scandinavia had difficulties with understanding and following the Polish requirements. It complicated the cooperation of Polish companies with foreign partners,
- Differences in the German regulations regarding the road transportation especially the time when roads were closed for the cargo traffic and the weight limits for the containers.

In summary the experts did not defined any serious constraints or problems regarding business relations, however the poor quality of Polish infrastructure, political situation with Russia and differences in law regulations are creating problems for running business cross the borders in BSR.

3.3 Findings regarding regional developments

3.3.1 Known regional development activities

The question about known regional development activities, in general, was answered, by the experts representing companies, with a statement that they didn't know any particular projects due to the fact

there was very poor communication from local authorities and support agencies. However they were able to mention three key infrastructure development activities, know to everybody from newspapers:

- A1 motorway
- the connection between port in Gdynia and the Tri-City ring so called “Trasa Kwiatkowskiego”
- the new container terminal in the Port of Gdańsk

Additionally few experts mentioned also the extension of the airport in Gdańsk and plans for converting the former military airport into the civil airport in Gdynia. The expert from Kwidzyn mentioned local development initiatives: the bridge over Vistula river connecting the city with the A1 motorway and the technology & industrial park called: “Kwidzyński park przemysłowo – technologiczny” The manufacturing company’s experts talked also about the special economic zones in the small cities / towns such as Kwidzyn, Tczew, Starogard Gdański where the government and the local authorities created friendly conditions for the investors. However the trade company’s representative explained that most of the activities related to financial support (EU founds) were directed to SME or foreign investors but the big Polish capital companies were not supported by development initiatives and that situation negatively impacted their market position comparing to big companies with foreign capital.

There was one example given by the logistic consultant about the local authorities making a good information campaign concerning the development initiative for Gdynia called: Open City for Open People inviting investors to invest in the city and showing the development plans for the city in the future.

Naturally much more development activities were known to the local authority, support agency, research institution’s experts as they were directly involved. They provided the following information:

- The base for all activities is “The Pomorskie Voivodeship Development Strategy 2020” focused on 3 priorities such as: Competitiveness – primarily economic, Cohesion – mainly social, Accessibility – essentially infrastructural
- Part of the strategy is further detailed in “The Regional Innovation Strategy” for The Pomorskie Voivodeship
- Base on the strategies there were an operational plan and a spatial development plan prepared. In the plans there was a lot of focus on the road transportation infrastructure system including the rings for many of the cities and towns in the regions

The research institution representative confirmed that his institution was well informed about all development initiatives however he shared his experience when working with companies that the business is not aware and not informed about the development activities in the region.

3.3.2 Key regional development issues

All the experts gave the same strong answer for the question what were the key regional development issues, all of them stated clearly that the poor quality of the road transportation infrastructure negatively impacted the development opportunities for the region.

The first issue mentioned by everyone was the lack of motorway connecting the region with the rest of the country and more important: connecting Central - Northern Europe and with Southern Europe. The experts explained that the criticality of the motorway for the region was related to the fact that Pomerania was far remote from the central Poland and most of the consumers lived south from Warsaw. They also said Pomerania economy was strongly based on the see ports and petrochemical industry which both depended on the connection to the rest of the country and Europe. The logistic consultant and logistic service provider's expert pointed the former lack (today too low number) of logistic centres localized in the region due to the lack of motorway. Additionally in the big two see ports in Gdańsk and Gdynia there were no modern and well functioning logistics centres, all goods had to be transported for few kilometres to the centres recently created close to the constructed motorway what increased costs and wasted time.

The second key issue pointed was the extremely low quality of national, regional roads and communication infrastructure in the cities – lack of comprehensive transportation system resulting in paralyzed cities not only in the pick hours. The electronic manufacturing and research institution's expert explained that the Tri-Cities were disconnected from the other cities in the region which blocks the development of the cities e.g. people leaving in the agglomeration could not work in other regional cities because they could not get to work in relatively short time. Analogically the same problem applied to the business goods flows that took too much time and became ineffective and time wise not predictable. The disconnection issue also apply to the railway infrastructure and services too. The above statement about the relation between available infrastructure and

regional development was proven with example of the city of Elbląd that had got better road and railway connection to the agglomeration and it developed much better than other cities of the same size and potential in the region.

The third key issue mentioned by most of the experts was the lack of integrated transportation system that would integrate air, sea, road and railway transportation. There were missing solutions such as good road connections from the see ports to motorway or airport with the city centre and infrastructure for inter-modal transportation. Additionally the railway connection did not meet basic quality standards and the airport was not ready for the increasing demand.

Beside the regional or country issues there were also local development issues mentioned for particular cities e.g. Kwidzyn – 40 000 inhabitants city – there was lack of a bridge over the Vistula river, connecting the industrial park and the city with national roads and A1 motorway and lack of good, regular railway connections. The bridge had been planned for many years and the design had been finished 3 years ago but still there was no bridge. The number of railway connections on the time table was decreased.

The local authority and the support initiative's representatives explained that the infrastructure problems were solved much slower that they could had been. The reasons for the situation described by the experts were related to:

- lack of continuity of strategies and decisions due to political changes in the local authorities
- lack of competent experts in local authorities to create logic, long term spatial strategic plans and consequently, continuously execute them
- too slow decision making process and distribution of EU founds
- shortage of resources both materials, companies and human resources to execute the plans
- law regulations that made the investment procedures very complex and time consuming
- very fast increases of prices

Beside the development issues related to infrastructure the experts mentioned also:

- lack of professional, business practical logistic trainings in region
- lack of electronic signature

- lack of e-office applications in regional and government offices
- low ITC awareness in the society
- too high costs of software and its implementation in the companies
- low ITC usage in Polish companies

In summary the experts pointed that the key issue in the regional development is the integrated transport infrastructure both regional, intercity and intra-city as well as ITC awareness and usage.

