LOGISTICS AND TRANSPORT MANAGEMENT
Masters Thesis No. 2001: 22

GÖTEBORG

AS A TRANSIT PORT

FOR THE BALTIC STATES

AND RUSSIA

(A MARKET DESCRIPTION)

OLUSINA O. COKER
This thesis deals with the Port of Göteborg and its effort to penetrate into the maritime/cargo traffic in the Baltic Sea Region and Russia (BSRR). It is an attempt aimed at gaining and sustaining competitive advantage in container cargo.

In the course of this study, it was discovered that analysis of shipping requires a continuous surveillance of development in policies, technology, factors of production, ecology and culture, the economy and international trade. Sectors that are particularly dependent on sea transports are the energy and raw materials markets, agriculture and the wood, mining, steel and car industries.

Since the break up of the former Soviet Union, countries in the Baltic Sea Region, especially those that were part of the former Soviet Union, have made great efforts at moving from a centrally controlled economy to free enterprise system. There are also attempts made at joining the European Union by each of these countries. These two major steps have had tremendous impact on the politics, economy and business life of these countries.

The chief goal of this research is to describe the situation in the BSRR, as regards container traffic in the region. To achieve this goal, I have attempted to analyses the situation both from a narrow and broad perspective; the former is an attempt to zero in on each seaport while the latter aims as given a broad picture of the Baltic market. I hope I have done a fairly good job at this.

I have discovered that great potentials exist for the Port of Göteborg, in container traffic, to routes other than the European market as well as the commercial viability of services offered by the Port of Göteborg.
ACKNOWLEDGEMENT

In the course of this work, I will like to acknowledge the efforts of the following people:

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I also acknowledge the support and understanding of my wife, Carina, without which this work would have been impossible.

Thanks to you all.

Göteborg, January 01, 2002

Olusina O. Coker
DEDICATION

This work is dedicated,

With much love and affection,

To my Mother,

(Mrs. Grace Mobola Coker)

And my Lovely Twins,

(’Rolayo and ’Roti Coker)
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Chapter 1 – Introduction

This thesis is one of three theses dealing with different aspects of the same project initiated by the Port of Göteborg. Therefore, the first introductory chapter is common to all three theses.

First, we give a brief background description. Then we present the Port of Göteborg AB. A section about the geographical region of interest, i.e. the Baltic States and Russia Region (BSRR), will follow this.

Then we explore the problem and state our main purpose. Finally, we explain the structure of this joint effort comprising of three theses.

1.1 Background

During our studies in our Masters Programme at the School of Economics and Commercial Law at Göteborg University, we made a site visit to the Port of Göteborg AB. Leaving the facilities we were fascinated by their operations. What was especially interesting was the pace and magnitude of their development in the face of stiff competition from the Nordic and European mainland ports. Even though the four of us that are undertaking this joint effort did not plan to work together at that point, all of us saw Port of Göteborg AB as an interesting company that we could very much foresee as a study object for our forthcoming Master theses.

When our professor presented us with a subject for a thesis with the Port of Göteborg AB, all of us saw an opportunity to work on this interesting case. The main idea for a research topic was to study the freight flow to and from the Baltic States and Russian Region. This is also interesting from a futuristic view as the imminent entry of the three Baltic States into EU will provide a new impetus to their economies and will present fascinating opportunities for businesses in the region.

Recent impetus for growth in the Baltic States, especially the added impact of liberalization and deregulation policies after gaining independence from Russia, has given rise to sea borne trade and they are increasingly looking westwards. This is all understandable. Economic and cultural links spanning
over centuries of shared history further Sweden’s natural interest into these states, besides a yearning to become a major regional player.

All these combined present a considerable challenge for the actors involved in the port and shipping business to look at the issue from new angles and perspectives.

1.2 Port of Göteborg AB

In this section we shall present our principal, the Port of Göteborg AB\(^1\). For the moment and to provide a perspective, suffice to say that it is the largest transoceanic port in Scandinavia. The City of Göteborg owns the port. One third of seaborne goods in Sweden pass through it and it controls 60% of Swedish container cargo. It is the largest port in Scandinavia with regular traffic to destinations around the world. It has a total port employee of about 1,200 people, port connected work force of 10,000 people and people depending on imports and exports of about 200,000. It is centrally located within the Scandinavian region; serving 70% of Nordic Industrial capacity with half the population of the region is located within 500 Km radius.

In the year 2000, the Port handled 33 million tonnes goods, of which 13.5 million was general cargo (95% of which are unit loads), and 685,000 containers TEUs. It also handled 417,000 trailers (of over 14 meter) and other Ro/Ro units, 310,000 new cars and 2.9 million passengers, in the same period. It has a total quay length of 12 Km and 4.5 million meters square land. The Port of Göteborg has direct sailings of 6 daily departures to continental Europe, 8 daily departures to the Scandinavian region, 3 weekly departures to North America, 4 weekly departures to Asia, 2 daily departures to Great Britain, 1 weekly departure each to Latin America, Australia and New Zealand. It plans to double its capacity by year 2005.

The Port of Göteborg has as its business concept to load and discharge cargo and develop customer-oriented transport solutions that will direct cargo via the Port of Göteborg. In the next 10 years, the Port has as its vision, the attainment of:

\(\text{--------------------------------------}\)

\(^1\) The following part is based on information from the annual report of the Port of Göteborg, 2000.
• 1.5 million TEUs and 700,000 trailers
• Continued strengthening of the competitiveness of the Scandinavian Industry
• New terminal areas
• Safer navigable channels
• A new unit-load rail terminal
• Improved infrastructure
• More direct sailings to overseas markets
• More rational and environmental adjusted transport solutions

To attain these goals, and strengthen its position as Scandinavia’s central port, the Port of Göteborg plans to bring in several direct calls of oceanic ships, through constant contact with shipping companies. This vision also calls for some demand management of cargo supply. In this picture, the Baltic Sea Region and Russia, (BSRR), comes as a natural source and ally.

Figure 1. The Baltic Sea Region and Russia.
1.3 The Baltic States and Russian Region

“The BSRR has the potential to become one of Europe’s strongest and most dynamic growth regions. After a few years of initial difficulties and adjustment problems following independence, the eastern area of the region, with the new Baltic States and Poland, has displayed favourable economic expansion, with sharply rising growth rates and an expansion in trade that outperform the more mature EU countries in the region. The major question has been – and still is – the direction of developments in Russia.”

The Baltic Sea Region is very highly regarded as an interesting development area for the coming 10-15 years period because of the following factors:

- The region has a big population with growing economy
- The increasing purchasing power within certain population’s segments of Baltic countries and Russia give rise to the increased export of consumer goods and the establishment of department store chains such as an IKEA department store in Moscow.
- The region has a unique potential for the structural transforming.
- The volume of trade is growing fast.
- The growth rate of economy development in Baltic States and Russia can bring the expectation of increasing manufactured goods import.
- The investment of share capital, loan and reinvestment profits are increasing.
- The region has a good transport infrastructure.
- Requirement of improved integration is increasing simultaneously with business grow between East and West.

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2 Action Plan For Maritime Transport In The Baltic Sea Region March, 2001
3 Östesjötangenten – Snabbaste vägen till världen (EuroFutures)
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<td>14,8</td>
<td>16,1</td>
<td>15</td>
<td>Oil products, ferry, cargo, steel</td>
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Table 1: Turnover in major transit ports in the Baltic States; 1992 – 1998 (Million ton)\(^4\)

The trend in the Baltic Sea ports has shown a steady increase in total yearly value and an almost steady yearly increase for each succeeding year in each port. This is clear evidence of increasing confidence in the economy of these states by the international business community and an indication of growth in domestic economic activities. In total, freight cargo within the Baltic Sea ports has witnessed a persistent rise in volume. This is an evidence of the increasing importance of the Baltic region, both in the diversified range of products and volume of exports.\(^5\)

1.4 The Port of Göteborg Project

Driven by the profit motive, every commercial concern is sensitive to threats to its position and endeavours to further strengthen it. The Port of Göteborg AB is no exception.

The Port of Göteborg project will examine the cargo flows through the Baltic Sea Region (BSR), especially to and from the Baltic States and Russian Region (BSRR)\(^6\) and identify those flows that can be of commercial interest to the Port of Göteborg. This interest stems from its vision to retain its dominant position in Scandinavia and to become a major player to be reckon with in the mainland European port market. This project, therefore, is aimed at exploring the opportunity for the Port of Göteborg of becoming the main or at least a major transit port for cargo originating from and going to the BSSR.

\(^4\) Statistics supplied by each of the ports listed
\(^5\) Brodin, 2000
\(^6\) Please note that we are talking about two different terms and respective regions
1.5 Limitations

As regards the scope of this study, some limitations seem in order. We shall not look at goods flow that the Port of Göteborg AB cannot handle or intends not to handle in the future (e.g. bulk, oil, etc). Nor will we look at the cruise or ferry traffic since it does not interest the Port of Göteborg AB in the same way as the other flows of goods do. Further, we shall be concerned only with cargo originating from and destined to BSRR, which passes or has the possibility of passing through the Port of Göteborg.

1.6 Project Structure

Since we are dealing with such a large project, we have chosen to split the work into more manageable entities that will fit the structure of the sub-problems that can be derived from the main problem. Each sub-problem will be dealt with as a separate project, but they will include the same introductory parts that will explain the background and main problem and purpose.

The structure is as follow:

- The first part shall take into consideration the present situation for goods flow bound for the BSRR, as a base for predicting the future development. This study will be responsible for that part.
- The second part, to be presented in Erlandsson and Kristenson (2002), examines possible sea-links for goods moving to and from the BSRR.
- The third part, to be presented in Rana (2002), shall deal with the land-bridge part of a combined sea-link, and a land bridge through Sweden, as a way of getting goods from/to the Port of Göteborg to and from the BSRR.

The second and third projects have an important link between them when it comes to agreeing on which port(s) on the Swedish east coast should be used for reloading of the goods.
Chapter 2 – Aim of Study, research questions and research design

This chapter is intended to give a general description of the purpose (aim) of this thesis, the research question, the research design and information needs. It will also specify the main area (points) of focus for this work. The basis of this research work is the purpose and the design.

