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PRIORITIES IN LITHUANIAN WATER TRANSPORT DEVELOPMENT:
Policy and activities

By
JUOZAS KARALAVICIUS
Lithuania

A dissertation submitted to the World Maritime University in partial fulfilment of the requirements for the award of the degree of

MASTER OF SCIENCE
in
GENERAL MARITIME ADMINISTRATION AND
ENVIRONMENT PROTECTION

1996

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I certify that all the material in this dissertation that is not my own work has been identified, and that no material is included for which a degree has previously been conferred on me.

The contents of this dissertation reflect my own personal views, and are not necessarily endorsed by the University.

(Signature)  
(October 1996)  

Supervised by:
Name: Professor T. J. Sampson
Office: General Maritime Administration and Environment Protection
World Maritime University

Assessed by:
Name: Professor P. S. Vanchiswar
Office: Maritime Safety Administration
World Maritime University

Co-assessed by:
Name: Aage Os, Deputy Director General
Office: Shipping Department
Royal Norwegian Ministry of Foreign Affairs
ACKNOWLEDGEMENTS

I would like to thank Mr. Jonas Birziskis, Minister of Transport, and my sponsors:
Mr. Valentina Greiciunas, Director of Klaipeda State Seaport Authority,
Mr. Eugenijus Spelis, General Director of Stevedoring Stock Company “Klaipedos Smelte”,
Mr. Antanas Anilionis, President of the Lithuanian Shipping Company,
Mr. Benediktas Petrauskas, General Director of Klaipeda Stevedoring Company “Klasco”, for giving me the possibility to study General Maritime Administration and Environment Protection (Policy), a two-year MSc course at World Maritime University, established under the auspices of the International Maritime Organisation, a specialised agency of the United Nations.

I am grateful to Professor T. J. Sampson and Professor P. S. Vanchiswar for their time and attitude.

My thanks to Captain J. Horck and to the English language staff, especially to lecturers I. Sund Battista and C. W. Cole.
The dissertation examines internal and external developments in the Lithuanian Water Transport industry, which started after the restoration of independence and the collapse of the former USSR. During the Soviet period the shipping industry in Lithuania was developed as part of the planned economy, under the control and management of centralised government structures of the former USSR. After the restoration of independence a new political environment created conditions for Lithuania to develop its own national economy, based on free and fair market competitive conditions.

This dissertation examines internal and external developmental factors which could set the direction of the water transport industry for successful transition to the free market economy.

The dissertation begins with a description of the state regulation system and basic legal regime for transport activities, then examines activities performed by water transport organisations and discusses the main impediment areas. In addition, the future of the water transport industry cannot be discussed without information on cargo flows.

Then, it turns to the external policy factors and examines relevant policy decisions and developments in the water transport sector as important considerations for Lithuania’s future.

Finally, for the nation’s successful transition and participation in future development and growth, getting the priorities right is very important. These issues are addressed as the main objectives for water transport development in Lithuania.
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LIST OF ABBREVIATIONS

dwt  Deadweight tons
EIA  Environment Impact Assessment
GDP  Gross domestic product
GT   Aggregate gross tonnage
HALCROW-APEC  Sir William Halcrow & Partners Ltd and Antwerp Port Engineering & Consulting
HELCOM  The Baltic Marine Environment Protection Commission
IACS  International Association of Classification Societies
IMLI  International Maritime Law Institute
IMO  International Maritime Organisation
IWA  Inland Waterways Authority
KLASCO  Klaipeda Stevedoring Company
KSSA  Klaipeda State Seaport Authority
LISCO  Lithuanian Shipping Company
MOU  The Paris Memorandum of Understanding on Port State Control
MTC  Maritime Transport Committee
MTRL  Ministry of Transport of the Republic of Lithuania
NTDP  National Transport Development Programme
OECD  Organisation of Economic Co-operation and Development
PSC  Port State Control
SCKH  Stock Company “Klaipedos Hidrotechnika”
SCNL  Stock Company “Nemuno Laivininkyste”
SSCKS  Stevedoring Stock Company “Klaipedos Smelte”
SCSP  Stock Company “Smiltynes Perkela”
SWTCNI  State Water Transport Control and Navigation Inspectorate
UN  United Nations
WMU  World Maritime University
WTD  Water Transport Department
CHAPTER 1

INTRODUCTION

The Republic of Lithuania forms part of the eastern coast line of the Baltic Sea. It has an ice-free port called Klaipeda, which is of enormous value to the national economy and maritime industry. This favourable geographical location is very important and creates basic conditions and opportunities for the country to develop existing maritime infrastructures in a sustainable way to meet the market needs and the nation's economic growth.

The author has chosen the topic of this dissertation "Priorities in Lithuanian water transport development: policy and activities", subject because the water transport industry and all the other industries in Lithuania are undergoing a process of transition from a centrally planned economy to market oriented activities. For this transition to the new environment there is a vital need to establish the right priorities in this field by analysing existing policies, developments, and the main impediments to this transition path.

The main aim of this dissertation is to evaluate the above issues so as to undertake this transition successfully. In the author's opinion, it is of the utmost importance to establish the priorities, that must be pursued in this field if future developments to be successful.
For a better understanding, of the realities to be faced in this transition to a market economy, it is important to present in a short introduction of Lithuanians history of government.

In 1940 the Soviet occupation broke up the existing governing structures in Lithuania. After this time the basic branches of the Lithuanian transport system with regard to shipping matters, aviation and rail transport were under the control and management of the centralised government structures of the ministries of the former Soviet Union. During this period of time, only roads and the inland waterways transport sector remained under the management of the local government.

The Ministry of Transport of the Republic of Lithuania (MTRL) was again reorganised after the restoration of the independent state of Lithuania on March 11, 1990. At the present time the MTRL covers and is responsible for all matters of the transport sector, including civil aviation, railways, road, sea and river transport modes. According to the National Transport Development Programme (NTDP) at the end of 1993, the transport sector, including the private sector, employed only about 8.5% of the labour force of Lithuania. The division of the labour force among the different modes of transport is as follows:

- Road transport 83.1%
- Railway transport 11.9%
- Aviation transport 1.6%
- Maritime transport 3.1%
- Inland waterway transport 0.3%

According to (Transport in independent Lithuania, 1995) economic indicators relative to contributions to structure gross domestic product (GDP) from the transport sector are as follows:

- 10% of the GDP in 1993
- 12% of the GDP in 1994
- forecast for 1997 up to 17% of the GDP.
From the growing economic indicators (GDP) it is possible to conclude that transport activities have a direct impact on the country's economic growth. The transport sector is recognised by the government as a priority for total national economy growth.

From this very brief look at the historical and current situation, it is clear that only in the last six year period have efforts been made to create a niche in water transport activities for the direct benefit of the people of Lithuania.

The dissertation begins with a description of the national state regulation system for transport in Lithuania. This chapter analyses the main tasks of the MTRL and the basic functions of the Water Transport Department (WTD) as a part of the MTRL.