3.3.3 Successful regional development projects

The interview partners had difficulties with clear listing of the regional development projects and assessing the success using the provided scale due to the facts:

- the definition for “the regional development project” was not clear
- the experts were not sure how to compare small project such as a training with a big project such as the renovation of the Tri-City ring
- success of some of the project could be only assessed in longer time horizon

Only 9 out of 10 interview experts provided the assessment but their criteria of assessment were different. The summary of the answers is presented in the below table.

Table 5 Successful regional development projects – the summary of answers

Number of successful regional development projects	<25%	25-50%	51-75%	>75%
	0	3	1	5

The successful regional development projects mentioned by more than one expert were:

- the container terminal in Gdynia
- renovation of the Tri-Cities ring
- the special economy zones

The local authorities stated that the operational plan for 2004-2006 was a success as all the funds were used in 100% in the Pomerania region.

Additionally the logistic service provider's expert pointed the new Prologis Logistic Centre as a successful development projects. The logistics consultant pointed the training and education project financed from EU funds as successful in more that 75%. The research institution expert underlined that there were many business driven projects that positively impacted the development of the region e.g. logistic centres owned by logistic service providers.

3.3.4 Strengths and weaknesses of the region

The interview partners commented on the strengths of the region in logistics and ICT.

The most often mentioned strength was the economical potential of the Tri-Cities agglomeration due to:

- the see ports in Gdańsk and Gdynia - strategic for Polish economy
- the airport in Gdańsk Rębiechowo and potentially the new one planned in Gdynia
- the number of inhabitants, number of businesses and universities

The potential was also related to the advantageous geographical location of the region, situated on the cross road of the main transportation corridors from North to South and from West to East.

In ICT the key strength mentioned by most of the experts was the number of investments located in the region in software companies and the strong job market for software developers. Two experts commented that due to the big universities and the software companies there was the strength in resources and labs for ICT research & development. One of the experts pointed that the ICT usage level in the Pomerania region was higher than in other regions.

The weaknesses in logistics in the regions were all focused the same as key development issues, on the transportation infrastructure and lack of logistic centres. The geographical location of the region was also mentioned as a weakness due to the fact it is remote from the main Polish consumer population centres in the Centre and South of Poland. All the business experts and the logistics consultant presented the weaknesses related to lack of modern warehouses and logistic

centres in the see ports as well as lack of advanced, developed logistic services.

The weaknesses in ICT were similar to the development issues such as too high cost, lack of resources, lack of electronic signature, and low usage of ICT for business management. The local authority expert also mentioned about missing internet access in some part of the region as well as still not sufficient cover for wireless internet access. The trade company expert also pointed that the knowledge sharing e.g. conferences and panels were not organized in Gdańsk, the strong ICT centres were in Warsaw and Poznań.

3.3.5 The logistics competence level

Table 6 The logistics competence level

	very low	questionable	accept-able	high	very high
of your company/ institution in comparison to leading companies in your branch?	0	0	2	5	2
of your region in comparison to other regions in the Baltic Sea Region	0	2	3	3	0
of the local authorities in the region?	1	1	3	3	0
of the support agencies in the region?	0	0	3	2	0

The above table summarizes the expert answers regarding the assessment of the logistics competences. The experts presented their opinion in three different contexts. When assessing their own organization, institution or company they stated, in most cases, that the competencies were on a high or very high level. There were only too experts that pointed the acceptable level however both of them explained that the companies were growing, developing and increasing the scope of business competencies therefore their resources were

continuously being trained and the current competencies would have been more than enough if the company hadn't transformed.

The support initiative's interview partner did not provided the assessment of the agency's employee logistic competencies explaining that the agency was not involved in any logistic activities and didn't have logistic competencies.

The experts also compared the logistic competencies in Pomerania with other BSR countries, in general the rating is lower (acceptable and high) because the experts stated there were higher competencies in Germany and Scandinavia. They assessed the other BSR country on the same or lower level than Pomerania. Two experts did not provided answer because they did not have experience of cooperating with BSR countries to be able to assess the level of the logistic competencies.

There was a contrast in the assessments of the local authority's competencies. When the institution assessed themselves the rating was high but when assessed by others the rating was lower. Half of the experts said: acceptable and two rated as questionable or very low. One expert did not provide the rating for local authorities due to lack of experience with local authorities in the field of logistics.

50% of experts were not able to assess logistic competencies of the support initiatives as they did not know them. The logistic consultant rated the support initiative's logistic competencies as acceptable because they had experience providing consulting services for the support initiatives. The local authorities, who cooperate closely with the support initiatives rated their logistic competencies as high, however the support initiative's expert stated they could not rate the logistic competencies as they were not involved in any activities that require logistics competencies.

3.3.6 Participation of the interviewed companies in logistics support agencies, networks or initiatives

The interview was performed with three manufacturing companies, one logistic service provider and one trade company. Three experts from those five companies answered that their companies were not involved in any support agencies, networks or initiatives. Only the pharmacy manufacturing and trade companies were involved in cooperation with The Institute of Logistics and Warehousing in Poznań.