2.1 Aim of Study of this thesis

The overall aim of this thesis is to describe the present situation with regards to cargo and freight movement to and from the BSRR, and the possibility of the Port of Göteborg being a transit port in the cargo flow. The purpose is to give a detailed report of current situation, as regards containerized cargo, which will serve as a background and help, both in understanding the present situation as well as serve as basis for decision making for the Port of Göteborg. This will also help in the assessment of future possibilities.

2.2 Sub aims

The above aim of study raises the following sub-aims:

- An analysis of the present situation, with a view to help the management at the Port of Göteborg decide if the current volume of cargo in the region is large enough for the port.
- Can the Port of Göteborg be a transit port or a hub in intra-regional and inter-regional cargo flow, to and from the BSRR?
- Does the Port of Göteborg have the infrastructure/superstructure to handle volume and type of cargo, to and from the region?
- Decide if there exist other possible/viable routes to and from the BSRR, apart from the European market
- In the course of this project, it was discovered that the influence of the Finnish maritime industry in ancillary (or support) services is considerable in the region. This has brought to the fore an additional sub-aim for this project:
- Explore other possibilities, apart from cargo movement to and from the region, e.g. ice breaking and environmental pollution, logistics and IT system.
2.3 Research Questions and Information needs

In order to have a focus, it is necessary to set out a number of research questions to be answered by this thesis and the information need for this purpose.

The research questions includes the following:

- Can the Port of Göteborg be a transit port for cargo to and from the BSRR
- How can the Port of Göteborg attract more vessels, for containerised cargo, to and from the BSRR

To describe the present situation, this study will focus on both technical and logistic issues, which could serve as a basis for decision making by management at the Port of Göteborg. The technical and infrastructure situation in Western European seaports will be highlighted with a view to provide the Port of Göteborg with a basis for self-assessment and comparison with these ports.

Principally, this work will focus on:

- Volume of freight involved in the region
- Types of cargo
- Frequency of sailings
- Type of vessels involved
- Route of sailings
- Origin and destination of cargo
- Various actors involved in freight movement, e.g., shippers, agents, shipping lines, etc
- Port infrastructure and operations
- Information about legislation, rules, organizations, taxes and dues in the various countries
- The Western European seaports involved in freight, to and from the BSRR.
The ports of interest in the BSRR are:

- ESTONIA – Port of Tallinn
- LATVIA – Ports of Riga and Liepaja
- LITHUANIA – Port of Klaipeda
- RUSSIA – Port of St. Petersburg

For countries in Western Europe, the main ports of interest are:

- GERMANY – Port of Hamburg
- NETHERLANDS – Port of Rotterdam

### 2.4 Research design

This research project is mainly descriptive/empirical and less theoretical. In light of this, the interpretation of result will be non-quantitative but descriptive.

A descriptive theory is appropriate when the research objective includes:

- Identifying problems or opportunities
- Portraying the characteristics of a phenomena and determining the frequency of occurrence
- Determine the degree to which variables are associated
- Making predictions regarding the occurrence of a phenomena
- Gaining perspective regarding the breadth of variables operating in a situation
- Gaining management and researcher perspective concerning the character of the problem situation

In descriptive research, analysis and interpretation of result is often qualitative and less quantitative. In this respect, I set out to conduct interviews with knowledgeable persons in the maritime industry; these include shipping agents and staff of the Institute of Shipping Research, here in Göteborg. These are professionals and research personnel with remarkable but varied experience in shipping and maritime business. Results from the interviews are presented at a latter part of this work. This is an effort to gain qualitative insight into the research problem.

To complement the above effort, data is collected from academic and general literature, business journals, the Internet and other publications. Access to reliable data proves the main obstacle to this work.
Chapter 3 – Theory

This chapter is intended to give a theoretical frame to the thesis. 3.1 give a brief definition of Logistics and its relations in the maritime industry, 3.2 relates the theory of strategic management to seaports and 3.3 describes the role of seaports in the transport chain/network and the need for coordination.

3.1 Logistics and the maritime industry

Traditionally, the economic functions of seaports can be grouped into three areas namely:
1) The Cargo handling or transport function
2) The commercial function
3) The industrial function

The cargo handling or transport function is directly connected to the development of the maritime industry in general. Ports have traditionally adapted themselves to changes in shipping and inland transport, rather than the opposite. This is evident through the technical and operational investments in ports, where the introduction of new transportation systems and technologies normally comes from the seaside or alternatively from inland transport. It includes intermodal cargo handling at the ports.

The commercial function includes the storage and physical distribution function and this has taken on an increasing significance. This is further reinforced by the specialisation of cargo transport and handling e.g., unitised cargo, general cargo, oil and chemical products, cars and perishable cargo.

Seaports have often been the catalyst for economic and industrial development, both in the port region and hinterland. The bulk breaking principle has made industrial location around seaports very convenient for different types of industries.

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7 Ojala, L., Strategic Management of Port Operations (1991, Centre for Marine Studies, University of Turku, Finland)
In modern times, seaports have taken on value added, logistics functions that have revolutionised the shipping industry. This logistics function relates to the introduction of **new cargo handling and transport technologies** and **information processing** such as the EDI system. Modern day classification of the basic functions of seaports takes the following form:

1. Logistical functions
   1.1 Cargo-handling function – physical intermodal cargo-handling activities
   1.2 Commercial function - physical storage and distribution activities
   1.3 Information processing function – information processing and interchange activities

2. Industrial function – industrial manufacturing or assembling in ports.

The Council of Logistics Management, USA, define logistics as

“The process of planning, implementing, and controlling the efficient, cost-effective flow and storage of raw materials, in-process inventory, finished goods, and related information flow from point-of-origin to point-of-consumption for the purpose of conforming to customer requirements”

In accordance with above definition of logistics Management, seaports are an important part of the logistics flow. They perform the flow and storage functions in the logistics channel. They make the flow of goods and services possible and act as an important channel in the movement (and storage) of goods between point of origin and point of consumption. Often times, seaports act as nodes (or hubs) for consolidation, transhipment point and bulk breaking in the logistics channel.

If logistics is seen as a part of supply chain management, then seaports can be regarded as performing a bigger role, in that it helps in the co-ordination of activities and processes within and between organisations in the supply chain. It is thus safe to say that a seaport’s function goes beyond logistics and well into the management of the supply network. It acts as buffers and links between the different organisations involved in the supply network.
Logistics as an activity can be assessed on the same principles as other operations namely, costs, quality, flexibility, speed and reliability. The performance of an organisation has an impact on both customer service levels and costs. In logistics, customer service is often understood as delivering the right item(s) at the right time to the right place, while keeping customers informed to the level they desire. A dissatisfied customer will explore alternative options.

3.2 Strategic Management of Ports

Strategic planning, also called strategic market planning, focuses on the market environment facing the firm. The emphasis is not only on projections but also on an in-depth understanding of the market environment, particularly the competitors and customers. The basic aim is not only to gain insight into current conditions, but also to be able to anticipate changes that have strategic implications. It is motivated by the assumption that the planning cycle is inadequate to deal with the rapid rate of change that can occur in the environment facing the firm (or organisation). In order to cope with strategic surprises and fast-developing threats and opportunities, strategic decisions need to be precipitated and made outside the planning cycle.

Strategic management is a system designed to help management both to precipitate and make strategic decisions, as well as create strategic visions – a vision of a future strategy or set of strategies. It often involves the creation, change, or retention of a strategy. It involves both external analysis and self-analysis by the organisation.8 The table below gives an overview of strategic management.

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8 Aaker, D.A. Strategic Market Management (3rd edition, 1992), pg 22 – 31, John Wiley & Sons, Inc, USA
Overview of Strategic Market Management

EXTERNAL ANALYSIS

- Customer analysis: Segments, motivations, unmet needs.
- Competitive analysis: Identity, strategic groups, performance, objectives, strategies, culture, cost structure, strengths, weaknesses.
- Market analysis: Size, projected growth, profitability, entry barriers, cost structure, distribution system, trends, key success factors.
- Environmental analysis: Technological, governmental, economic, cultural, demographic, scenarios, information need areas.

Opportunities, threats, and strategic questions

SELF ANALYSIS

- Performance analysis: Profitability, sales, shareholder value, value analysis, customer satisfaction, product quality, brand associations, relative cost, new products, employee attitude and performance, product portfolio analysis.
- Determinants of strategic options: Past and current strategies, strategic problems, organisational capabilities and constraints, financial resources and constraints, strengths, weaknesses.

Strategic strengths, weaknesses, problems, constraints, and questions

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Figure 2, Strategic Market Management

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External analysis

It involves an examination of relevant elements external to an organisation and should be purposeful, focussing on the identification of threats, opportunities, strategic questions and strategic choices. The identification and understanding of threats and opportunities, both present and potential, is one output of external analysis. An opportunity is a trend or event that could lead to a significant upward change in sales and profit patterns – given the appropriate strategic response, while a threat is trend or event that will result, in the absence of a strategic response, in a significant departure from current sales and profit patterns. Accordingly, external analysis can be divided into four components, namely:

- **Customer analysis** – involves the identification of the organisation’s customer segments and each segment’s motivations and unmet needs. Segment identification defines alternative product markets and thus structures the strategic investment decision (i.e. what level of investment to assign to each market). The analysis of customer motivation provides information needed to decide whether the firm can and should attempt to gain or maintain a sustainable competitive advantage. An unmet need, a need not currently being met by existing product (or service), can be strategically important because it may represent a way that entrenched competitors can be dislodged.

- **Competitive analysis** – it commences with the identification of competitors, both current and potential. Some competitors will compete more intensely than others hence it is sometimes helpful to group them into strategic groups, groups that have similar characteristics (e.g., size and resources), strengths (e.g., brand names, goodwill, trade name, distribution network), and strategies (e.g., high quality). To develop a strategy, it is important to understand the competitor’s performance, objectives, current and past strategy, culture, strengths and weaknesses. Of special interest are the competitor’s strengths and weaknesses. Strategy development often focuses on exploiting a competitor’s weakness, or neutralising or bypassing a competitor’s strength.