Chapter 3 concentrates on the description and analysis of the activities performed by national water transport organisations. This includes activities concerning ports and shipping, as well as the inland waterways sector.

The study then turns its attention in Chapter 4 to the MTRL initiatives in the field of water transport development, examining relevant policy decisions and external political developments, in the international and regional arena and the implication of these for Lithuania's national maritime strategy.

In Chapter 5, the main problem areas facing water transport development in Lithuania are addressed. In particular, shipping operational matters regarding the average age of the fleet and the rate of detentions of national flag ships are analysed.

Chapter 6 establishes the priorities that must be considered as necessary for the development of water transport in Lithuania.
Chapter 7 gives the recommendations arising from the dissertation. Many factors affect the changing environment governing water transport activities and much more needs to be done to ensure that water transport supports the economic growth of the country.

This study is only a first stage in the elaboration of the water transport activities and policy for Lithuania.

This chapter cannot give all the operational solutions or identify the most practical policy in this dramatically changing environment, but gives an idea of the general direction for water transport industry development need and to achieve national goals, namely successful transition into a market economy environment.
CHAPTER 2

THE STATE REGULATION SYSTEM OF TRANSPORT IN LITHUANIA

The nation’s welfare and continuous economic growth depend on its political, social and economic philosophies and an adequate system of management.

Figure 1 shows the basic sectors of the state structure:

![Diagram](image)

Figure 1 The powers of the State

In accordance with the Constitution, which was approved by national referendum on 25 October 1992, the Republic of Lithuania is an independent and democratic republic.
The divisions of powers of the state (Figure 1) are as follows: the Seimas (Parliament) is the legislative power, which considers and enacts amendments to the constitution, enacts laws, supervises the activities of the government and considers other issues in accordance with the constitution provisions.

The President of the Republic is the Head of the State. The President resolves foreign policy issues in conjunction with the government, implements policies and considers other issues in accordance with constitution provisions.

The executive power is performed by the government of the republic, which consists of the Prime Minister and other ministers. The government's main considerations and responsibilities are to oversee the nations affairs, the implementation of laws, drafting of legislative acts, co-ordination of activities among governmental organisations, as well as tending to all matters arising in accordance with constitutional provisions.

The judicial branch is an independent authority of the state and consists of a constitutional court, a supreme court, a court of appeal and district and local courts.

The State system for regulation of transport is based on the establishment of a legal basis for transport matters. The initial aim and purpose has been to prepare the necessary laws to regulate the activities of all modes of transport. This process began when the Supreme Council of the Republic of Lithuania issued Law # I-1863, which came into force on October 08, 1991. This is the foundation law which gives general provisions for transport activities in Lithuania and has the title “The law of the fundamentals of transport activities of the Lithuanian Republic”. It is a basic, but very powerful law and contains 11 articles with general provisions to set a direction for state regulations and the management system for transport in Lithuania.

Article 2 gives definitions of transport and the divisions of transport modes. According to the Article as regarding maritime and inland waterways transport, it covers areas such as ports, lighthouses, fairways, and aids to navigation as well as vessels.
Article 3. Is the transport relations regulation. This Article establishes the legal
regime for transport regulations in Lithuania.

Article 4. Addresses the right of ownership of transport. This Article addresses
division of property, such as railways, main roads, port areas, aids to navigation, civil
aviation aeronautics systems, and the main pipelines, which are established as
Lithuanian state property. All other property, such as local roads and transport means
may belong to local governments, jurisdictions or be private property.

Article 5. Governs the transport management. The state transport property is
governed by the MTRL and other governmental organisations. Transport modes at
the disposal of local authorities are managed according to the laws of local
authorities.

Article 6. Deals with taxation. This Article deals with provisions of taxation matters
for use of transport services regulated by government, and establishes rules and
tariffs, for example port dues.

Article 7. Establishes the legal capacity to manage transport means. This Article
deals with basic requirements, such as appropriate qualifications and health
conditions.

Article 8. Addresses responsibilities of contracting parties. This Article deals with
obligations and entitlements of the parties in the transportation of cargo and
passengers, including insurance implications.

Article 9. Governs occupation in transport activities. This Article deals establishes
the legal regime that governs occupations in transportation business in accordance
with other national laws.

Article 10. Deals with safety control. The MTRL together with appropriate
governmental organisations are given responsibility for the co-ordination of safety
requirements, controls and enforcement of safety provisions.

Article 11. Addresses ecological and hygiene requirements for transport activities.
The provisions for transport business are based on international and national
ecological and hygiene standards.
From this very brief information it can be concluded that the basic tenets for the legal basis of transport have been established by the above mentioned law. It covers all transport sectors and sets up the directorates and general legal provisions for transport activities in Lithuania.

2.1 MINISTRY RESPONSIBLE FOR TRANSPORT MATTERS

From the previous discussions regarding State regulation and division of power and responsibilities for transport matters (Figure 1), and according to the above mentioned Law # I-1863, Article 5 and Article 10, it is clear that the MTRL is responsible overall for transport matters.

After the restoration of independence from the former USSR, the main concern and priority task for the new independent government was to establish this new governing body for transport, known as the MTRL. This ministry was established at once after the Supreme Council of the Republic of Lithuania had declared the Act on the restoration of the independent State on March 11, 1990.

The main concern was to create a governing system for the transportation activities, covering all modes of transport in Lithuania with the exception of pipeline transport. At the present time the organisational structure of the MTRL is roughly expressed in the following chart:
Figure 2 Organisational chart of the Ministry of Transport

Source: Transport in independent Lithuania, 1995

Note: ............ first stage
...... second stage
Figure 2 is an organisational chart of the MTRL, which can be explained as a "flat" organisational system. The general feature of this structure is that work is carried out in two stages only.

The Secretary and under-secretary to the Ministry together with departments from the first stage are responsible for formulation of general transport policies, such as transport policy and investment, economic and legal affairs, environment protection matters, international relations policy as well as transport industry and privatisation matters.

The second stage of the organisational structure shows the departments responsible for specific modes of transport. They maintain relations with organisations prescribed by the MTRL in the specific field of activities. For example, the water transport department maintains relations with relevant water transport organisations, or in other words, they maintain an open dialogue with all institutions dealing with water transport matters.

The general policy of this management system and organisational structure are to create harmonisation and synchronisation of all modes of transport. These conditions are very important for the complex development of the entire national transport sector.

Why is this important? First, all transport modes should not be looked at as separate activities. In a global context, it is the transportation infrastructure with a specific superstructure that has an impact on the functioning of other economic branches, such as manufacturing industries, agriculture and building activities.

On the governmental level, i.e. the first stage of the MTRL, synchronisation and development of all modes of transport according to market needs and requirements should be done. As mentioned above, the second stage of this organisational structure should have experts in the field of activities for the purpose of assisting the policy-makers in developing an effective transport policy. It implies that employees who are responsible for a specific mode of transport, for example the maritime
transport department, must be competent in all relevant maritime matters. This is a very important point which will be discussed in the following sections.