The pharmacy manufacturing company worked on initiatives to implement product identification, tracing and RFID. There was a

network of companies and organizations preparing a government founded project for integrated, national data base to track and trace product on the pharmacy market.

The trade company was involved in the logistic directors' forum. It was interesting that both experts worked independently with the Institute and both made a comment this was a fruitful cooperation and also stated that there was such an institution missing in the Pomerania region.

3.3.7 Assessment of local authorities´ support and policy concerning logistics and ICT issues

The below table summarizes the assessment of local authorities provided by the experts. A half of the experts answered that they were neither unsatisfied nor satisfied and commented that they did not know local authorities support or policy concerning logistics.

The answer "satisfied" was given by one of the local authority experts and the logistic consultant. Both of them provided reasons related to the activities in progress regarding the see ports and road transport infrastructure.

The answer "rather unsatisfied" was given by the research institute expert and due to all the delays in improving infrastructure and lack of strategy and decisions continuation. The trade company assessed the fact that there is no policy or support known as "rather unsatisfied" as they expected that was the local authority role.

The logistics service provider and one of the local authority's experts did not provided the assessment. The company did not know any support or policy therefore stated the assessment could not be made. The local authority did not want to assess own institution.

In summary 70% of the respondents stated they did not know any support or policy of local authorities regarding logistics.

Table 7 Assessment concerning logistics issues

very unsatisfied	rather unsatisfied	neither unsatisfied nor satisfied	satisfied	fully satisfied
0	2	4	2	0

In the assessment provided for the support or policy from local authorities regarding ICT all the experts stated there is no activities from the local authorities in the area of ICT. The support initiative's expert commented that there was too low awareness and lack of understanding from the local authorities regarding the importance of ICT. The research institution's expert stated there was very low interest and support for the ICT cluster organized in the region. The below table summarizes the responses.

Table 8 Assessment concerning ICT issues

very unsatisfied	rather unsatisfied	neither unsatisfied nor satisfied	satisfied	fully satisfied
0	3	5	0	0

3.3.8 Proposals for improvement

The proposals for improvements in logistics and ICT were provided by the experts for the following three areas:

- for the expert's company, organization, institution
- for local authorities
- for support initiatives/agencies

Regarding the internal improvements, the companies were focused on areas related to their current business needs such as increasing the warehouse space, increasing the transportation capacity due to company's developments. In ICT the proposed improvements were: implementing on a wider scale EDI and ICT software applications.

The research institution, support initiatives and local authorities focused on wider implementations ICT by using more software applications, electronic document flows and electronic signature

Additionally the local authority's representative mentioned the need for Geographic Information System (GIS) and the easier access to the company car.

The logistic consultant talked about building further a stronger team with very high logistics competencies (e.g. law and regulations).

The required improvements of logistics in local authorities, mentioned by the experts, were:

- improving the quality of roads
- stopping the cancellations of the intra-regional railway connections
- improving the quality of travel to people's work places
- further improvements in the see ports e.g. the depth of the port
- opening the job market to non-EU workers to eliminate the human resources shortages in the construction industry which slow down the infrastructure developments
- improving the procedures and regulations for the construction permits
- coordination of the cooperation between the business and science for logistics development in the region

The experts provided the same or similar proposals for improvements of ICT in local authorities, which were implementations of:

- customer service based on Internet
- electronic flow for all documents (requests, decisions, permits)
- customer's case/requests status visibility
- higher ICT skilled politicians and clerks

The improvement proposals in support initiatives / agencies focused on better communication and contacts with business allowing easy access to the particular business related information. Within the ICT areas the local authorities and support initiative's experts proposed improvements in the scope of ICT usage in the agencies.

In summary the business proposed improvements to adjust the logistics capabilities to their growing business and increase ICT applications in business processes. The proposals for the local authorities mainly focused on infrastructure and law regulations to ease making business and work in the region. The improvement proposals for both local authorities and support initiatives were pointing the improved Internet and electronic communication between the customers and the institutions.

3.3.9 Roles and responsibilities in regional development

The roles and responsibilities in regional development were perceived in the same way by all the experts as far as the local authorities were concerned. The experts stated that the local authorities were

responsible for creating the investor friendly environment and for coordinating the development activities on the strategy and policy level for the region. The local authorities should be responsible for framework plans.

The role of the companies was to define requirements, ideas and partner with the local authorities in building the development plans. The logistic consultant stated that the local authorities should consult the lower level decisions and plans with the business to align the activities with the current business needs.

The electronic manufacturing expert underlined the importance of sharing the development plans of the local authorities with the business to allow the alignment of business strategies and plans with the regional development plans. This type of cooperation creates predictable and friendly conditions for investors.

The pharmacy manufacturing expert also mentioned the role of universities and researchers to support the regional development planning by performing researches and share knowledge with the local authorities and business.

The research institution pointed the role of business to engage in Public Private Partnership (PPP) which could be a new way in Polish regional development. The reason it was considered as “a new way” was the fact that the law for PPP had been implemented in Poland only recently.

There were comments from the business experts that the local authorities were limited by the centrally controlled decisions. That got confirmed by the local authorities’ representative who underlined the importance of local spatial plans that unfortunately were created and controlled centrally on regional level. That situation limited the cooperation between the local authorities and the business and also created issues and barriers for the local priorities that were not known or understood by the regional offices.