- **Market analysis** – it has two primary objectives, first to determine the attractiveness of the market and second, to understand the dynamics of the market so that threats and opportunities can be detected and strategies adopted. Market analysis should include an examination of the size (current and potential), growth (prospect for growth or decline), profitability (the number and vigour of existing competitors, threat of new competitors, threat of substitute product/service, the profit impact of powerful suppliers, and the power of customers to negotiate for price concessions), cost structure (what value-added stage represents the most...
important cost component), distribution channels, market trends and key success factors (competitive skill or asset needed to compete successfully).

- Environmental analysis – this involves the analysis of forces outside an organisation and it’s immediate markets and competitors, which will shape the organisation’s operations and thrust. It will attempt to identify and understand emerging opportunities and threats created by these forces. This can be divided into five components, namely: technological, governmental, economic, cultural, and demographic.

**Internal analysis**

Internal or self-analysis, aims to provide a detailed understanding of those aspects of the organisation that are of strategic importance. It covers performance analysis and an examination of the key determinants of strategy such as strengths, weaknesses, and strategic problems. Performance analysis consists of both financial and non-financial performance measures. Profit and sales provide financial performance evaluation of past strategies and an indication of the current market viability of a product (or service) line. Non-financial performance measures include customer satisfaction/brand loyalty, associations (what do customers associate with our business in terms of perceived quality, innovativeness, customer orientation etc), product/service quality, relative cost, new product activity, manager/employee capability and performance.

Internal analysis should also review characteristics of the business that will influence strategy choice, namely:

- Strategy review – past and current strategy should be understood as it provides an important reference point for the organisation
- Strategic problem – if uncorrected, it could have damaging strategic implications on the organisation.
- Financial resources and constraints – an analysis of the financial resources available for investment either from planned cash flow or debt financing helps determine how much net investment should be considered
- Organisational capabilities and constraints – this involves the internal analysis of the organisation, it’s structure, systems, workers, and culture. It is important strategically, especially when it is a source of strength, a weakness or a constraint.
“Strategic management is essential in the management of any operation subject to uncertain and highly diverse conditions with potentially profound impacts on the performance of the operation” – (Frankel, 1989)

Port operation is characterised by uncertainties, a highly competitive business environment and a constantly changing and diverse conditions. These are the factors that determine the way seaports are administered and have profound effects on the performance of the operation.

An essential part of strategic management is long-term planning over a space of several years, or possibly decades. Most of the challenges faced by seaports cannot be met by short-term planning since the measures are required to span through several years. For instance, investment (disinvestments) decisions usually involve large capital outlays and have a long economic life.

Although strategic management may not be able to assure the future success of the operation, all the same, it provides an approach for intelligent evaluation of the risks posed and alternatives available, and an effective means for the design of a feasible set of actions and activities under the projected circumstances. Strategic management also forces port management to define and update objectives, maintain up-to-date databases, seek valid methods to measure port performance, and evaluate potential developments in the light of its goals. Furthermore, strategic management induces an explicit identification of opportunities and threats, and an objective or subjective appraisal of their probabilities of occurrence, as well as possible impacts. By this, strategic management introduces discipline to management planning and forms an essential part of effective management.
Strategic management identifies three time-horizons, namely:

- Operational planning – planning of operations on a daily, weekly or monthly time period but generally not more than one year
- Tactical planning – this involves planning over a time period of 1 to 3 years. For seaports, the supply of port services is inelastic within this time frame, but the time is too short to build new facilities or convert existing ones.
- Strategic planning – this is for a period of three years and over. Extensive investment or disinvestments strategies can be pursued. A good example is the 10 plan of the Port of Göteborg to triple cargo turnover and the extensive investment in infrastructures and superstructure at the port.

According to Hansell\textsuperscript{10}, for lack of external guidance, port organizations will give priority to strategic goals, which are usually not well defined but to a great extent merely implicit. By definition, internal goals or objectives are a vital instrument in strategic planning. Often times, there could be a conflict between internal goals or objectives, and external goals. The port management must possess the ability and means to formulate explicit internal objectives for the organization. However, the formulation of internal goals requires an adequate external intelligence. This research report is intended to be a part of that external intelligence.

“It is one of management’s primary tasks to translate the company’s purpose into a set of specific objectives and goals that will support the realization of this purpose. Some of the most common company objectives are profitability, sales growth, market share improvement, risk diversification, and innovation.” (Kotler, 1980)

For the purpose of this research, the strategic goal includes market share improvement, sales growth and consequently increased profit. The issue is not just market share improvement but a sustained increase in market share and long-term profitability.

\textsuperscript{10} Hansell, H.A., Identification and discussion of some traits in Swedish seaports and stevedoring organisations, a research paper, Karlshamn, 1982
Objectives can be regarded as long-term guidelines for the company’s activities, whereas goals can be thought of as short-term, concrete ends for the company. According to Frankel, a port (or shipping company’s) objective often differs from those of other enterprises, not in basic terms, but in the details of the objectives. The reason being that ports (and shipping) are often regarded as national (or regional) assets and so induces various forms of government involvement, which skew commercial objectives, for example, municipal pride.

3.3 The Port as Transport Chain Coordinator

In the transportation of goods and passengers, the seaport often performs a coordinating function in the transport network. In the transport network, various actors and parties are involved, all for the sole purpose of conforming to customer specification in terms of time schedule, information on location of freight between origin and destination, service quality, safety of cargo, reliability, flexibility to customer transport need and other characteristics of quality transport system.

Transportation is a network consisting of nodes and links. The general transportation task is to transport goods between consignor and consignee, i.e., to add place and time utility. It is therefore important that planned times are included in all parts of the network to create planned time utility for the user. Transportation service cannot be kept in stock while the service is generated at the moment it is produced; hence there is a very strong time and place connection between the production, sale and consumption of the service.

Modal split is a useful analytical tool in the study of transportation. This concept divides the entire transport passenger or freight market according to the major modes of transportation. The seaports, apart from enabling the movement of freight and passengers from one point to another, performs other functions such as consolidation, unification, transhipment, co-ordination, sorting, kitting, sequencing, storing and commercialisation. In the process of performing these and other functions, the seaports act in concert with other actors in the transport network. Such actors include shipping agents (or freight forwarders), freight brokers, customers and third party logistic providers. With increasing degree of industrialisation, manufacturing costs transforms into distribution cost. However, with an efficient information technology (IT) system, distribution cost can be greatly reduced.
Due to globalisation, geographical disparity between source of raw materials and point of usage, and a wide distribution network for produced goods, there is an ever-increasing need for efficient, effective and cost conscious transport service. The “just in time” delivery system has made time an important consideration in transportation. Different specialised services and actors are therefore needed in the transport network.

In the transportation of freight to and from the BSRR via Port of Göteborg, the following are some of the actors that will be involved in the transport chain:

- The shipper – often at the point of origin of the freight. He decides the destination and expected time of arrival of freight, in conformity with the requirement of the consignee/customer
- Freight forwarders – they consolidate small shipments for long-haul and eventual distribution to customers
- Freight brokers – persons or firms that negotiates or link up shippers and carriers. Acts as middlemen between the shipper and the carrier. Do not issue bill of lading and not required to maintain cargo liability insurance since they are not considered to be a carrier
- Ship owner – owns and operate the vessel on a commercial basis. Provides the actual movement of freight over a long distance
- Stevedoring providers – provides handling equipment for loading and off loading of ships at the seaports
- Third party transport providers – often acts as link between the seaport and the hinterland using other modes of transportation such as rail, road and air
- The customer/consignee – the purchaser of the transport service, often located at the final destination of freight

In transportation, information about the transaction is very important. For different actors in the transport network, different information is required to enable them play their role in the transport system. For instance, both the consignor and consignee require current information on location and delivery schedule of the freight, the freight forwarder and broker require information about the state/condition of freight as well as the volume, size, weight and packaging requirement of freight, the stevedoring company needs information about the weight, packaging, type and volume of freight while the ship owner require information about documentation, insurance, size and volume of freight. All these information are vital to each actor in the transport system. The seaport is in an overall position to provide and make the information available for efficient transportation. It is therefore vital for the seaports to make this information accessible and readily available to all the actors in the network.
In recent years, the seaports have taken on the added responsibility of coordinating the various aspects of transportation, often acting as a rallying point between the various actors. The traditional functions of the seaports have given way to a more diversified (in terms of functions in the transportation network) and specialised (in terms of freight handled by the ports) seaports. This unusual combination of diversification and specialisation can be a potent weapon for competitive advantage. The Port of Göteborg can therefore not afford to leave the actors uncoordinated. Rather the Port of Göteborg should encourage and provide an enabling environment for the various actors to co-operate and come together to act in unison. The general saying that a chain is as strong as it’s weakest point is highly relevant in this respect. Any lapse or observed inefficiency by any of the actors in the network will have a domino effect on the entire transport system, leading to delays and disruption in schedule. The efficient co-ordination of the various actors has a cost (and time) saving potential for every body in the network. Through this, operating cost can be shared among the actors while duplication of efforts can be considerably reduced. Co-ordination also makes it relatively easy for the Port of Göteborg to handle the many actors involved as well as give a united front to the actors in their official dealings, both with the port and the government.

In light of the foregoing, the information need of this research work will focus on volume, size, potentials for growth, port capacity in the Baltic and Russian seaports as well as frequency and destination of sailings to and from the BSRR.
Chapter 4 - Descriptive Data

In this chapter section 4.1 – 4.4 will give a brief description of maritime situation in each of the four countries, 4.5 will present the import and export situation to selected countries and the BSRR, 4.6 will focus on the seaports under review, 4.7 will attempt to show the situation of the two major seaports in Europe as regards their operation in the BSRR in an attempt at competitive benchmarking.

Generally, there are two different ways to organise ports in a country’s infrastructure. In most cases, as is found in the BSRR, the ports are organised by a central port authority, which regulates both investments and pricing in individual ports. The other option is for ports to compete with each other and not obey any central authority. In the latter case, local authorities usually own ports, but private ports also exist alongside them.

4.1 Estonia

Transportation plays an essential role in the Estonian national economy. Transit traffic and management of roads are the main activities of more than 3,500 enterprises, which makes up nearly 9% of the GDP and employ 7% of the total workforce. International shipping and port services generate the predominant part of transport revenue.