The main tasks and responsibilities of the MTRL are determined by “The Statute of the Ministry of Transport of the Republic of Lithuania”. At present the basic legal provisions for the MTRL are contained in the above mentioned document known as Decision 943, approved by the government of Lithuania on 6 October 1994. This new document of the MTRL contains 15 Articles and is subdivided into the four following parts:

- General statutes
- Tasks and functions
- Legal capacity
- Management

According to the Statute of the MTRL, the main tasks can be broadly categorised as follows:

- To formulate and implement a national transport strategy
- To unite all modes of transport into an effective transport system and to determine the main factors in order to develop the basic infrastructure of the national transport system
- To co-ordinate interaction of all modes of transport
- To formulate and co-ordinate safety and environment protection policy matters
- To prepare a legal basis for the national transport system
- To co-ordinate, participate and communicate with appropriate international institutions and organisations.

During this transition period from a planned economy to a market economy, the MTRL has to fulfil specific tasks as regards transport considerations, namely to prepare the transport sector progress towards functioning a market economy, for example taking into consideration privatisation and other related matters.
In terms of the governing body responsible for transport matters and its coverage area as discussed in the previous section it is evident that the Water Transport Department (WTD) covers all water transport matters. This government authority is responsible for maritime and inland waterway matters as a part of the MTRL (Figure 2) and covers the following areas:

![Diagram of water transport industry branches](image)

Figure 3 The branches in the water transport industry

At present the offices branches are primarily located in the city of Klaipeda, which is the main centre of the maritime industry and has connections with the inland waterway network as well. Basic functions are prescribed by the government Decision 312 "The establishment of governing bodies for water transport and fishing industry". The WTD was established in accordance with this Decision issued by the Government of Lithuania issued on 16 October, 1990. This is the main and most
powerful document addressing water transport activities. For example, paragraph 1 expresses the following: “The Ministry of Transport was given the task to establish the Water Transport Department in Klaipeda, to accomplish the policy of government in the water transport field”.

The main task and function after the restoration of independence in 1990 was to create a national water transport system that would mesh with all other transport modes and to prepare the national legal basis for the purpose of assuring water transport safety. The basic international legal provisions for maritime safety and pollution prevention from ships and several international conventions (see Appendix 1) were signed by the Lithuanian government at the same time.

The second major step for the national policy relevant to waterway transport was to have Lithuania accepted as a member of the International Maritime Organisation (IMO), see (Appendix 2). This policy decision is discussed in Chapter 4 of the dissertation.

For a better understanding of the basic functions of the WTD, it is relevant to present the organisational structure that exists at present in that it has changed several times since its initial inception.

![Organisational structure of the Water Transport Department](image)

Figure 4 Organisational structure of the Water Transport Department
This organisational structure (Figure 4) carries out its work in accordance with the basic roles and functions which are determined by Order 247 issued on 4 May 1995, known as “The Statute of the Water Transport Department” in accordance with Decision 943 approved by government on 6 October 1994.

The Order contains six parts, namely

- General provisions
- Main tasks
- Functions
- Legal capacity
- System of management
- Responsibility.

In accordance with the above Order, the main tasks and functions are

- Formulation and implementation of a national water transport strategy
- Integration into the global water transport network
- Formulation and implementation of environment protection and safety of navigation policy
- Drafting of national legislation in the water transport field of activities
- Keeping of international relations with relevant organisations
- Controlling activities of the water transport organisations under the cognisance of the WTD.

From the WTD organisational structure, and according to the basic functions prescribed by the Statute of the WTD, it is possible to conclude that the existing three divisions need to implement policy decisions and, at the same time, carry out a function of assisting policy makers in the development of a national water transport policy.

Again, in the author’s opinion, this assistance should be made by experts in these fields of activities, in order to advise policy makers in the process of constructive policy formulation.
In order to keep the national fleet at the highest standards of safety at sea and to prevent pollution of the marine environment, the MTRL has delegated certain functions to classification societies.

2.3 RELATIONSHIP BETWEEN THE FLAG ADMINISTRATION AND CLASSIFICATION SOCIETIES

During the time before restoration of independence in Lithuania, the survey and certification of Lithuanian flag seagoing vessels were carried out by the Maritime Register of Shipping (Russia). At present, the MTRL has decided to delegate these functions, such as surveys and certification, under agreement between the MTRL and classification societies to carry out this work on behalf of the MTRL. This decision was taken mainly for the following reasons. Currently it is impossible to establish a classification society in order to carry out this work. A second impediment and an important consideration is the lack of qualified and experienced personnel in the national maritime administration to carry out this work.

In keeping with the MTRL’s commitment to high standards for the Lithuanian fleet, it was decided to authorise only members of the International Association of Classification Societies (IACS) to carry out the statutory duties on behalf of the MTRL.

The field of authorisation has been extended a number of such classification societies. Before independence only the Russian Register acted as a classification society for the Lithuanian flag. At present the picture in this field has dramatically changed i.e. Lithuania has authorised statutory duties to be carried out on its behalf by agreement between the major classification societies, as follows:

- Det Norske Veritas
• Lloyds Register of Shipping
• Polski Rejestr Statkow
• Maritime Register of Shipping (Russia).

This does not limit other classification societies from entering into agreements with the MTRL.

At present these classification societies carry out duties for four key international conventions, which form the main framework of maritime safety and pollution prevention standards (Hisayasu Jin, 1995). These duties are in connection with the following international conventions:

• International Convention on Load Lines (LL) 1966
• International Convention for the Safety of Life at Sea (SOLAS)
• International Convention for the Prevention of Pollution from Ships (MARPOL 73/78)

From the shipowners’ point of view, this policy decision gives an opportunity to select the classification society for survey and certification that is most advantageous for their own ships. At present most Lithuanian flag vessels are inspected by the Russian Register as before, but the situation is changing and other classification societies are beginning to carry out more inspections of Lithuanian flag ships.

The Lithuanian River Register and the Polski Rejestr Statkow carry out statutory surveys and certification of vessels and pleasure craft in the inland waterway sector.

The following shows the system of delegated functions and survey/certification procedures.
Regarding delegation under the International Maritime Organisation (IMO) standards, it is very important to remember the following (Vanchiswar, 1994) comment:

In this connection it needs to be borne in mind that such delegation does not relieve an Administration of its responsibilities and obligations. This is clearly defined in Regulation 6 (e) of the Protocol of 1978 relating to the SOLAS Convention, 1974, which states:

"In every case, the Administration shall fully guarantee the completeness and efficiency of the inspection and survey, and shall
undertake to ensure the necessary arrangements to satisfy this obligation”.

In this case it is very important to set up means to monitor or audit the classification society by competent personnel from the WTD in order to see how the society performs these delegated obligations. In other words, in view of the responsibilities and obligations under the IMO conventions, a delegating administration, in this case the WTD, must establish a form of monitoring of the classification societies to ensure that the work is performed according to the requirements. This implies that the WTD must have a satisfactory quality audit. It is also important to note that the delegated administration still retains all responsibilities and obligations under the ratified conventions.