In summary the conclusion could be drawn that the local authorities should be responsible for creating strategy, policy and framework base on the inputs from business, science and directions from the regional offices, however should have more freedom in local spatial planning than they have today. The execution of the regional development should be supported by development agencies that should connect the authorities with the business, science and government. The experts said the business role is to engage in cooperation and partnership with the local authorities also via PPP.

3.4 Findings regarding education and skills in the regions

3.4.1 Qualification of employees in logistics

The below tables present the expert's answers concerning the assessment for the qualification in logistics of employees.

Table 9 Logistics qualification in your company

Qualification level in logistics					
	very low	rather low	acceptable	high	very high
blue-collar worker	0	0	3	1	0
white-collar worker	0	1	2	6	1
management	0	0	1	5	4

In the first part where the experts assessed their own companies, institutions, organizations only four business representatives were able to assess the blue-collar worker qualifications due to the fact the rest interviewed institutions and organizations did not employ blue collar workers.

The business experts assessed higher their own employees than the employees in the region and the explanation provided was that the companies invested in trainings for their employees to bring their skills to the acceptable and high level.

The trade company expert provided two different assessments of the blue-collar workers by making differentiation between people working in the warehouse (higher qualification) and people working in the shops. Similarly the electronic manufacturing expert pointed that the employees in the purchasing department had higher qualifications than employees in other departments in the company.

In general the white-collar workers and management qualifications are ranked higher than blue-collar workers.

Table 10 Logistics qualification in the region

Qualification level in logistics					
	very low	rather low	acceptable	high	very high
blue-collar worker	0	6	3	1	0
white-collar worker	0	3	6	1	0
management	0	3	3	4	0

Most of the assessments indicated that the logistics qualifications in the region were rather low or acceptable for blue and white collar workers.

The lowest assessment was given by the expert from the support initiative because in their opinion there was lack of people capable to build and execute strategic regional development plans that integrate and consider long term requirements using knowledge of different fields e.g. logistics, ICT, spatial planning etc.

Some of the experts struggled to provide only one rank for the entire region, they underlined that there were big differences depending on the company and industry.

3.4.2 Qualification of employees in ICT

The below tables summarize the assessment provided by the expert for employee ICT qualifications.

Table 11 ICT qualification in your company

Qualification level in ICT					
	very low	rather low	acceptable	high	very high
blue-collar worker	0	2	2	0	0
white-collar worker	0	0	5	2	3
management	0	0	1	6	3

In general the ICT qualifications of blue and white-collar workers were assessed lower than the logistics ones. The management qualifications were assessed much higher than other groups.

The local authorities' expert explained that the ICT competencies were forced by the fact people that had to work with software applications on their jobs.

Table 12 ICT qualification in the region

Qualification level in ICT					
	very low	rather low	acceptable	high	very high
blue-collar worker	0	7	2	1	0
white-collar worker	0	2	7	1	0
management	0	1	6	3	0

The ICT qualification assessment for the region was lower than for the interviewed companies, institutions and organizations. This was related with the earlier mentioned internal trainings as well as the fact the interviewed parties require the basic ICT qualifications from their employees.

The lowest rank was given to the blue collar workers that aligned with the earlier statements about the low ICT awareness of the society in Poland and in the region.

3.4.3 Expectations for future educational training in logistics and ICT

In general the experts mentioned that there had been many trainings funded in the 2004–2006 period, however still practical and professional trainings were required, both in logistics and ICT.

The experts provided few very specific requirements for logistics training such as:

- Controlling in logistics
- Regional & interregional logistics – best practices/solutions in EU
- Post graduate studies focused on logistics:
  - new trends / best solutions / best practices / cost reductions
  - economics & financials around new solutions

    - communication with customers about new logistics solutions offered (e.g. reasoning/convincing regarding benefits of outsourced logistics)
- Supply chain management
- APICS (The Association for Operations Management) training -easy/cheap access to the trainings
- Management of resources: financial, material, people, time, information
- Project management – specific to continuous improvements of logistic process, systems and transitions

The support initiative experts stressed the need for workshops in strategic regional development planning. Also other experts mentioned earlier the lack of integrated approach for spatial planning as a weakness or issue in the region.

In the area of ICT the following training requirements were defined:

- Continuous training for the society and the authorities to become familiar with the different applications and solutions in the e-office concept
- Create a system of continuous improvement of ITC skills – follow the market
- ITC capabilities to improve local authority's processes
- Data security management – risk avoidance
- Integrated systems to manage transport & information – intelligent traffic
- ITC in reducing usage & cost of electric energy
- Development trends for ITC in logistics
- Software applications for managing projects and teams:
    - e.g. Microsoft Project, Excel, Access

3.5 Findings regarding company expectations

3.5.1 Expectations and wishes for further logistics and ICT development

The construction of A1 motorway and connections into it definitely were the first priority for all the experts. Some of the experts also added the requirement for the road connections between the see ports in Gdynia

and Gdańsk and the motorway. The expert from Kwidzyn underlined the need for the bridge over Vistula to give access to and from the city.

Many of the experts also mentioned the expectation to reduce the traffic in the Tri-Cities. The trade company's expert stressed the need to build a new railway connection between the airport and the Gdańsk centre due to the fact most of the new house estates were constructed outside of the Tri-City ring but there was no long term solution to assure the right level capacity transportation solution.

There was also a lot of focus on the recommendations for a further development of the see ports in order to meet the demand and maximize transit to South of Europe. Five experts pointed the need for creation of public logistic centres in ports, close to container terminals.