ESTONIAN NATIONAL MARITIME POLICY / ADMINISTRATION

ESTONIAN MARITIME STRUCTURE
In Estonia, the Ministries of Transport and Internal Affairs are jointly responsible for seaports and maritime activities: the Transport Ministry, through the Estonian National Maritime Board, (ENMB), the Vessel Traffic Services and Marinecom. The Director General and the Board of Directors heads the ENMB, with the General Department, Maritime Safety Department and Lighthouse 6 Hydrographic Departments, respectively. The following, graphically illustrates the Estonia Maritime administration more vividly:
Ministry of Transport
- Marinecom
- Vessel Traffic Services – Ice-breaking, pilotage and VTS Radar
- Estonian Maritime Board – Director General/ Board of Directors, General Department, Maritime Safety Department, Lighthouse & Hydrographic Department

Ministry of Internal Affairs
- Border Guard
- Chief of Staff
- Coast Guard Search and Rescue – MRCC and Patrol Boats

Maritime & Transport Policy

The maritime/transport priorities include;
- Supporting the development of the transport infrastructure and international transport corridors
- Increasing the number of international passengers and the capacity of transit traffic. Implementing clear, simple and stable regulations
- Increasing the competitiveness of Estonian ports and fleet, and promoting Estonia as an attractive maritime and transit country
- Improving multi-modal and combined transport systems, and supporting the development of attractive incentive zones, free zones, custom areas and storage facilities, and the development of electronic information exchange systems
- Removing obstacles encountered at border crossings
- Increasing traffic safety and reducing the negative environmental affects of transit shipment
To achieve these objectives, some projects were embarked upon, the most important being:

- Implementing the 1996 – 2000 development plan of Estonian Railways, including reconstruction of the main Tallinn – Tapa-Narva line, which connects Tallinn with “Via Hanseatica” through Narva and further on to St. Petersburg
- Implementing the development plan (until 2005) for roads and highways, and implementing the necessary financing mechanism
- Implementing the national programme for traffic safety
- Modernization of the navigation symbols for safety in maritime transport, development of the national inspection board and joint sea communications, implementing a radar and information system for maritime traffic that is suitable for Estonia
- Implementing the programme for updating the air traffic control system

PORTS IN ESTONIA

There are 34 seaports in Estonia; most of them are relatively very small. The main port in Estonia is the Port of Tallinn.

THE PORT OF TALLINN

The Port of Tallinn is the major player in international transport context. The Port of Tallinn was established in 1991 by the Estonian government and it is one of Estonia’s largest enterprises. It consists of four harbours, namely:

(i) The Old City Harbour is the major passenger port and also an important general cargo port. The port has two round-the-year ferry routes; Tallinn – Helsinki and Tallinn – Stockholm. To handle the increasing passenger traffic, new terminals have been built and the old ones reconstructed into modern comfortable facilities. As regards cargo handling, the harbour is focused on ro-ro and lo-lo services but also handles mixed – cargo and container shipping. It consists of 4 passenger terminals, (including ro-ro facilities), general cargo and mixed terminals.
(ii) Muuga Harbour is essentially a cargo port but also handles oil products, grains, fertilizers, containers and ro-ro cargo, reefer cargo, timber, bulk and general cargo. About 40% of the total cargo throughput of the port of Tallinn is handled in Muuga. It is an important transit port in Estonia. It consists of liquid bulk terminals, general cargo terminals, grain terminal, ro-ro and container terminal, dry bulk terminal and a steel terminal presently under construction.

(iii) Paljassaare Harbour is a cargo port, which specializes primarily in the handling of mixed cargo, coal and oil products, timber and perishables. It consists of an oil terminal, cooking oil terminal, timber, coal and general cargo (including reefer) terminals, and a dry bulk terminal.

(iv) Paldiski South Harbour – prior to 1993, it was a Naval base, it has since developed into a modern cargo port complex with a capacity of about 3 million tonnes annually. It consists of timber, metal, peat and ro-ro terminals.

Below are the technical specifications for the four harbours that make up the Port of Tallinn:

<table>
<thead>
<tr>
<th></th>
<th>OLD CITY</th>
<th>MUUGA</th>
<th>PALJASAARE</th>
<th>PALDISKI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Territory</td>
<td>54.2 ha</td>
<td>367.3 ha</td>
<td>43.6 ha</td>
<td>55.2 ha</td>
</tr>
<tr>
<td>Aquatory</td>
<td>75.9 ha</td>
<td>752 ha</td>
<td>35.5 ha</td>
<td>43.6 ha</td>
</tr>
<tr>
<td>No. Of berths</td>
<td>23</td>
<td>20</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>Total length of berths</td>
<td>3.7 km</td>
<td>3.7 km</td>
<td>1.9 km</td>
<td>880 m</td>
</tr>
<tr>
<td>Maximum depth</td>
<td>10.7 m</td>
<td>17.4 m</td>
<td>9 m</td>
<td>9.7 m</td>
</tr>
<tr>
<td>Max. Length of a Vessel</td>
<td>240 (300m)</td>
<td>280 m</td>
<td>190 m</td>
<td>140 m</td>
</tr>
<tr>
<td>Max. Width of a Vessel</td>
<td>40 m</td>
<td>40 m</td>
<td>30 m</td>
<td>20 m</td>
</tr>
<tr>
<td>STORAGE CAPACITY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warehouse area</td>
<td>20,443 sq. M</td>
<td>7,830 sq. M</td>
<td>16,000 sq. M</td>
<td></td>
</tr>
<tr>
<td>Open storage area</td>
<td>73,000 sq. M</td>
<td>324,000 sq. M</td>
<td>102,000 sq. M</td>
<td></td>
</tr>
<tr>
<td>Oil tank capacity</td>
<td>156,500 cub m</td>
<td>42,000 cub m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reefer warehouse area</td>
<td>28,620 sq. M</td>
<td>15,000 sq. M</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Data supplied by the Port of Tallinn
Table 2, Technical Specifications, Port of Tallinn
PORT DUES AND CHARGES
The following are compulsory dues and charges for vessels in Estonian waters

- Tonnage dues – based on gross tonnage, (GT), and type of vessel
- Quay charges – based on GT, type of vessel and frequency for liners
- Mooring charges – based on GT and frequency
- Other fees – including passenger fees, road charges, vehicle fees, electricity supply, communication charges, water supply, waste disposal, etc
- Pilotage dues in the port – based on GT, frequency and distance
- Lighthouse dues
- Ice dues

The Estonian Maritime Board levies pilotage, lighthouse and ice dues. The Port of Tallinn levies other dues above. Port dues are paid according to tariff or negotiable rate. The port dues are adjusted to correspond to the Finnish levels.

The stevedoring companies, which are competing private enterprises, collect the following:

- Cargo charges
- Rental charges
- Charges on separately ordered services

REGULAR LINES FROM/TO PORT OF TALLINN
CARGO VESSELS
Muuga Harbour – Bremenhaven – Hamburg – Bremenhaven – Kotka – Muuga Harbour
Muuga Harbour – Bremerhaven – Riga – Helsinki – Kotka – Muuga Harbour
Muuga Harbour – Felixstowe – Antwerp – Stockholm – Old City Harbour – Muuga Harbour
Muuga Harbour – Helsinki – Muuga Harbour
Muuga Harbour – Copenhagen – Arhus – Kiel/Rostock – Muuga Harbour
PORT OF TALLINN IN FIGURES

### Cargo key figures

<table>
<thead>
<tr>
<th>1.1. Cargo traffic</th>
<th>2000</th>
<th>2001</th>
<th>% change</th>
<th>% share</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 months</td>
<td>8 months</td>
<td>%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cargo traffic</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Th tonnes</strong></td>
<td>21 058,6</td>
<td>21 716,4</td>
<td>3,1</td>
<td>100,0</td>
</tr>
</tbody>
</table>

#### By type

<table>
<thead>
<tr>
<th>Type</th>
<th>2000</th>
<th>2001</th>
<th>% change</th>
<th>% share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Containers</td>
<td>51 665</td>
<td>53 129</td>
<td>2,8</td>
<td></td>
</tr>
<tr>
<td>Containerized</td>
<td>495,2</td>
<td>528,7</td>
<td>6,8</td>
<td>2,4</td>
</tr>
<tr>
<td>Break Bulk</td>
<td>2 395,9</td>
<td>1 664,7</td>
<td>-30,5</td>
<td>7,7</td>
</tr>
<tr>
<td>Dry Bulk</td>
<td>2 589,5</td>
<td>2 186,3</td>
<td>-15,6</td>
<td>10,1</td>
</tr>
<tr>
<td>Liquid Bulk</td>
<td>12 864,0</td>
<td>14 290,7</td>
<td>11,1</td>
<td>65,8</td>
</tr>
<tr>
<td>Wheeled</td>
<td>2 650,7</td>
<td>2 895,0</td>
<td>9,2</td>
<td>13,3</td>
</tr>
<tr>
<td>Non-marine</td>
<td>63,3</td>
<td>151,0</td>
<td>138,5</td>
<td>0,7</td>
</tr>
</tbody>
</table>

#### By destination

| 1.2. By destination |
|---------------------|------|------|----------|--------|
| **Th tonnes** | 2 795,8 | 2 338,8 | -16,3 | 10,8 |
| **Import** | 1 895,1 | 2 072,4 | 9,4 | 9,5 |
| **Transit** | 900,7 | 266,4 | -70,4 | 1,2 |
| **Export** | 18 199,5 | 19 224,7 | 5,6 | 88,5 |
| **Transit** | 2 952,2 | 2 910,0 | -1,4 | 13,4 |
| **Domestic** | 15 247,3 | 16 314,7 | 7,0 | 75,1 |
| **Non-marine** | 100,0 | 1,9 | 1,0 | 0,0 |

| 1.2.4. Non-marine | 151,0 | 151,0 | 138,5 | 0,7 |

| 2. Ship calls |
|---------------|------|------|----------|--------|
| Cargo Ships | 6 961 | 6 839 | -1,8 | 100,0 |
| 2 524 | 2 538 | 0,6 | 37,1 |

Source: Based on data supplied by the Port of Tallinn

Table 3, Cargo Figures, Port of Tallinn, 2000 – 2001
CONCLUSION
The major bulk of national and transport revenue comes from international shipping and port services. Transit shipping is an important aspect of Estonia’s national economy as a substantial part of total investment is devoted to infrastructure development. The country’s economic policy is designed to stimulate growth through privatisation, in an effort to improve efficiency and attract foreign investment. To this end, the port of Göteborg can benefit immensely through a closer cooperation and better working relation with the port of Tallinn. Sweden’s expertise in IT and logistics is a good basis for this.