2.4 ORGANISATION UNDER THE SUPERVISION OF THE WATER TRANSPORT DEPARTMENT

As mentioned in the previous section all maritime activities, i.e. shipping, ports, ship building and ship repairing activities were previously commanded and managed from Moscow. After the restoration of independence all of the above mentioned maritime transport industry organisations belonged to Lithuania, namely to the MTRL as a governmental agency. The MTRL became responsible for all transport matters, and in accordance with Lithuanian law, these are now under MTRL jurisdiction and control.

In order to implement its policies and supervise water transport organisations as a part of the total transport system, the MTRL issued an order on supervision by WTD that covers the whole of the water transport industry. At present all organisations under the supervision of the WTD can be divided in two sectors, i.e. maritime and
inland waterway. Broadly speaking, both sectors have common features with regard to shipping, ports and activities. The only major and important difference in this case is the scale of coverage, i.e. providing local or international services. Both sectors have created conditions for successful integration of water transport into the transport chain and both form a part of the total transport system that ensures the movement of goods and passengers.

The organisations which are under supervision of the WTD and participate in water transport activities can be described, as follows:

- The Lithuanian Shipping Company (LISCO) is the main national sea borne trade player. At present it owns 44 vessels with a tonnage that ranges from 2 000 up to 14 000 dwt. This company carries different types of cargo as well as passengers.

- Klaipeda State Seaport Authority (KSSA), the KSSA is the landlord of the land and water territory of the port, KSSA is also responsible for maintenance and development of the port infrastructure. The Harbour Master’s office is in charge of navigation safety, organisation of search and rescue operations and other maritime matters.

- The Klaipeda Stevedoring Company (KLASCO) is the biggest stevedoring company in the port as regards cargo handling operations. It handled more than 50 % of the total cargo flow in 1995. The International Sea Ferry Terminal also belongs to KLASCO. The main business of the International Sea Ferry Terminal is to meet new requirements for passenger ferry and RO-RO services.

- The Stevedoring Stock Company, “Klaipedos Smelte” (SSCKS) handles different types of cargo, such as fish products, fruit and vegetables, mineral fertilisers, meet, timber etc. The turnover in 1995 was over one thousand tons.
• The Stock Company, “Klaipedos Hidrotechnika”, (SCKH) oversees the activities of maintenance and construction of quays and breakwaters in the port area.
• The Stock Company, “Nemuno Laivininkyste” (SCNL) is the inland waterway shipping company, which carries cargo and passengers on the River Nemunas.
• The Inland Waterways Authority (IWA) has the tasks of dredging work, navigational maintenance and development of the inland waterway system.
• The Stock Company, “Smiltynes Perkela” (SCSP) is the ferry company for local needs. This company performs transport services for passengers and transport vehicles from Klaipeda to Kursiu Nerija.
• The State Water Transport Control and Navigation Inspectorate (SWTCNI) is in charge of safety of navigation, registration, survey and certification of inland waterways vessels, pleasure and sport craft. It also deals with charts for navigation and compass matters.

In accordance with an order issued by the MTRL, the WTD is obligated to supervise the following water transport organisation, see Figure 6.
Figure 6 Organisation under supervision of the WTD
CHAPTER 3

WATER TRANSPORT ORGANISATION ACTIVITIES

In the previous chapter it was mentioned that the water transport system in Lithuania consists of maritime and inland waterway sectors. Generally, water transport activities need basic systems, such as ports, shipping companies and fairways. The water transport system in Lithuania can be depicted as follows:

Figure 7 Water transport system in Lithuania

Figure 7 presents the main systems, namely ship operations, fairway and port/terminal which are vital to perform water transport activities.
A ship operation system implies that the crew has to meet national and international standards and the ships have to comply with Classification Society rules. In other words, ships and crew members must be able to operate a ship as prescribed by national, international and classification societies standards, namely safely and in a manner consistent with protection of the marine environment. They also have to comply with the concept of transport efficiency from an economical point of view. As regards transport efficiency in global terms Dolman (1992) gives the following comments:

"... 'efficiency' in a global transportation system is cheap, fast, punctual, damage free, under the central control of one party, and environmentally acceptable..."

The fairway system in this case plays a very important role and makes it possible for ships to operate safely. The fairway and aids to navigation are absolutely vital as an essential element of safety in the system. An important consideration is to identify the needed quality and reliability of the aids to navigation along with other elements of the fairway system that can affect safety of vessel movement. In Lithuania the KSSA is responsible for the maritime sector and the IWA covers inland waterway navigable waters.

The port/terminal system provides the junction point with regards to land transport modes, namely roads and railways. This system also serves as the connection between shippers and consignees. The port/terminal must meet their requirements for needs and services.

These are the main characteristics of the water transport system. The details of the water transport organisation’s activities will be examined further in the remainder of this chapter.
3.1 ACTIVITIES AND ORGANISATION OF THE KLAIPEDA STATE SEAPORT

Klaipeda is a Baltic seaport, which is located on the eastern side of the Baltic Sea in a strait connecting the Kursiu Marias with the Baltic Sea. From a navigational point of view Klaipeda is an ice-free port open for navigation the year round.

One of the most valuable assets of the port of Klaipeda is its extremely favourable geographical position. It occupies a central location with regard to the east-west transport corridor for cargo and passenger flow. This port serves as a transport junction with links by road, rail and inland waterway to the eastern Europe hinterlands this is a valuable route for carriers of cargo and offers an opportunity to meet the demand for an integrated transport network. The general plan of the port (Figure 8) and the main characteristics are as follows:

- Ability to receive ships up to 195 meters
- Maximum permissible draft of 10.5 meters.

After the restoration of independence the Lithuanian staff government became involved in dealing with the initial establishment of needed port management structures, because previously maritime activities such as ship repair, ship building, and other related activities of the port area had been distributed among different ministries of the former USSR. The legal regime for management and regulation of water transport activities is the “The law of the fundamentals of transport activities of the Lithuanian Republic” issued in 1991. This law is the basis for establishing coordination and linkage between different modes of transport. Another important law is the decree of the government of Lithuania which was issued in 1992 whereby the port of Klaipeda received the status of the Lithuanian State Seaport.

The establishment of the KSSA laid out the corner stone in port policy in Lithuania. At present the KSSA has the following organisational structure (Figure 9, page 26):
Source: Guide to port entry, 1993-94

Figure 8 The general port plan of Klaipeda
Figure 9 Organisational structure of Klaipeda State Seaport Authority
This organisational structure is under the MTRL with direct supervision by the WTD. The daily operations of the port are carried out by the KSSA. A number of department groups are dealing specifically with port operations and development matters. This organisation can be divided into the following main groups:

- General administration
- The Harbour Master's office
- Technical services.

The general administration of the port is functionally subdivided in a number of departments, such as port security, economic and legal matters.

The technical services of the port include a number of groups and services with regard to technical matters in the port, such as maintenance and construction of the port infrastructure. In other words, the main responsibilities are to maintain and develop quays, port roads, railways, fairways and aids to navigation.