3.5.2 Policy recommendations

Two of the experts provided policy recommendation related to the development agencies to become more active in cooperation with business, providing clear dedicated information and supporting Polish companies in building business relations with companies in BSR.

There was an expectation expressed that the government, local authorities and support agencies provide more support for the development of the see and ports economy and related industries.

In relation to the weaknesses of the region and required trainings there was policy recommendation for having logic coordination of spatial development plans and investments. Four experts expressed the need for having long term development plans not destroyed by frequent (4 year) political changes in the local authorities.

The construction industry experts expressed expectation that the local authorities prepare infrastructure such as electricity, water and gas to support further development.

The companies expressed expectation that the local authorities would be more flexible and open minded.

The pharmacy manufacturing expert pointed a recommendation for the policy to improve the transport capabilities in the Eastern direction and engage local authorities in developing the logistic services in the region.

The research institute expert and one of the local authorities experts recommended to stimulate the improvements in ICT awareness of the society by encouraging and training people to use the e-office

application, assuring free access to Internet plus support the Internet development by public orders.

The support initiative expert stressed the policy recommendation for maximizing PPP.

3.6 Interpretation of results and conclusion

Base on the expert interview responses the following conclusions are drawn: the economy growth in Poland and Pomerania, as well as development of business in this region drive growing demand for logistic services as well as requirements for developments of logistic processes and systems base on ITC. The positive trends are slowed down by very low quality infrastructure.

The answers regarding the trends in ICT show that the Internet and software business applications are required for companies and people to survive in today's market. However, despite the fact software development centres are present in Pomerania, still Polish companies are not building their competitive advantage based on an active usage of ICT solutions in running their businesses.

The manufacturing, trade and logistics service companies don't have many business contacts in BSR and if they have, the partners are from Germany or Scandinavia. The lowest number of business contacts is established with Russia and Lithuania, Latvia, Estonia. The interviewed companies have no direct business contact established, the existing ones are only via distributors. This is a field where the support initiatives / agencies could have actively help the business in networking between Polish and other BSR companies e.g. by organizing data bases, portals, meetings, panels where the businessmen could meet and learn more about each other.

The companies from Pomerania are not involved in many new logistic projects with other business partners in BSR unless they implement improvements into the business processes with partners they already have had contacts with (mainly suppliers in Germany). The local authorities and support initiative actively participate in cross-national projects lead in BSR however without the significant business participation and engagement.

The fact of low business cooperation within BSR by Polish companies is not related to any significant constraints or problems regarding business relations. The poor quality of Polish infrastructure, political situation with Russia and differences in law regulations

between Poland and EU create problems for running business cross the borders in BSR but they are not a barrier.

The regional development projects are not well known to business. All the key issues in regional development mentioned by the interview partners are related to the transport infrastructure and integrated system, see ports and lack of logistic centres. In the ICT area the main development issues are the cost of Internet access and software applications as well as the low ICT awareness in the society.

There were only three successful regional development projects widely recognized: the container terminal in Gdynia, renovation of the Tri-Cities ring, the special economy zones. This is very short list considering the size of the region.

The strength of the region was related to the high potential of the market and economy in the region that are strongly supported by the see ports presence as well as the geographical localization. The weaknesses are mainly related to the lack of good quality infrastructure to support the market demand.

The logistic competencies within companies are assessed on the acceptable or high level however business does not assess well the competencies of the local authorities and support agencies. In many cases there are no contacts with the agencies and the agency itself does not recognize its role in logistics development activities.

Companies participate in initiatives, networking with other businesses but unfortunately those activities are originated outside of Pomerania and they are not related to local authorities or support agency's activities.

70% of the respondents stated they did not know any support or policy of local authorities regarding logistics nor ICT.

The interviewed experts agree that the local authorities should be responsible for creating strategy, policy and framework base on the inputs from business, science and directions from the regional offices. They should also have more freedom in local spatial planning than they have today. The execution of the regional development should be supported by development agencies who should connect the authorities with the business, science and the government. The business role is to engage in cooperation and partnership with the local authorities also via PPP.

The logistics and ICT qualifications are ranked by the business experts higher for their own employees than the employees in the region due to the fact the companies invested in trainings for the new employees to bring their skills to the acceptable and high level. The

conclusion is that the former and existing education system does not supply to the market people with required qualifications in logistics and ICT. The experts rank the employees between rather low and acceptable level. During the entire interview processes many experts were underlining the weakness of the region related to low ICT qualifications in the society and especially in SME.

The qualification situation was proven by the list of required trainings.

The company expectations and recommendations focus mainly on the transportation infrastructure (including ports) and logistic centres, ICT qualifications improvements and better relations between the local authorities, support agencies and business.

4 SUMMARY AND OUTLOOK

The interview was performed with 10 experts representing different companies, organizations and institutions but the answers provided show very similar trends in logistics and ICT, similar situation regarding the cooperation within businesses located in BSR as well as development issues and similar expectations and recommendations.

The research result clearly show transportation infrastructure development and long term spatial planning are the priorities for the Pomerania region. The condition to successful regional development is the close cooperation between local authorities and support initiatives engaging and supporting business and investors.

The next steps in the regional development should focus on:

- expediting the transportation infrastructure development, specially in the areas mentioned by the interviewed experts
- building more investor friendly environment by developing ICT in the office processes as well as supporting with simpler procedures, construction infrastructure availability and engaging in PPP
- provide stronger support to ICT cluster, organize logistic cluster and stronger support the see ports developments
- encourage and network companies from different BSR to cooperate

The next steps should also focus on dedicated logistics and ICT trainings aligned with specific business needs.