4.2 Latvia

NATIONAL MARITIME POLICY
In general, Latvian shipping and ports are not given any state aid or financial subsidies. The income from shipping dues (lighthouse and pilotage) goes to the Maritime Administration and the income from the port goes to the port authorities. The smaller ports receive financing from the state for keeping and maintaining the channels and breakwaters. Channels and breakwaters are state properties, but there are no restrictions on private infra-structural port investments.

MARITIME STRUCTURE AND POLICY
The highest organ in Latvian maritime sector is the Council of Ports, which has the Prime Minister as its head and membership consisting of administrators and local government leaders. The Ministry of Transport is an arm of the Council of Ports. Below is a graphical presentation of the Latvian Maritime system:

Council of Ports – consists of
- Prime Minister (head of council)
- Administrators (form port strategies)
- Local government leaders (form port strategies)

Ministry of Transport
- Latvian Maritime Administration – responsible for navigation and safety
- Port Board, for each port – representative from Ministry of Transport, local government and companies all of whom are responsible for environmental protection
- Port Captain – responsible for pilotage and safety

Local government Municipality
- Port Board (as above)
- Port authority – makes infrastructural investment decisions and responsible for maintenance of ship channels

Port companies – consists of agents, stevedores etc, and is responsible for customs and clearance

**LATVIAN PORTS**

Latvia, has three large ports – Ventspils, Riga and Liepaja.- and seven small ports. The State, local government or other legal entities own Port land. Port waters are regarded as properties of the state and both these and state lands are assigned into the possession of the respective port authorities. However, port infrastructures (warehouses, cranes, forklifts, etc) and superstructures are privately owned. Port land may be let or leased to private companies on the basis of contract agreements concluded with the Port Authority. Ventspils’ port deals mainly with oil and chemical cargo. The main ports for both cargo and container traffic are the Ports of Riga and Liepaja. Riga’s Port handles mainly general cargo and bulk cargoes, but also oil and reefer cargoes, and caters to passenger ships. Liepaja handles the transhipment of timber, metals and liquid cargo, ro-ro and fishing activities. Stevedoring is undertaken by private commercial interest.

Port authorities are non-profit organizations and they receive no grant, aid or subsidies from the state. The income from shipping dues (lighthouse and pilotage) goes to the Maritime Administration and the income from
the port dues go to the port authorities. The financial resources at the disposal of the Port Authority may be used only for the maintenance and development of the port and its infrastructure and also for performing daily operations. The Ports Authority finances all new public investments in Latvian ports. The smaller ports receive financing from the state for keeping and maintaining the channels and breakwaters; channels and breakwaters are state property but there are no restrictions on private infra-structural port investments.

PORT DUES AND CHARGES

Basically, there are two main types of dues in Latvian maritime sector:

- National dues; and
- Port dues

**National dues** – this is made up of both lighthouse and pilotage dues. The basic rate of the lighthouse dues is 0.11USD/GT and it is payable for the first six entrances per calendar year. Ro-ro and container vessels are granted a 20% rebate, which reduces the dues to 0.088 USD/GT, while passenger vessels are granted a 30% reduction, lowering the due to 0.077 USD/GT. Pilotage dues are collected from vessels calling at Latvian ports according to the procedures stated in the port regulations. This means leading the ship into the port from the outside area, heaving up the anchor and leading the ship to the outside area or moving the ship within the port area. There is a set of additional situations when pilotage is required. The basic pilotage due is 0.042 USD/GT, however, the dues can be reduced under certain circumstances.

**Port dues** – most port dues are based on gross tonnage (GT), and are collected by the respective port authorities. For the three main ports, the dues are similar and they include ice dues, canal dues, anchorage dues, small tonnage dues and sanitary dues.
**Port of Riga**

The port of Riga is a commercial Freeport, with an all-year round navigable waters. The State Shareholders Company, Riga Commercial Port, dominates cargo operations. The total cargo throughput has increased over the years, rising to 13.3 million tonnes in 2000. The 2001 estimate is about 12.4 million tonnes. It has a total cargo handling capacity of about 20 million tonnes annually. The main type of cargo handled in the port includes containers, metals, timber, coal, fertilizers, chemicals, food, and oil products. General cargo, timber and sawn wood represents about 70% of cargo while 80% of cargo turnover are transit to and from CIS. Environmental protection is accorded priority by the current management of the port.

Port dues include tonnage dues, canal dues, sanitary dues, and anchorage dues. Vessels smaller than 200GT pay small tonnage dues.

**Port of Liepaja**

This is a diversified port and, in March 1997, it became a Special Economic Zone, (SEZ). Through this, it offers favourable business and economic incentives to operators, some of which includes tax reductions, customs and excise duties exemptions and double depreciation rate for investments made within the zone. Trans-shipment of cargo is also very important. It has a similar structure with the port of Riga in regards to port dues.

The Port of Riga is very active in cargo movement to and from Europe. It has many vessels with routes to various destinations in Western Europe, but little to the Nordic region. The only regular route to the Nordic region goes to Helsinki, Finland. Other possible cargo movement are either by road haulage or tramp (unscheduled) shipping. The port has excess capacity, regarding container cargo and this should be of interest to the Port of Göteborg. It represents a viable route in the future and one way to attract vessels to the Port of Göteborg is by courting (encouraging) shipping agents currently operating in the port. Maersk Line has a
presence both in Sweden and Latvia. The shipping company should be a useful tool to the Port of Göteborg in its effort to attract more vessels to the port.

PORT FACILITIES
Number of berths 21
Depth alongside 6.5 – 10 m
Total length of quays 337.6 m
Warehousing 66,350 sq. M
Open storage 329,100 sq. M

SUPPORT FACILITIES
41 Portal cranes (lifting capacity: 5 – 40 tonnes)
2 Floating cranes (lifting capacity: 35 – 100 tonnes)
10 Container cranes (lifting capacity: 30.5 tonnes)
30 Tugmasters, a wide range of other cargo handling equipment (front and side loaders, fork lift trucks, etc)
Marine service fleet: (5 tug boats, 2 bunkering vessels, 1 oil tank vessels for supplying portable water)

DESCRIPTION HANDLING CAPACITY
(Thousand Tonnes per annum)
Grain 2,000
Raw Sugar 1,000
Containers (TEU) 250,000
Rolled ferrous metals 1,300
Scrap metal 100
Perishable cargo 120
Loose boxes, palletised
Bagged cargo (up to 80 Kg) 150
Cotton in bales 150
Timber in bundles 120
Cars (Units) 70,000
Other General cargo 50

Source: Based on data supplied by the port

Table 4, Technical specifications, Port of Riga
CONCLUSION
The two major (cargo) seaports in Latvia, Riga and Liepaja, have great potential and excess capacity for added volume. The government has put into place a number of incentives for potential foreign investors wishing to explore these potentials. As transit ports for Russian exports and imports, there exist ample opportunities for increased cargo traffic, both to continental Europe and North America (USA). These present possible areas for future exploration and research studies. The influence of Finland in maritime operations in Latvia is of equally profound interest and a possible area for future research studies. Sweden has the technical and logistic wherewithal to garner considerable influence in maritime operations in Latvia.

4.3 Lithuania

The significance of the maritime and shipping industry in the economics of Lithuania is undoubtedly great. About 20 and 25 thousand Lithuanians work in shipping, or a related industry. As a deliberate government policy, port and maritime activities in Lithuania are generally not financed through state budget or funds. The maintenance and development of port infrastructure is financed from the budget of each port. Port development credits are guaranteed by the state. The country has also benefited from credits and loans from international bodies such as the EU and the EU Bank for Reconstruction and Development.

MARITIME ADMINISTRATION / POLICY

In Lithuania, four different Ministries are involved in Maritime and shipping policy, they are the Ministries of Transport, Finance, Environment and Internal Affairs. Graphically, the structure is as seen below:

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11 Vytautas Lygnugaris, Member of Board, Lithuanian Association of Ship owners (International Marine Business Magazine, Issue 2000/3)
Ministry of Transport (Waterborne transport department)

- Klaipeda State Seaport Authority and Harbour Master
  - i. Ship’s inspection
  - ii. Navigational aids
  - iii. Hydrographic survey
  - iv. Search & Rescue
  - v. Combat of pollution
  - vi. VTS & Piloting
  - vii. Ship’s arrival/departure
  - viii. Seamen’s Register
  - ix. Technical works
  - x. Port development
  - xi. Wastewater & dangerous cargo
  - xii. Sanitary service
  - xiii. Marketing

- Inland waterways Administration
  - i. Dredging
  - ii. Navigational aids
  - iii. Inland waterways development

- Inland ships state inspection
  - i. Small boats register
  - ii. Inland ships register
  - iii. Inland ships & small boats technical survey

Ministry of Finance

- Customs: ship control
- Customs: cargo control

Ministry of Environment

- Dangerous cargo registration
- Dangerous cargo transport permits
- Dangerous cargo storage permits
Ministry of Internal Affairs
- Coast guard
- Ships arrival and departure immigration control

The Klaipeda State Seaport Authority and the Harbour Master are responsible for the full range of port activities. The port authority is assigned many of the duties performed by the national maritime administration or other government agencies in other countries. A separate organization, Inland Waterways Administration and the Inland Ships State Inspection, govern inland waterways.