The Harbour Master's office has five sections. The Harbour Master is in charge of matters concerning maritime safety, pollution prevention from ships, vessel registration matters, and the issue of certificates of competency for seafarers of all ranks and denominations.

Regarding port management, according to the national law, a port is situated on public property and for this reason a port is a public service. In this case the government determines obligations and responsibility of the KSSA. The main tasks can be summarised as follows:

- Maintenance of the port infrastructure
- Construction of a new port infrastructure
- Long term lease of port territory
- Collection of port dues from vessels and other special purpose utilizations
- Measures to accommodate vessels
- Ensuring the movement of goods.
Finally, and a very important feature, there is no interference in the commercial activities of the terminals by the KSSA, which implies that commercial business is completely left to the terminal managers.

In accordance with national law the port of Klaipeda got the status of the state seaport, which means that the port territory, port waters, objects containing port infrastructure and objects related to the port safety, such as, pilotage, and the vessel control system belong to the state. Commercial and technical activities and services are commercialised, such as stevedoring, terminal operators, freight forwarders, specialist agencies and other supporting activities. These companies are directly engaged in their private business activities and may use the port infrastructure to perform these activities under long term lease arrangements. The KSSA is responsible for leases in accordance with common agreements issued by the MTRL. Basic charges for the leasing of quay areas depend on water depth. Concession tariffs for leasing of land also vary according to the use of the land. In general, the lowest tariffs apply when the site is used for general maritime traffic activities.

In addition to the commercial and technical activities mentioned above, there are three ship repair yards and one ship building yard.

The port of Klaipeda handles (Vaino, 1993) 21.1% of the total amount of goods loaded at the ports of the Baltic states and Russia. The MTRL statistics on cargo handling operations in the port of Klaipeda are presented in figures 10 and 11. Figure 10 describes cargo flow and fluctuation over the years. Figure 11 gives an idea of cargo distribution in 1994 and 1995 by commodities.
<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Discharged</td>
<td>4 521</td>
<td>4 372</td>
<td>4 199</td>
<td>3 723</td>
<td>2 799</td>
<td>2 619</td>
</tr>
<tr>
<td>Loaded</td>
<td>11 598</td>
<td>11 310</td>
<td>8 724</td>
<td>12 195</td>
<td>11 710</td>
<td>10 090</td>
</tr>
<tr>
<td>Total</td>
<td>16 119</td>
<td>15 682</td>
<td>12 923</td>
<td>15 918</td>
<td>14 509</td>
<td>12 709</td>
</tr>
</tbody>
</table>

Source: Annual report MTRC, 1996

Figure 10 Cargo handling in Klaipeda Port  
(thousands of tons)
Figure 11 Cargo handling in 1994 and 1995 according to the types of cargo

Source: Annual report MTRC, 1996
From Figure 10, illustrating the cargo flow in the port of Klaipeda, it can be seen that during the last six year period, market fluctuation had a direct impact on port operations, resulting in a heavy loss of about 13%. The cargo flow was the same in 1995 as in 1992. This was caused by the decrease of the mass of cargo as shown. Comparing the handling of oil products in 1994 and 1995, it decreased by almost 11%. To avoid such heavy losses in cargo flow it is very important to analyse the impediments to this market sector.

Cargo handling operations during 1995 and 1994, according to the types of cargo (Figure 11), on a percentage scale showed an increasing tendency, such as metal 7%, ree^roducts 3%, and containers almost 100% in the total cargo flow proportions.

Information in an edition of the MTRL’s (Transport in independent Lithuania, 1991-1995), allows a better view of cargo flow in region. About 78% of the freight exports, and about 84% of the imports of the port, are transit goods belonging to shippers from Russia, Germany, Great Britain, Belarus, Denmark, Sweden, Ukraine and other countries.

From this information it is evident that the port of Klaipeda serves mainly as a transit transportation junction in the global transportation chain and therefore development is vital to meet market needs and to maximise the inherent economic benefits for Lithuania.

3.2 LITHUANIAN MERCHANT FLEET AND ITS ACTIVITIES

After the restoration of independence from the former the USSR, maritime policies for fleet changed dramatically. For example,
The former USSR fleet has been replaced in the market by new national fleets.

The shipping management system has changed, from centrally planned activities to market oriented activities.

At present it is very important and necessary for the Lithuanian fleet to improve its competitiveness and to find its own niche in the free market economy. If comparing the structure of the Lithuanian fleet (Vainio, 1993) with all the fleets in the Baltic Sea region, it covers 1.1% constitutes only.

<table>
<thead>
<tr>
<th>Country</th>
<th>per cent</th>
<th>Country</th>
<th>per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poland</td>
<td>21.2</td>
<td>Russia</td>
<td>7.1</td>
</tr>
<tr>
<td>Sweden</td>
<td>18.3</td>
<td>Latvia</td>
<td>4.5</td>
</tr>
<tr>
<td>Denmark</td>
<td>16.9</td>
<td>Estonia</td>
<td>2.1</td>
</tr>
<tr>
<td>Finland</td>
<td>16.1</td>
<td>Lithuania</td>
<td>1.1</td>
</tr>
<tr>
<td>Germany</td>
<td>12.7</td>
<td>TOTAL</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Finland Turku University, 1993

Table 1 The fleet in the Baltic Sea region in 1990

Table 1 illustrates the distribution of national fleets by countries and given as percentage of all the fleets of the Baltic Sea region's 9 countries.

Information on ship's average age, number and ship type of the Lithuanian merchant fleet was according to Lloyd's Register of Shipping (1995) as follows:
Table 2 The fleet of Lithuania by ship structures

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Cargo carrying ships</th>
<th>Ships of miscellaneous activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>246</td>
<td>72</td>
<td>174</td>
</tr>
<tr>
<td>GT</td>
<td>660 695</td>
<td>385 319</td>
<td>275 376</td>
</tr>
<tr>
<td>Average age</td>
<td>18</td>
<td>20</td>
<td>17</td>
</tr>
</tbody>
</table>

Source: Lloyds’s Register of Shipping, 1995

According to the above information the average age of national ships is 18 years, but for certain different types of ships, such as general cargo and refrigerated cargo vessels, these are much older. The main impediments to compete in the market are the technical and technological limitations because of the ships’ age. To find a way for national fleet managers to be competitive, additional government efforts and assistance with financing are needed to perform services competitively.

Only during the past three years has there been a dramatic change in distribution of vessel ownership, namely the conversion of state shipping companies to private shipping companies. Before independence Lithuania had only state-owned shipping companies. Today the situation in this field of activities is totally different because of the establishment of new private shipping companies. During the past years more than 50 different private shipping companies were established. They typically participate in the freight business with one or more vessels of low tonnage. The private shipping companies mainly provide services in the Baltic region.

The state owned shipping companies are as follows:

- Lithuanian Shipping Company (LISCO)
• Klaipeda Transport Fleet Ltd.
• Lithuanian State Fishing Fleet Enterprise “JURA”.

Only LISCO is under supervision of the MTRL, the other two shipping companies are under supervision of the Ministry of Agriculture.