There is also support needed for local authorities and development agencies to increase the logistics awareness and competencies and help them to recognize their role in the logistics and ICT development in the region.

APPENDIX

Appendix 1 Interview guideline

Structure

Introduction:

Introduction of the interviewer
Short presentation of the LogOn Baltic project and its objectives

Question clusters:

I: Trends (1 question)	*∑min 5 min*
II: Business Connections (3 questions)	*∑min 12 min*
III: Regional Development (9 questions)	*∑min 30 min*
IV: Education/Skills (2 questions)	*∑min 5 min*
V: Outlook (2 questions)	*∑min 8 min*

Interview – Basic information

Interviewer

Name:
Institution:

Interviewee

Name:
Function:
Name of institution:
Type of institution:

- ☐ Manufacturing industry
- ☐ Retail industry
- ☐ Logistics service provider
- ☐ Logistics consultant
- ☐ Local authority
- ☐ Support initiative
- ☐ Research institution

Date, duration and location of interview

Date:
Duration:
Location:

Interview – Questions

I: Trends

I.1.) What do you think are currently the most important trends relevant for logistics and ICT that will influence:

a) your company / institution / organisation?

Logistics:

ICT:

b) your region?

Logistics:

ICT:

II: Business Connections

II.1.) Do you have any business contacts to the Baltic Sea Region? If so, please differentiate among:

Number of contact	0-5	6-15	16-25	>25
Federal Republic of Germany	❑	❑	❑	❑
Poland and Baltic States (Lithuania, Latvia, Estonia)	❑	❑	❑	❑
Russia	❑	❑	❑	❑
Scandinavia (Denmark, Sweden, Finland, Norway)	❑	❑	❑	❑

Why do you have so many / no contacts?

II.2.) Are there any logistic projects planned with new suppliers / customers in the BSR in the next year(s)? *[for industry and research]*

Number of logistics projects	0-2	3-5	6-10	>10
	❑	❑	❑	❑

What kind of projects?

II.2.) Are there any (state-run) cross-national projects planned with local authorities / institutions / companies in the BSR in the next year(s)? *[for local authorities and support agencies]*

Number of cross-national projects	0-2	3-5	6-10	>10
	❑	❑	❑	❑

What kind of projects?

II.3.) When cooperating with partners from Eastern Europe, new EU member countries, Russia, Scandinavia[1] respectively what kind of challenges did emerge?
Please describe inhibitors or possible constraints when dealing with these foreign business partners:

a) concerning the business relations (e.g. intercultural differences, business performance factors, skills of workforce, management skills)
b) concerning institutional setup (e.g. transport and ICT infrastructure, general political conditions, …)

III: Regional Development

III.1.) Do you know of any regional development activities in your region?

III.2.) What are the key regional development issues (e.g. concerning infrastructure, location, training, local support …) for:

a) logistics in your region?
b) ICT in your region?

III.3.) What kind of former regional development projects in your region have been successful?

Number of successful regional development projects	<25%	25-50%	51-75%	>75%
	❑	❑	❑	❑

How did you come to this judgement?

III.4.) In your opinion, what are the strengths and weaknesses in the area of logistics and ICT in your region? What determined your decision to

[1] Eastern European countries, Russia, Scandinavia will add Federal Republic of Germany respectively and cancel their home country.

locate in this region (please refer to special regional logistics competences, locational factors, infrastructural conditions, support programs, skilled workforce …)?

	of Logistics	of ICT
Strengths		
Weaknesses		

III.5.) How do you think is the logistics competence level…

	very low	question-able	accept-able	high	very high
of your company/institution in comparison to leading companies in your branch?	❑	❑	❑	❑	❑
of your region in comparison to other regions in the Baltic Sea Region	❑	❑	❑	❑	❑
of the local authorities in the region?	❑	❑	❑	❑	❑
of the support agencies in the region?	❑	❑	❑	❑	❑

Please comment.

III.6.) Is your company participating in logistics support agencies, networks or initiatives (e.g. for Hamburg Region: Logistics Initiative Hamburg, Süderelbe etc.[2])? Why?

III.7.) How satisfied are you with the local authorities´ support and policy (e.g. for Hamburg[3]: Wirtschaftsbehörde) concerning logistics and ICT issues?

Logistics:

very unsatisfied	rather unsatisfied	neither unsatisfied nor satisfied	satisfied	fully satisfied
❑	❑	❑	❑	❑

Please comment.

[2] please add locally the most important local agencies
[3] please adapt locally

ICT:

very unsatisfied	rather unsatisfied	neither unsatisfied nor satisfied	satisfied	fully satisfied
❑	❑	❑	❑	❑

Please comment.

III.8.) Where do you see room for logistical and ICT improvements?

Improvement	of Logistics	of ICT
a) in your company / organisation		
b) in local authorities		
c) in support agencies		

III.9.) How do you see the different roles and responsibilities for regional development (e.g. who should start development activities: state, pubic-private-partnerships, companies by themselves, associations, etc.)?

IV: Education/Skills

IV.1.) How would you value the employees´ qualification level in logistics / ICT

a) in your company?