Port Dues/charges
Klaipeda State Seaport Authority collects all dues. Except for tonnage and passenger dues, all dues are based on the vessel’s gross tonnage as indicated in the original of the tonnage certificate. The monetary unit for the dues are US Dollars, except for vessels registered under the Lithuanian flag, which are allowed to pay in local currency. The dues include:

- Vessel dues – based on GT and collected from all vessels. Reduction is made for tramp vessels after the 12th call in a calendar year and for liner and ferry/ro-ro, after the 6th call.
- Cargo dues – payable for each loaded and unloaded tonne of cargo. There is a volume-based rebate system. For instance, if a vessel both loads and unloads in the port and the weight of the total cargo handled adds up to more than 120% of the vessel’s deadweight tonnage, DWT, a different rebate system is charged.
- Sanitary dues – based either on the vessel’s GT, cubic metre of refuse or pollutants, or fixed. Rebates are granted after the 11th day in the port.
- Pilotage dues – calculated on the vessel’s GT and charged at 0.084 USD/GT for piloting within the port water limits. Piloting beyond Klaipeda State Seaport waters attracts 0.00015 USD/GT per nautical mile.
• Passenger dues – charged for all passengers boarding or disembarking at a flat rate of 1 USD/passenger. Children under the age of 7 are exempted.

• Berth dues – charged for cargo handling operations and based on the vessel’s GT. Cargo handling operations include cargo loading and unloading, the lashing and securing of cargo and the preparation of cargo documents.

• Mooring dues – charged for all mooring operations at a rate of 0.01 USD/GT. Ro-ro ships and ferries are charged a discount rate of 0.007 USD/GT.

PORTS IN LITHUANIA

PORT OF KLAIPEDA

The port of Klaipeda is the major seaport in Lithuania. It is located in a narrow strait called the “Sea Canal” on the Eastern Baltic Seashore. It is navigable all-year round and is involved in general, dry bulk, and liquid bulk cargoes. It is a major transit port for cargo between the east and west. The port faces strong competition from other transport modes, particularly trucks through Poland, and other ports in Latvia, Finland and Estonia. The port recently opened a new container terminal and the Ministry of Transport approved reduced / favourable port dues for container vessels in July 2001. This is aimed at attracting new lines, as well as improving business conditions to the existing ones. Some of the newly introduced dues are as follows:

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>OLD RATE</th>
<th>NEW RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly liner service on vessels and berths</td>
<td>20%</td>
<td>50%</td>
</tr>
<tr>
<td>Tonnage dues after 1,000 boxes</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>Tonnage dues after 2,000 boxes</td>
<td>20%</td>
<td></td>
</tr>
<tr>
<td>Tonnage dues after 3,000 boxes</td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td>Tonnage dues after 4,000 boxes</td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>Tonnage dues after 5,000 boxes</td>
<td>50%</td>
<td></td>
</tr>
</tbody>
</table>

**Previous Tonnage dues**

<table>
<thead>
<tr>
<th>After</th>
<th>10%</th>
<th>After 20,000 boxes</th>
<th>20%</th>
</tr>
</thead>
</table>

**PILOTAGE DUES**

0,084 USD/GT  0,027 USD/GT

Source: Data Supplied by Port of Klaipeda

*Table 5, New Tariff Structure, Port of Klaipeda*

---

**PORT OF KLAIPEDA - TECHNICAL SPECIFICATIONS**

- **Land territory**: 4,148,000 sq. M
- **Water territory**: 6,232,000 sq. M
- **Max. Width of vessel**: 180m - 300m
- **Fairway length**: 4 Miles
- **Depth**: 14.5 m

**STORAGE**

- **Warehouse**: 74,900 sq. M
- **Open storage**: 258,900 sq. M
- **Refrigerators**: 18,100 sq. M
- **Length of quay**: 19,216 m
- **Length or railway tracks**: 69,200 m

Source: Data supplied by the Port of Klaipeda

*Table 6, Technical Specifications, Port of Klaipeda*

---

**CONCLUSION**

Klaipeda is an interesting and important port in the Baltic Sea Region. It has a location advantage in East – West cargo movement. It is an important transit port with a yearly increase in container traffic due mainly to flexible maritime/port charges.
4.4 Russia

The break up of the former Soviet Union had a major effect on Russia’s maritime industry. Both the size and volume of the Russian fleet and cargo flow were lost, many to the newly independent states of the former USSR. Presently, Russia has only two operational ports in the Baltic Sea Region – St. Petersburg and Kaliningrad. Both ports are being enlarged and modernised, in line with international standards and Russia’s national requirements.

MARITIME POLICY / ADMINISTRATION

The government of the Russian Federation is conscious of the importance of maritime transport to the national economy. Since 1994, the maritime administration is being restructured. The Russian maritime policy, in line with modern day international maritime standards, seeks to achieve among others, the following objectives:

- Development of modern freight forwarding systems and construction of cargo processing terminals in the ports
- Modernisation of port handling facilities
- Construction of environmental protection systems
- Computerisation of documentation flows in the ports and port administration
- General services and cargo services; intermodal systems
- Integration of sea and land transportation with the ports

THE PORT OF ST. PETERSBURG

The Port of St. Petersburg has 54 harbours, 4 cargo areas and a total quay length of about 8.4 kilometres. It operates a Vessel Traffic System and 4 icebreakers. The seaport is surrounded by city infrastructures and this makes the possibility for expansion very remote. Competition can be strengthened only through modernization of infrastructures and not through physical expansion. Currently, there are attempts by the Russian government at modernising the port infrastructures and fleet with a promised increase in port output of between 60 and 80 percent by 2005.
During the winter months, November and December, navigation and port activities are severely hampered by ice. This has prompted the Russian government to build icebreakers and flood protection facilities. However, funding and completion of projects are very uncertain. In Russia, the transportation and maritime industry is highly monopolized by the state, but attempts are currently being made at encouraging competition. A prediction of about 35 million tonnes in cargo output by 2005 has been made, although this appears very doubtful. As of the end of 2001, (January – October), container cargo accounts for 14.3 % of total cargo at the port; while in TEU it is almost 39 million. Compared with year 2000, container cargo and TEU, showed an increase of 35% and 41%, respectively, in year 2001.

4.5 Exports/Imports from the Baltic States to Selected Countries, 1998 – 2000

<table>
<thead>
<tr>
<th>QUANTITY - OECD DATA BASE</th>
</tr>
</thead>
</table>

**EXPORTS**

<table>
<thead>
<tr>
<th></th>
<th>U.K.</th>
<th>U.S.A.</th>
<th>SWEDEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESTONIA</td>
<td>371203</td>
<td>341545</td>
<td>917540</td>
</tr>
<tr>
<td>LATVIA</td>
<td>988541</td>
<td>1155075</td>
<td>646108</td>
</tr>
<tr>
<td>LITHUANIA</td>
<td>351273</td>
<td>266204</td>
<td>216045</td>
</tr>
<tr>
<td>RUSSIA</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**IMPORTS**

<table>
<thead>
<tr>
<th></th>
<th>U.K.</th>
<th>U.S.A.</th>
<th>SWEDEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESTONIA</td>
<td>63721</td>
<td>30144</td>
<td>98738</td>
</tr>
<tr>
<td>LATVIA</td>
<td>60027</td>
<td>56827</td>
<td>685101</td>
</tr>
<tr>
<td>LITHUANIA</td>
<td>51433</td>
<td>26757</td>
<td>45143</td>
</tr>
<tr>
<td>RUSSIA</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: OECD DATA BASE

Table 7, Exports and Imports, Baltic States, 1998 - 2000

**N.B.** Figures for Russia not available
Above figures, 3 and 4 is graphical representation of table 7 above. It depicts the quantity of Imports and Exports to and from the Baltic region for 1998 – 2000 to selected countries in the world. The figures for Russia are not available. These are the countries most relevant to this study.

UK

Exports to the UK from Estonia and Lithuania in 1999, compared to 1998, showed a reduction but for Latvia, there is an increase. There is a reduction in Imports from the UK for the three countries in 1999, compared to the 1998 figures. For Estonia, the reduction is more than 50%.
USA

Exports to the USA witness an increase for the three countries, except for Latvia in 2000. Conversely, there is a decrease in imports from the USA between 1998 and 2000, except for Lithuania in 2000 where there is an increase in imports.

SWEDEN

Exports to Sweden from the three Baltic countries showed an irregular pattern. For Lithuania, there is an increase in each successive year. For Estonia, there is an increase in 1999 followed by a decrease in 2000 while for Latvia there is a decrease in 1999 and an increase in 2000. Using 1998 as the base year, imports from Sweden to the Baltic States shows a decrease for both Estonia and Latvia, in 1999 and 2000 but an increase figure for Lithuania. However, in successive year pattern, whereas there is a decrease in 1999 compared to 1998, the figures for 2000 compared with 1999 showed an increase for all the countries in 2000. What the 2000 figure portends for imports from Sweden is an increasing trade with the three Baltic States.

4.6 Baltic Seaports

BALTIC PORTS AND CARGO TURNOVER, 1995 - 2000

BALTIC PORTS AND CARGO TURNOVER, (Million Tonnes), 1995 - 2000

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Estonia</td>
<td>Tallinn</td>
<td>13</td>
<td>14</td>
<td>17,1</td>
<td>21,4</td>
<td>26,5</td>
<td>29,3</td>
</tr>
<tr>
<td>Latvia</td>
<td>Riga</td>
<td>7,4</td>
<td>7,4</td>
<td>11,5</td>
<td>13,3</td>
<td>12</td>
<td>13,3</td>
</tr>
<tr>
<td></td>
<td>Liepaja</td>
<td>1,4</td>
<td>1,6</td>
<td>2,3</td>
<td>2,3</td>
<td>2,3</td>
<td>2,9</td>
</tr>
<tr>
<td>Lithuania</td>
<td>Klaipeda</td>
<td>12,7</td>
<td>14,8</td>
<td>16,1</td>
<td>15</td>
<td>15,7</td>
<td>19,3</td>
</tr>
<tr>
<td>Russia</td>
<td>St. Petersburg</td>
<td>17,1</td>
<td>16</td>
<td>20,6</td>
<td>21,6</td>
<td>28,2</td>
<td>32,4</td>
</tr>
</tbody>
</table>

Source: Baltic Ports Organization website, www.bpoports.com
Table 8, Baltic ports cargo turnover, 1995 – 2000
Except in few cases, the cargo turnover in Baltic seaports has shown an increase in successive years. Using 1995 as the base year, the turnover in 2000 is more than double for ports of Tallinn and Liepaja while for the other ports it is close to 80%. This implies an increasing port activity at the ports in the region and an indication of the outcome of the development/expansion projects at the various ports.