The main power of the national fleets is LISCO. Currently it owns 44 ships with tonnages ranging from 2,000 up to 14,000 dwt. The company provides services between ports in Europe, America, Africa and participates in Arctic navigation. According to Information to the Board of MTRL, (1996), more than 80% of the LISCO fleet is under time charter party, which means that the company seeks to become profitable by chartering out excess tonnage.

At present LISCO operates the following permanent ferry lines:

- Klaipeda-Kiel-Klaipeda
- Klaipeda-Mukran-Klaipeda
- Klaipeda-Åhus-Klaipeda.

At present two ferries “Kaunas” and “Vilnius” for passengers and cargo operate on the Klaipeda-Kiel-Klaipeda line. They carry wagons, ro-ro cargoes, and passengers. The ferry “Kaunas” can take up to 200 passengers and “Vilnius” 120 passengers.

The second line, Klaipeda-Mukran-Klaipeda, is in operation using the LISCO ferry “Klaipeda” which carries Ro-Ro cargoes, wagons, and no more than 12 passengers.

The other line, Klaipeda-Åhus-Klaipeda, carries trailers use the modern Ro-Ro vessel “Siauliai”.

The demand for transportation of trailers, cars and wagons by ferries and Ro-Ro ships is increasing. According to Information to the Board of MTRL, (1996), in 1995 the line Klaipeda-Mukran-Klaipeda performed the following transportation of vehicles: rail wagons 21,180 units, trailers and lorries 8,600 units and 3,700 cars.

A similar increase in transportation of vehicles over 21,000 units, of trailers and lorries, more than 8,000 cars were transported on the Klaipeda-Kiel-Klaipeda line.
In terms of passenger traffic flow by LISCO more than 36,000 passengers were carried in 1995 or 11,000 more than in 1994. The main passenger flow concentrates on the Klaipeda-Kiel-Klaipeda line.

The total cargo traffic by LISCO of different commodities, such as grain, black metals, fertilisers, container cargo, wood, and coal are shown in Figure 12. According to the information in Figure 12 there has been low fluctuation in the cargo flow for the past 5 years.

From this analysis, it appears that there is an opportunity for the LISCO administration to put additional efforts into finding its own way in the new market environment, focusing attention on the development of a fleet for the water transport system to act as a chain in the Baltic trade and in global marine transport.

3.3 ACTIVITIES OF THE INLAND WATERWAY SECTOR

In Lithuania the inland waterway transport sector plays only a local transportation role. The main inland waterway transport artery is the river Nemunas in Europe known as inland waterway E-41.

According to the periodical (Marine Money, 1996) the perennially navigable inland waterway route extends for only about 600 km. Inland waterway transport in Lithuania is of little importance mainly for two reasons.

First, the inland waterway is not sufficiently developed, and second, transportation is seasonal only. In general navigation is available from 31 March until 15 November, but this may vary from year to year. Navigation during the year is available for only 230 days.
Figure 12 Goods traffic by the Lithuania Shipping Company

Figure 13 Passenger and goods traffic by inland waterways

Source: Annual report MTRL, 1996
Waterways with a four month break when navigation is not available may be appropriate for seasonal and local transportation only, but not for transportation that must act as a transport chain in a global network.

At present the inland waterway transportation business is occupied by two organisations that have the following number of vessels:

- Stock company “Nemuno Laivininkyste” (SCNL) -53 ships
- Stock company “Smiltynes Perkela” (SCSP) - 8 ships.

In the previous chapter it was mentioned that both of above mentioned companies are inland waterway shipping companies.

The SCNL’s main business is on the seasonal routes from Kaunas to Klaipeda. Barges transport building materials on these routes. In summer passenger ships run between the Lithuanian ports of Kaunas, Klaipeda and Nida.

The second inland waterway ferry company, the SCSP, runs all year round and transports passengers, lorries and cars from Klaipeda to Kursiu Nerija. At present this company operates on two lines. The first is at the old part of the city and is generally for passengers and cars.

The second line operates on the southern part of the city and connects the city and Kursiu Nerija. The main activities on this line is the same as previously mentioned. However, this line can carry heavy lorries as well. The main peak of passenger and cargo flow is in the summer.

Figure 13 shows fluctuations in the traffic of passengers and goods on the inland waterway system during the past five years. This decreasing fluctuation shows that the 1995 the passenger flow was only one half of that of the previous year and only one third of that four years earlier. It implies that ferries among tourists and local people on holiday are not very popular and that these people probably have found other recreational activities.

The goods transported by inland waterway are mainly building materials for enterprises, but the present demand for these goods has diminished by 80% in four years.
CHAPTER 4

DEVELOPMENTS IN THE POLITICAL ENVIRONMENT
INFLUENCING WATER TRANSPORT

By political environment, it is meant all external factors, such as laws, regulations, standards, directives as well as political pressure that affect the conduct of water transport as an industry in Lithuania.

Since having its independence restored from the former USSR, circumstances this period in the Republic of Lithuania can be described as a time of finding a way in new external while striving to deregulate an industry firmly controlled by government's internal environment. To find a way in this new external environment there has been a vital need to prepare the internal environment to function within the new global requirements of maritime transport. The main aim of Lithuanian water transport specialists is to update this transportation mode to:

- Mesh internal administration of this mode with the external commercial and political realities.
- Establish a national legal basis to fairly govern the commercial safety and environmental aspects
- Develop an adequate transport infrastructure
- Initiate a process to integrate government and private sector initiatives to realise national economic benefits of this transport sector.

As discussed in the previous chapter, water transport activities are seen to be a very substantial contributor to the national economy.
After restoration of independence administration of water transport has emphasised transition to a developed market economy. This means modifying maritime activities regulated by strict plans to their participation in the freight market on the basis of fair competition among market participants.

To achieve these goals the MTRL supports development in international shipping and improvement of trade with Central and Eastern European countries and new independent states of the former USSR. The main objective has been formulate and prepare policies to achieve competitive shipping and improve port services in consonance with the needs of a free market economy.

The main document promulgated to direct development in tone with the external environment is known as the “Understanding on Common Shipping Principles”. The substantial document dealing with internal policy is known as the National Transport Development Programme (NTDP). This lays out the main state transport policy principles for development and integration into the global transport service market.

4.1 LITHUANIA’S MEMBERSHIP IN THE INTERNATIONAL MARITIME ORGANISATION

After the restoration of independence on March 11, 1990 the Lithuanian government has been developing its maritime policy. How does a nation become successful in maritime activities? The answer to the question can be found only if a nation tries to take active part in the current maritime developments. Participation in current maritime developments implies not only observation, but conforming national practices to global standards in all respects.
The global maritime arena is open for all countries to participate and allows an opportunity to provide services world-wide. In other words, maritime activities are international activities and continuous development of maritime contributions to a nation's economy is on an international basis possible only if a nation is willing to engage in maritime trade.

All maritime nations today come together to discuss and develop maritime safety and environment protection standards in a technical body known as the International Maritime Organisation (IMO). It was established for the purpose of establishing standards on a consensus basis among its members.