Qualification level in logistics					
	very low	rather low	acceptable	high	very high
blue-collar worker	❑	❑	❑	❑	❑
white-collar worker	❑	❑	❑	❑	❑
management	❑	❑	❑	❑	❑
Qualification level in ICT					
	very low	rather low	acceptable	high	very high
blue-collar worker	❑	❑	❑	❑	❑
white-collar worker	❑	❑	❑	❑	❑
management	❑	❑	❑	❑	❑

b) in the region?

Qualification level in logistics					
	very low	rather low	acceptable	high	very high
blue-collar worker	❑	❑	❑	❑	❑
white-collar worker	❑	❑	❑	❑	❑
management	❑	❑	❑	❑	❑
Qualification level in ICT					
	very low	rather low	acceptable	high	very high
blue-collar worker	❑	❑	❑	❑	❑
white-collar worker	❑	❑	❑	❑	❑
management	❑	❑	❑	❑	❑

Please provide some background information on the professional qualification of your employees.

IV.2.) What educational training do you expect to be relevant in the future and how do you support further education and training in the area of logistics and ICT?

V: Outlook

V.1.) What are your expectations and wishes for further logistics and ICT development (from local authorities, support agencies…)?

V.2.) Do you have any concrete policy recommendations in the area of logistics / ICT?

LogOn Baltic Publications (as of 21.9.2007)

LogOn Baltic Master reports

1:2007 Developing Regions through Spatial Planning and Logistics & ICT competence - Final report
Wolfgang Kersten, Mareike Böger, Meike Schröder and Carolin Singer

2:2007 Analytical Framework for the LogOn Baltic Project
Eric Kron, Gunnar Prause and Anatoli Beifert

3:2007 Aggregated logistics survey report *(working title)*
Håkan Aronsson and Naveen Kumar

4:2007 Aggregated ICT survey report *(working title)*
Eric Kron and Gunnar Prause

5:2007 Aggregated Expert interview report *(working title)*
Matti Takalokastari

LogOn Baltic Regional reports

Development Measure Impact Analysis (DEMIA)

10:2007 REGIONAL DEVELOPMENT IN THE SOUTHERN METROPOLITAN REGION OF HAMBURG, GERMANY - Development Measure Impact Analysis (DEMIA) on regional development related to logistics and ICT
Janina Benecke, Jürgen Glaser and Rupert Seuthe

11:2007 REGIONAL DEVELOPMENT IN MECKLENBURG-VORPOMMERN, GERMANY - Development Measure Impact Analysis (DEMIA) on regional development related to logistics and ICT
Gertraud Klinkenberg

12:2007 REGIONAL DEVELOPMENT IN ESTONIA - Development Measure Impact Analysis (DEMIA) on regional development related to logistics and ICT
Jaak Kliimask

13:2007 REGIONAL DEVELOPMENT IN SOUTHWEST FINLAND - Development Measure Impact Analysis (DEMIA) on regional development related to logistics and ICT
Kaisa Alapartanen

14:2007 REGIONAL DEVELOPMENT IN LATVIA - Development Measure Impact Analysis (DEMIA) on regional development related to logistics and ICT
Riga City Council - Rode & Weiland Ltd.

15:2007 REGIONAL DEVELOPMENT IN LITHUANIA - Development Measure Impact Analysis (DEMIA) on regional development related to logistics and ICT
NN

16:2007 REGIONAL DEVELOPMENT IN POMERANIA, POLAND (THE POMORSKIE VOIVODESHIP) - Development Measure Impact Analysis (DEMIA) on regional development related to logistics and ICT
Anna Trzuskawska

17:2007 REGIONAL DEVELOPMENT IN SAINT PETERSBURG, RUSSIA - Development Measure Impact Analysis (DEMIA) on regional development related to logistics and ICT
Mikhail Pimonenko

18:2007 REGIONAL DEVELOPMENT IN ÖSTERGÖTLAND, SWEDEN - Development Measure Impact Analysis (DEMIA) on regional development related to logistics and ICT
Håkan Aronsson and Staffan Eklind

ICT surveys

20:2007 ICT SURVEY IN THE SOUTHERN METROPOLITAN REGION OF HAMBURG, GERMANY
Wolfgang Kersten, Meike Schröder, Mareike Böger, Carolin Singer and Tomi Solakivi

21:2007 ICT SURVEY IN MECKLENBURG-VORPOMMERN, GERMANY
Eric Kron, Gunnar Prause and Tomi Solakivi

22:2007 ICT SURVEY IN ESTONIA
Seren Eilmann and Tomi Solakivi

23:2007 ICT SURVEY IN LATVIA
Riga City Council, Telematics and Logistics Institute Ltd. and Tomi Solakivi

24:2007 ICT SURVEY IN LITHUANIA
NN and Tomi Solakivi

25:2007 ICT SURVEY IN SOUTHWEST FINLAND
Juha Läikkö and Tomi Solakivi

26:2007 ICT SURVEY IN POLAND
Anna Trzuskawska and Tomi Solakivi

27:2007 ICT SURVEY IN SAINT PETERSBURG, RUSSIA
Yuri Ardatov and Tomi Solakivi

28:2007 ICT SURVEY IN ÖSTERGOTLAND, SWEDEN
Naveen Kumar, Håkan Aronsson and Tomi Solakivi

Logistics surveys

30:2007 LOGISTICS SURVEY IN THE SOUTHERN METROPOLITAN REGION OF HAMBURG, GERMANY
Wolfgang Kersten, Mareike Böger, Meike Schröder, Carolin Singer and Tomi Solakivi