**BALTIC SEAPORTS, CARGO TURNOVER, 1998 – 2000**

<table>
<thead>
<tr>
<th>Country</th>
<th>Seaport</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>IMPORTANT CARGOES</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESTONIA</td>
<td>Tallinn</td>
<td>21.4</td>
<td>26.5</td>
<td>29.3</td>
<td>Oil products, metals, chemicals, containers, coal, reefer cargoes</td>
</tr>
<tr>
<td>LATVIA</td>
<td>Riga</td>
<td>13.3</td>
<td>12</td>
<td>13.3</td>
<td>General cargo, containers, pulp wood</td>
</tr>
<tr>
<td></td>
<td>Liepaja</td>
<td>2.3</td>
<td>2.3</td>
<td>2.9</td>
<td>Pulp wood, steel products, containers</td>
</tr>
<tr>
<td>LITHUANIA</td>
<td>Klaipeda</td>
<td>15</td>
<td>15.7</td>
<td>19.3</td>
<td>Oil, fertilizers, scrap metals, containers, cement</td>
</tr>
<tr>
<td>RUSSIA</td>
<td>St. Petersburg</td>
<td>21.6</td>
<td>28.2</td>
<td>32.4</td>
<td>Oil products, metals, chemicals, containers, reefer cargoes</td>
</tr>
</tbody>
</table>

Source: Data supplied by individual seaport

Table 9, Baltic seaports cargo turnover, 1998 - 2000

The table above shows the main cargoes (by type) being moved to and from the Baltic seaports.

**BALTIC SEAPORTS AND CONTAINER CAPACITY** (Million TEU)

---

Figure 4; Baltic Seaports Cargo turnover, 1995 – 2000

Source: Baltic Ports Organization web page, [www.bpoports.com](http://www.bpoports.com)
### Baltic Seaports and Container Capacity (Million TEU)

<table>
<thead>
<tr>
<th>Country</th>
<th>Seaport</th>
<th>Capacity</th>
<th>Container Capacity Utilized</th>
<th>Unutilized</th>
<th>Utilized</th>
<th>Unutilized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estonia</td>
<td>Tallinn</td>
<td>45 M</td>
<td>100 000</td>
<td>76 692</td>
<td>23 308</td>
<td>23%</td>
</tr>
<tr>
<td>Latvia</td>
<td>Riga</td>
<td>20 M</td>
<td>250 000</td>
<td>84 818</td>
<td>165 182</td>
<td>66%</td>
</tr>
<tr>
<td></td>
<td>Liepaja</td>
<td>7.5M</td>
<td>7 000 4640*</td>
<td>2 360</td>
<td>4 620</td>
<td>34%</td>
</tr>
<tr>
<td>Lithuania</td>
<td>Klaipeda</td>
<td>30 M</td>
<td>200 000</td>
<td>39 955</td>
<td>160 045</td>
<td>80%</td>
</tr>
<tr>
<td>Russia</td>
<td>St. Peters</td>
<td>30 M</td>
<td>250 000</td>
<td>195 733</td>
<td>54 267</td>
<td>22%</td>
</tr>
</tbody>
</table>

N.B. * 1999 figure, all others are year 2000

**Source:** Baltic Ports Organization web page, [www.bpoports.com](http://www.bpoports.com)

Table 10, Container Capacity, Baltic ports (Million TEU), Baltic Ports, 2000.

---

**Figure 5, Baltic Seaports, Container Capacity**

The seaports in the BSRR have various capacities for container traffic as shown in both the table and figure above. Total capacity for both Riga and St. Petersburg is 250,000 TEU’s each while Klaipeda and Tallinn have 200,000 and 100,000 respectively. The total capacity unutilized range from 22% to 80%. Klaipeda has the largest un-utilised capacity of 80% while St. Petersburg has the lowest un-utilised capacity of 22%. What this mean is that there exists room for increased container traffic in the seaports under consideration.
### NUMBER OF PORT CALLS BY VESSEL TYPE AND COUNTRY, 2000

<table>
<thead>
<tr>
<th>Traffic Area</th>
<th>Bulk/Comb</th>
<th>Tank</th>
<th>Gas</th>
<th>Cargo</th>
<th>Container</th>
<th>Reefer</th>
<th>Roro</th>
<th>Passenger</th>
<th>Other</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>N. Cont.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Europé</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.K.</td>
<td>3 415</td>
<td>20 441</td>
<td>3 568</td>
<td>32 186</td>
<td>7 705</td>
<td>1 194</td>
<td>15 272</td>
<td>4 166</td>
<td>254</td>
<td>88 201</td>
</tr>
<tr>
<td>GERMANY</td>
<td>1 587</td>
<td>4 381</td>
<td>570</td>
<td>12 164</td>
<td>7 008</td>
<td>390</td>
<td>3 519</td>
<td>381</td>
<td>160</td>
<td>30 160</td>
</tr>
<tr>
<td>Netherlands</td>
<td>2 797</td>
<td>9 095</td>
<td>1 362</td>
<td>18 347</td>
<td>6 380</td>
<td>1 105</td>
<td>6 093</td>
<td>1 922</td>
<td>214</td>
<td>47 315</td>
</tr>
<tr>
<td>N. Cont Europe Total</td>
<td>6 047</td>
<td>17 115</td>
<td>2 907</td>
<td>39 354</td>
<td>16 873</td>
<td>2 338</td>
<td>16 407</td>
<td>2 705</td>
<td>467</td>
<td>4 213</td>
</tr>
<tr>
<td>Scandinavia/Baltic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESTONIA</td>
<td>282</td>
<td>1 126</td>
<td>1</td>
<td>3 973</td>
<td>127</td>
<td>38</td>
<td>311</td>
<td>42</td>
<td>13</td>
<td>5 913</td>
</tr>
<tr>
<td>LATVIA</td>
<td>513</td>
<td>1 125</td>
<td>79</td>
<td>3 970</td>
<td>272</td>
<td>112</td>
<td>265</td>
<td>283</td>
<td>17</td>
<td>6 636</td>
</tr>
<tr>
<td>LITHUANIA</td>
<td>287</td>
<td>399</td>
<td>-</td>
<td>2 016</td>
<td>56</td>
<td>190</td>
<td>191</td>
<td>263</td>
<td>11</td>
<td>3 413</td>
</tr>
<tr>
<td>RUSSIA</td>
<td>984</td>
<td>685</td>
<td>-</td>
<td>6 439</td>
<td>343</td>
<td>771</td>
<td>264</td>
<td>509</td>
<td>22</td>
<td>10 017</td>
</tr>
<tr>
<td>SWEDEN</td>
<td>906</td>
<td>6 265</td>
<td>586</td>
<td>15 563</td>
<td>1 471</td>
<td>179</td>
<td>3 669</td>
<td>540</td>
<td>89</td>
<td>29 268</td>
</tr>
<tr>
<td>GERMANY</td>
<td>405</td>
<td>710</td>
<td>39</td>
<td>5 366</td>
<td>37</td>
<td>11</td>
<td>1 844</td>
<td>905</td>
<td>12</td>
<td>9 329</td>
</tr>
</tbody>
</table>

Source: SAI/LVR

Table 11, Vessel Type and Country
4.7 Ports In Europe

Port Of Hamburg, Germany

**PORT OF HAMBURG SEABORNE TRAFFIC**

**PERCENTAGE SHARE OF CONTAINERIZED TRAFFIC IN TOTAL CARGO**

<table>
<thead>
<tr>
<th>Traffic Area</th>
<th>Year</th>
<th>TOTAL CONTAINERIZED</th>
<th>CONTAINERIZED CONTAINERIZED CONTAINERIZED NON</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INBOUND/INWARD</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESTONIA</td>
<td>1999</td>
<td>652 265</td>
<td>120 109</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>528 102</td>
<td>139 657</td>
</tr>
<tr>
<td>LATVIA</td>
<td>1999</td>
<td>295 472</td>
<td>50 723</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>836 448</td>
<td>68 338</td>
</tr>
<tr>
<td>LITHUANIA</td>
<td>1999</td>
<td>321 026</td>
<td>39 850</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>309 769</td>
<td>72 028</td>
</tr>
<tr>
<td>Russia - Baltic Sea</td>
<td>1999</td>
<td>072 444</td>
<td>504 737</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>942 700</td>
<td>651 405</td>
</tr>
</tbody>
</table>

| **OUTBOUND/OUTWARDS** |      |                      |                                               |
| ESTONIA               | 1999 | 114 799              | 61 018                                        |
|                       | 2000 | 116 040              | 77 744                                        |
| LATVIA                | 1999 | 157 044              | 79 952                                        |
|                       | 2000 | 154 728              | 134 415                                       |
| LITHUANIA             | 1999 | 50 441               | 36 399                                        |
|                       | 2000 | 112 060              | 65 269                                        |
| Russia - Baltic Sea   | 1999 | 365 810              | 267 665                                       |
|                       | 2000 | 647 651              | 576 552                                       |

Table 11, Total Cargo, Hamburg – Baltic Seaports, 1999 – 2000

Figure 6; Port of Hamburg, Containerised/ Non-Containerised Cargo (Inbound)
Figure 7; Port of Hamburg, Containerised/ Non-Containerised Cargo (Outbound)

From the table above, the Port of Hamburg is very active in cargo traffic, to and from the BSRR, especially with respect to container shipment. Container traffic represents well over 50% of the outward cargo especially in year 2000, to countries in the BSRR. This is a clear indication of imports to the countries of the BSRR, from other lands. An excellent port facility in the Port of Hamburg and a huge presence of shipping agents in Germany accounts for this. The German maritime law equally plays a vital role in this respect. There is a long and close business tradition behind this development. According to Christopher Pälsson, of the Institute of Shipping Research in Göteborg, it is relatively cheaper for vessels to use the port of Hamburg, Germany or Rotterdam, in the Netherlands than the Port of Göteborg. Port dues are relatively cheap and port-handling facilities are excellent in these ports. The relative advantage these ports have over the Port of Göteborg is with respect to the low port dues charged to vessels using both ports and the central location in Europe. This calls to question the maritime dues charged by the Port of Göteborg. Efforts should be made for a downward review of charges and rates paid at the Port of Göteborg.