The basic goal of IMO is summarised by Article 1 (a) of the IMO Convention:

"to provide machinery for co-operation among Governments in the field of governmental regulation and practices relating to technical matters of all kinds affecting shipping engaged in international trade; to encourage and facilitate the general adoption of the highest practicable standards in matters concerning maritime safety, efficiency of navigation and prevention and control of marine pollution from ships".

According to this extract it can be concluded that the primary tasks of IMO are to develop and adopt world-wide standards, to improve safety of international shipping and to prevent pollution from ships.

The scope of international concerns for maritime safety and pollution prevention from ships was addressed after the restoration of independence by government of Lithuania (Appendix 1), through the signing of IMO's conventions. The global aims of international law were incorporated into Lithuanian policy. Those aims, according to professor (P S Wanchiswar, 1994), are as follows:

(i) Certainty of standards;
(ii) Uniformity of minimum standards-World-wide;
(iii) Harmonisation of relevant maritime legislation-World-wide; and
(iv) Justice between parties concerned.
Ratified conventions and treaties signed by a nation are mandatory. This means that they are legally binding by the country that ratifies these conventions. In other words, by accepting them a country makes them a part of its national law and applies them in the same way as national law.

Ratification of IMO conventions carries with it certain obligations.

To summarise the above discussion it is very important to point out the following with regard to national government, ratification requires:

- Participation in IMO work and contribution to the evolution of the IMO’s standards;
- Preparation of the process for implementation of the international maritime conventions, as implementation is the responsibility of the government.

Participation in IMO has been deemed important for Lithuania’s future development in that:

A country having a fleet of ships under its flag and wishing to participate in international shipping activities and to provide services world-wide must be seen to be responsible by its potential trade and transport partners. A government must ensure that its national ships and crew comply with international as well as national standards of regards maritime safety and pollution prevention.

For Lithuania to bring its shipping activities in line with internationally accepted maritime standards the national government must prepare and develop an adequate legal regime for its fleet that addresses all considerations relevant to global maritime transport. To prepare such a legal regime can only be done through communication and co-operation with the international maritime community. This means that Lithuania’s participation in the work of IMO is essential for the development of the nation’s maritime industry.

To fulfil Lithuania’s needs and at the same time participate in the continuous development of its maritime industry, the government of Lithuania (Appendix 2) has become the 153rd Member of the IMO.
4.2 THE FORMULATION OF INTERNATIONAL SHIPPING POLICY PRINCIPLES

After the collapse of the USSR, the government of Lithuania had to formulate a new shipping policy. The former USSR owned a single fleet and operated these vessels as fleet owner and flag state, with little if any real involvement with the rest of the international shipping community.

The need for future developments to establish the free market concept in Lithuania is very important. To do this new policy must be formulated that establishes an effective framework for conducting maritime business States represented by the Organisation of Economic Co-operation and Development (OECD), the Central and Eastern European Countries, and the New Independent States of the former Soviet Union. The principal objective of the Maritime Transport Committee (MTC) was to become actively involved in intergovernmental co-operation with representatives from above mentioned countries to identify the essential issues for establishment of a common shipping policy.

Finally, representatives of the OECD, the Central and Eastern European countries, and the New Independent States met in Paris in May 1993 and reached an Understanding on common shipping policy principles (Appendix 3). A very important feature was how these “principles” should be applied among the parties to the Understanding. These “Principles” and “Agreed observations” served as a very powerful influence in the establishment of a new shipping policy framework for Lithuania. The “Principles” contain basic rules for international shipping activities, namely:

Principle I. The participation under free and fair market competitive conditions of sea going ships of any nationality in internal sea borne trade.
Principle II. Non discriminatory treatment with respect to access to ports open to international trade, the use of infrastructure and auxiliary maritime services of those ports as well as related fees and charges.

Principle III. Non discriminatory treatment as regards agency operations and relations with forwarders.

Principle IV. The freedom for shipping companies to offer an efficient total transport system (multimodal transport services) and engage in joint venture investments.

Principle V. The free, efficient and timely transfer of funds related to all aspects of commercial shipping operations.

Principle VI. Encouragement of co-operation through commercial negotiations between shipping companies while adhering to the principles of free and fair market commercial operations.

Principle VII. Adherence to market pricing practices by all parties involved in commercial shipping operations.

Principle VIII. Freedom for shippers to choose among different shipping services for the transport of commercial cargoes on all trade routes.

Principle IX. Open access to inland waterways for all seagoing vessels engaged in the maritime related transport of commercial cargoes in international trade.

Principle X. Compliance with applicable international rules and standards regarding maritime safety and training, the prevention of pollution of the environment and the living and working conditions on board vessels.

Principle XI. Improvement of transparency as regards those involved in maritime transport operations.

Principle XII. Consultations: Parties to this Understanding, while not inhibiting bilateral discussions of Parties involved, agree to consult as regularly as needed.

The Parties also agreed to hold consultations during a three year period for the purpose of achieving full compliance with the “principles” and “agreed observations”. It implies that during this transition period Agreed Parties should achieve full compliance with an Understanding.
In conclusion, the shipping policy principles establish the method for acceptance of the concepts of trade liberalisation and free access to the shipping and port market. This policy decision serves as overall guidance for Lithuania’s future development and improvement of existing conditions. Only on this basis of a free market and fair competition among the offering of services can Lithuania achieve its main aim and goal of integration of its future development with accepted international practices.

4.3 THE WATER TRANSPORT STRATEGY CONCEPTS IN THE NATIONAL TRANSPORT DEVELOPMENT PROGRAMME

As discussed in the previous chapters the water transport system plays a significant role in the national economy. From an economical point of view water transport industry services and the associated activities of inland transportation, cargo handling, distribution and storage of goods are linked system that will underpin any possible economic development in Lithuania. This means that all the aspects of this industry such as shipping operations, fairways, and port operation systems must necessary be upgraded if total transport service is to be provide in an efficient way. From the point of view of transition from a command administrative economic model to a free market oriented economy, it is impossible to achieve national goals without changing policy.

To carry out this transition the following are important:

- A stable political system in order to set up directions for development
- The relevant legal environment
- Conductive economic and social conditions
- Widespread technical and technological renovations.
Lithuania must prepare to integrate itself into the global water transport activities according to free market principles, of equality and fair competition.

To accomplish this objective, the MTRL in 1994 prepared a general document known as the National Transport Development Programme (NTDP), which was approved by the government of Lithuania. This document is a long term programme that looks ahead to the year 2010. As a part of the programme a plan for the implementation of necessary measures in the time frame of 1995-1997 was approved by government.

This document is one of the first for Lithuania that covers all modes of national transport and offers a “fresh” view for the management environment needed to make this Programme successful. The NTDP serves as the main guideline for formulation of a national transport policy for all transport infrastructures.

The main aim and purpose of the NTDP is to integrate all the sectors of the transport system, and to further integrate these into the European transport services market to promote foreign cargo and passenger flow through Lithuania.