31:2007 LOGISTICS SURVEY IN MECKLENBURG-VORPOMMERN, GERMANY
Eric Kron, Gunnar Prause and Tomi Solakivi

32:2007 LOGISTICS SURVEY IN ESTONIA
Ain Kiisler and Tomi Solakivi

33:2007 LOGISTICS SURVEY IN LATVIA
Riga City Council, Telematics and Logistics Institute Ltd. and Tomi Solakivi

34:2007 LOGISTICS SURVEY IN LITHUANIA
NN and Tomi Solakivi

35:2007 LOGISTICS SURVEY IN SOUTHWEST FINLAND
Tomi Solakivi

36:2007 LOGISTICS SURVEY IN POLAND
Anna Trzuskawska and Tomi Solakivi

37:2007 LOGISTICS SURVEY IN SAINT PETERSBURG, RUSSIA
Valeri Lukinsky, Natalia Pletneva and Tomi Solakivi

38:2007 LOGISTICS SURVEY IN ÖSTERGÖTLAND, SWEDEN
Håkan Aronsson, Naveen Kumar and Tomi Solakivi

Expert interviews

40:2007 EXPERT INTERVIEWS IN THE SOUTHERN METROPOLITAN REGION OF HAMBURG, GERMANY - Results and analysis of the intersectoral expert interviews in the field of logistics and ICT
Wolfgang Kersten, Meike Schröder, Carolin Singer and Mareike Böger

41:2007 EXPERT INTERVIEWS IN MECKLENBURGVORPOMMERN, GERMANY - Results and analysis of the intersectoral expert interviews in the field of logistics and ICT
Gunnar Prause, Margitta Rudat, Gertraud Klinkenberg and Eric Kron

42:2007 EXPERT INTERVIEWS IN ESTONIA - Results and analysis of the intersectoral expert interviews in the field of logistics and ICT
Ain Kiisler and Seren Eilmann

43:2007 EXPERT INTERVIEWS IN SOUTHWEST FINLAND - Results and analysis of the intersectoral expert interviews in the field of logistics and ICT
Matti Takalokastari, Matias Suhonen, Petri Murto and Hilja-Maria Happonen

44:2007 EXPERT INTERVIEWS IN LATVIA - Results and analysis of the intersectoral expert interviews in the field of logistics and ICT
Riga City Council and Rode & Weiland Ltd.

45:2007 EXPERT INTERVIEWS IN LITHUANIA - Results and analysis of the intersectoral expert interviews in the field of logistics and ICT
NN

46:2007 EXPERT INTERVIEWS IN POMERANIA, POLAND - Results and analysis of the intersectoral expert interviews in the field of logistics and ICT
Anna Trzuskawska

47:2007 EXPERT INTERVIEWS IN SAINT PETERSBURG, RUSSIA - Results and analysis of the intersectoral expert interviews in the field of logistics and ICT Russia
Natalia Ivanova

48:2007 EXPERT INTERVIEWS IN ÖSTERGÖTLAND, SWEDEN - Results and analysis of the intersectoral expert interviews in the field of logistics and ICT
Håkan Aronsson, Staffan Eklind and Naveen Kumar

Regional Profiles

50:2007 REGIONAL LOGISTICS & ICT PROFILE: THE SOUTHERN METROPOLITAN REGION OF HAMBURG, GERMANY
Wolfgang Kersten, Meike Schröder, Mareike Böger and Carolin Singer

51:2007 REGIONAL LOGISTICS & ICT PROFILE: MECKLENBURG-VORPOMMERN, GERMANY
Eric Kron, Gunnar Prause and Gertraud Klinkenberg

52:2007 REGIONAL LOGISTICS & ICT PROFILE: ESTONIA
Ain Kiisler

53:2007 REGIONAL LOGISTICS & ICT PROFILE: SOUTHWEST FINLAND
Jarmo Malmsten

54:2007 REGIONAL LOGISTICS & ICT PROFILE: LATVIA
Telematics and Logistics Institute Ltd.

55:2007 REGIONAL LOGISTICS & ICT PROFILE: LITHUANIA
NN

56:2007 REGIONAL LOGISTICS & ICT PROFILE: POMERANIA, POLAND
Anna Trzuskawska

57:2007 REGIONAL LOGISTICS & ICT PROFILE: SAINT PETERSBURG, RUSSIA
Elena Timofeeva

58:2007 REGIONAL LOGISTICS & ICT PROFILE: ÖSTERGÖTLAND, SWEDEN
Håkan Aronsson, Naveen Kumar and Staffan Eklind

LogOn Baltic Master reports

60:2007 STRUCTURAL CHANGES AND TRANSPORT CHALLENGES - A report about the Danish structural reform
Kent Bentzen and Michael Stie Laugesen

LogOn Baltic Regional reports

70(FI):2007 VARSINAIS-SUOMEN LOGISTINEN KILPAILUKYKY
Matti Takalokastari (toim.)

71:2007 AIR TRAFFIC SERVICE DEVELOPMENT IN TURKU REGION *(working title)*
Pekka Jaakkola

72:2007 ENTERPRISE ICT *(working title)*
Kalle Luhtinen

*) LogOn Baltic reports published in any other language than English language are marked with a 2-digit country ID code. E.g. publication nro. 70(FI):2007 is written in Finnish language.

Published by

LogOn Baltic
Turku School of Economics
Rehtorinpellonkatu 3, FI-20500 TURKU, Finland