For freight coming to the Port of Hamburg from the Baltic seaports, the percentage share of containerised cargo is between 4% in Latvia (1999)
and 69% in Russia in 2000. This is low when compared with cargo from Hamburg to the Baltic seaports. However, there is an increase in the 2000 figures over the previous year for all the ports and this could be taken as a signal to future expectation in container cargo in the region.

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>PORT</th>
<th>Shipping Co.</th>
<th>CARGO TYPE</th>
<th>SAILINGS</th>
<th>AGENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESTONIA</td>
<td>Tallinn</td>
<td>DEU con</td>
<td>CK/FCL</td>
<td>Weekly</td>
<td>DeuCon</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ESF</td>
<td>FCL</td>
<td>Weekly</td>
<td>Menzell</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Estonian</td>
<td>FCL</td>
<td>Weekly</td>
<td>NSA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LPS</td>
<td>Conv</td>
<td>Weekly</td>
<td>Lass</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unifeeder</td>
<td>BB/FCL/CKTC</td>
<td>Twice weekly</td>
<td>Unifeeder</td>
</tr>
<tr>
<td>LATVIA</td>
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Table 12, Frequency of Sailings, to and from, Baltic Seaports.
## PORT OF ROTTERDAM, THE NETHERLANDS

### PORT OF ROTTERDAM: CARGO TURNOVER

ROTTERDAM - BALTIC SEAPORTS, 1998 - 2000

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**RUSSIA TOTAL**

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Source: Port of Rotterdam, Information Dept.

Table 13, Rotterdam - Baltic Region, 1998 - 2000

### CARGO FREIGHT, ROTTERDAM - BALTIC SEA (1998-2000)

![Bar chart showing cargo freight in the Baltic Sea region from 1998 to 2000 for Russia, Lithuania, Latvia, and Estonia.]

Figure 8, Total cargo freight, Rotterdam – Baltic Sea region (1998 – 2000)
Figure 9, Cargo freight, Rotterdam – Baltic Sea (1998 – 2000)

1999 is a bad year, as regards freight flow between Rotterdam and the Baltic Seaports. There is a decrease in port activities in 1999, compared with 1998, for all the Baltic seaports. However, Estonia, Lithuania and St. Petersburg did bounce back in 2000, albeit still lower than the 1998 figure in St. Petersburg.

Comparing the Ports of Hamburg and Rotterdam, Hamburg has a larger share of freight to and from the BSRR. While there is a decrease in cargo freight through Rotterdam, especially in 1999, Hamburg witnessed an increase in 2000 over 1999 figures. This could mean that Rotterdam’s loss is Hamburg’s gain.
Chapter 5 – Conclusion

5.1 Summary

In the BSRR, container traffic is increasing and there are still good opportunities for expansion at the seaports. With a depth of 12 metres, for container and ro-ro vessels, the Port of Göteborg can accommodate the largest vessels to and from the BSRR. For the Port of Göteborg, closeness to the open sea signifies shorter approach times, and immediate access to the motorway and the railway link provides swift cargo transports. For the Port of Göteborg, great opportunities could open through co-operation with other transport hubs in the world. The BSRR is an interesting and expanding market. Over 100 million people, with growing purchasing power live on and work close to the coasts of the Baltic Sea. There is large trade potential for the whole of Northern Europe; the Port of Göteborg could be a catalyst for this great potential.

5.2 Conclusion

In the preceding chapters, I have analysed the market situation in the Baltic Seaports, especially in the last 2 – 3 years. As mentioned previously, the functions of the seaports in modern times goes beyond physical movement of goods and passenger, from one point to another. It entails a lot of information sharing and management, co-ordinating the entire transport network and dealing with specialised agencies (or individuals). A careful study and analysis of the situation in the BSRR makes it safe to arrive at the following conclusion:

- There is a growing volume of cargo to and from the BSRR, especially in the last three years
- Containerised cargo is on the increase in the major seaports in the region. This trend is sure to continue as this belief underscore the various development and expansion work in the Baltic seaports
- The various development and expansion of infrastructure at the seaports in the BSRR, represents a strong commitment by the government in the respective countries, to the maritime industry and recognition of the increasing importance of the ports
- It may be too optimistic for the Port of Göteborg to think itself as a hub (or major transit port) for cargo bound for European markets
(or seaports). However, the Port of Göteborg is in a good position to be the major transit port for cargo to and from the BSRR bound for North Europe, the USA and South American ports. Good geographical location, excellent port facilities, an efficient handling system, short lead times and easy transhipment makes the Port of Göteborg a veritable transit port.

- The possibility of some of the countries in the BSRR becoming members of the European Union is high. This will open a floodgate of economic and business potentials, especially for the seaports, which is a major industry in these countries.

5.3 Recommendation

- To achieve the objective of being a major transit port, the Port of Göteborg should co-ordinate the entire transportation network with its clients. The various actors in the network should come together with the Port of Göteborg as the facilitator. Through co-operation, the transport and logistics functions are better enhanced and the transport network becomes better organised and more efficient.
- Information should be better shared with clients and customers alike, to facilitate access to reliable information.
- The Port of Göteborg should commission further research into the possibility of being a hub (or transit port) for cargo bound for the USA and North America, to and from the BSRR.
- The Port of Göteborg should explore alternative business opportunities in the BSRR. This includes IT and logistics support for seaports in the BSRR. These are commercially sale-able services.
- From my interview in the course of this research work, it became evident that the price charged to vessels by the Port of Göteborg is NOT competitive, compared with other seaports in Europe. The Port of Göteborg should therefore employ competitive pricing system, for fees charged to use the port.
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Jennie Thalenius, Institute of Shipping Research, Göteborg
Petra Thunegard, Institute of Shipping Research, Göteborg
Babro Wilen, Institute of Shipping Research, Göteborg
Klas Lunden, Unifeeder, Göteborg
Karl-Rediar Gundersen, Teamlines, Göteborg

Eric Nilsson, Vice VD, Göteborg Hamn AB
Claes Sundmark, Göteborg Hamn AB
Nils van Dam, Information Consultant, Port of Rotterdam
Klaus-H. Lubcke, Head, Market Research Dept., Port of Hamburg

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## Appendix 1

### IMPORTS/EXPORTS TO/FROM THE BALTIC STATES, 1998 - 2000


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Appendix 2

AGE OF VESSELS CALLING AT THE NORTH EUROPEAN PORTS, 2000

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Source: SAI/LVR
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Source: SAI/LVR
Appendix 4

MASTER’S THESIS – GBS, Göteborg University
Interview Questions – October 05, 2001, Institute of Shipping Research, Göteborg.
Explanation of terms:
• Port throughput
• Transit cargo
• Transhipped cargo
• Port fairway
• Tramp shipping

1. More recent data/statistics on the BSRR, W. Europe, Sweden
2. What, in your opinion is the most efficient and cost effectively viable means of freight between the BSRR and W. Europe – air, land, sea or combination of any?
3. Container Traffic, past, present and future. Possible source(s) of information??
4. The Port of Göteborg (POG) as A transit port between the BSRR – W. Europe, BSRR – Intercontinental. How feasible?
6. What is the most important factor, by the shipper, agents, etc in port selection?
7. Major factor for POG to attract ships/vessels as a transit port. How can the POG attract vessels in its ambition to be a major transit port?
8. Can the POG be a hub in intra-regional and inter-continental container traffic? If YES, please suggest measures you think could make it realizable. – Technically, logistically, geographically.
9. Rival port(s) to the POG in this respect.
10. What amount of reliability should one attach to statistical data from various actors in the maritime industry, including the Internet?
11. Is the maritime industry over saturated or do you think there exist room for new players, at least in the sea-link region under consideration?
12. What do you think is the most active sea-route between the BSRR and Western Europe?

N.B.
BSRR – Estonia, Latvia, Lithuania and Russia
W. Europe – Germany and The Netherlands
Estonia – Port of Tallinn
Latvia – Port of Liepaja
Lithuania – Port of Klaipeda
Russia – Port of St. Petersburg
Appendix 5

MASTERS THESIS – GBS, Göteborg University


1. As a player in freight movement between the BSRR and Western Europe, what do you think is the most important, i.e. busy route, in terms of traffic flow?

2. From your knowledge of the traffic flow between the above sea links which of the seaports will you consider most important, in terms of container traffic and handling capacity?

3. What are the main determinants in seaport selection in container traffic?

4. How often does the shipper choose the port in freight movement?

5. What is more important to the shipper – time, reliability, frequency, port handling, routes, price. How will you rate each, on a scale of 10?

6. How would you describe the future prospects between the BSRR and Western Europe, in terms of container traffic?

7. Do you think the Port of Göteborg can be a major player in container traffic between the BSRR and Western European seaports? If YES, how?

8. If we decide to make SWOT analysis of the Port of Göteborg and the ports in Hamburg, Bremehaven and Rotterdam, what do you think are the strengths, weaknesses, opportunities and threats of the Port of Göteborg?

9. How can the Port of Göteborg attract more freight along the above route? Please suggest ways.

10. Can the Port of Göteborg be a hub in intra-regional and inter-regional container traffic? If YES, please suggest measures you think could make it realisable – technically, logistically, and geographically.

11. Is the maritime industry over saturated or do you think there exist room for new players, at least in the sea-link region under consideration?
12. Tramp shipping or scheduled freight movement, which will be more effective and profitable for the port of Göteborg in the above sea-link?

13. What are the major bottlenecks in container shipping: intra-regional, inter-regional and above sea-link?

THANK YOU FOR YOUR TIME AND FOR SHARING YOUR EXPERIENCE WITH ME.

N.B.

BSRR – Estonia, Latvia, Lithuania and Russia
W. Europe – Germany and The Netherlands

Estonia – Port of Tallinn
Latvia – Ports of Riga and Liepaja
Lithuania – Port of Klaipeda
Russia – Port of St. Petersburg