The basic policy constituents of the NTDP directions are as follows:

- Creation of a legal regulating system based on norms of international law
- Integration of the national transport system into the European transport services network services
- Participation of government organisations to ensure stable functioning of strategic transport infrastructure
- Execution of economic reforms and privatisation of the transport sector.

The main aim and purpose is to prepare the national transport infrastructure to meet the principles of a free market economy, by establishing fair competition and equality among market players. The governmental development policy is an ongoing, continuous process reflecting both external and internal demands and realities. The NTDP establishes the basic directions for all activities affecting total transport industry development.
It is very important to take all the necessary steps to prepare a correct and adequate water transport policy that covers all important external and internal constraints. This implies that all aspects of the national water transport system should meet internal co-operation objectives and provide links among sectors to facilitate adapting to external developments. In other words, all matters related to the water transport system such as the fleet, ports, and fairways as well as intermediate activities, should focus on internal objectives in order to achieve external objectives.

The main strategy and provisions in the development of water transport are as follows:

- Development of the port of Klaipeda
- Rebuilding of the national merchant fleet
- Establishment of new ferry lines from Klaipeda to other Baltic ports
- Development of the inland waterway.

Generally speaking, these are the main objectives. Still it is necessary to focus available resources on these objectives in order to achieve the national goal for development of the transport infrastructure.

4.4 REGIONAL POLICY ON RECEPTION FACILITIES

This section deals with regional external developments for the protection of the marine environment of the Baltic sea area. Nine countries, Denmark, Germany, Poland, Lithuania, Latvia, Estonia, Russia, Finland and Sweden have coast lines on the Baltic Sea.

Lithuania is located on the Eastern coast of the Baltic Sea and has a 108 km. long coastline. The coastline is open to the Baltic Sea with mainly sandy beaches.
To protect the semi-enclosed and sensitive marine environment from all possible sources of pollution, regional co-operation and a policy covering this region are needed.

Klaipeda is the only merchant port in Lithuania. Vessel traffic through the port entrance of calling ships totalled 6,931 in 1995 and 6,884 in 1994 as shown in Figure 14. These movements to and from Klaipeda port, include tankers. According to this information, during this period there was a total increase by 47 vessels, but tanker traffic diminished by 46%.

The constant utilisation of the Baltic Sea area and the inflow of waste from cities, industrial activities and rivers has resulted in pollution of the Baltic Sea.

The intensive traffic of tankers, passenger ships, general cargo vessels, fishing vessels and an increasing number of small craft, as shown in Figure 14, have contributed to the pollution of the sea. A major concern of the countries in this region is to protect the fragile marine environment of the Baltic Sea.

The two main tools to protect the Baltic Sea from pollution are the MARPOL 73/78 Convention addressing pollution from ships and the Helsinki Convention of 1974 and 1992 on the Protection of the Marine Environment of the Baltic Sea Area covering all types of pollution.

After the restoration of independence, Lithuania became a member of the Baltic Marine Environment Protection Commission (HELCOM), and has signed the MARPOL 73/78 Convention.

In order to prevent pollution from ship generated wastes, the MARPOL 73/78 convention has a provision known as a special area to provide stricter protection measures in sensitive areas. According to the convention a special area is:

"a sea area where for recognised technical reasons in relation to its oceanographic and ecological condition and the particular character of its traffic, the adoption of special mandatory methods for the prevention of sea pollution is required".
Figure 14 Vessel traffic through the port entrance
The global coverage of MARPOL 73/78 is designed to:
prevent deliberate discharges of oil, chemicals, sewage and garbage from ships in operation and in port through regulations that address the operation, construction and equipment of ships.

In general terms MARPOL 73/78 is a convention with, at present, five Annexes. Another annex, Annex 6, will deal with air pollution from ships in the future.

The MARPOL 73/78 Convention also stipulates that reception facilities, for wastes that are not allowed to be discharged overboard, shall be available in the port, without causing undue delay to the ships.

The MARPOL 73/78 regulations apply to all vessels and cover various environmental threats in five Annexes as shown in Table 3:

<table>
<thead>
<tr>
<th>Annex</th>
<th>Cargo</th>
<th>Entered into force</th>
<th>Requires reception facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Oil</td>
<td>1983.10.02</td>
<td>YES</td>
</tr>
<tr>
<td>II</td>
<td>Noxious liquid substances in bulk</td>
<td>1987.04.07</td>
<td>YES</td>
</tr>
<tr>
<td>III</td>
<td>Harmful substances in packaged form</td>
<td>1992.07.01</td>
<td>NO</td>
</tr>
<tr>
<td>IV</td>
<td>Sewage</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>V</td>
<td>Garbage</td>
<td>1988.12.31</td>
<td>YES</td>
</tr>
</tbody>
</table>

Source: Port reception facilities, 1996

Table 3 MARPOL 73/78 Annexes on reception facilities
According to Table 3 it is clear that all Annexes require reception facilities except Annex III. The type and size of reception facilities depend on vessel traffic development and vessel needs (see Figure 14).

The second substantial tool for the protection of Lithuania’s marine environment is the Helsinki Conventions of 1974 and 1992. This is a powerful instrument because it takes into account all forms of pollution. The Helsinki Convention’s region of coverage is shown in Figure 15. The main objectives of the Helsinki Conventions are:

- Prevention of pollution from ships
- Protection against pollution from offshore activities
- Protection of internal waters as well as the Baltic Sea
- Co-operation for combating pollution
- Prohibition of dumping and incineration
- Requirement of Environment Impact Assessment (EIA), for all activities and developments affecting the region’s marine environment.

In conclusion the MARPOL 73/78 and the regional Helsinki Convention, 1974 and a new Helsinki Convention 1992 treat the Baltic sea as a “special area” where polluting emissions are prohibited as a matter of principle.

At present HELCOM has an agenda and policy for the Baltic region known as the Baltic strategy for reception facilities. The aim of this strategy includes making it possible to implement the requirements for reception facilities as laid down in MARPOL 73/78 and the Helsinki Convention, 1974 and 1992. This policy is a very powerful tool to protect the sensitive marine environment of the Baltic Sea area. The main goals are:

- to decrease operational discharges
- to eliminate illegal disposal of ships wastes, as well as
- to develop adequate reception facilities.
Source: The state of the Baltic sea, 1996

Figure 15 The HELCOM coverage area
In order to achieve these goals on reception facilities a basic policy is the introduction of a harmonised fee system for use of reception facilities. The best solution that fits this region is called the “no special fee” concept, which means the cost for reception, handling and disposal of wastes are included in the port fee irrespective of whether wastes are delivered or not.

Furthermore, the strategy deals with:

- Operation and management of reception facilities
- Minimisation of waste on board vessels
- Development of an information system among port Authorities
- Investments to improve reception facilities in the countries in transition.

At present in the Baltic region the main goal is to eliminate illegal disposal of ship generated wastes. To this end, according to Horck (1996), in March 1996 the states of the Baltic region prepared a policy and agreed on the following:

- A suitable communications system among responsible government agencies
- A common data base
- Adequate controls by each respective Administration.

This policy provides for a network of reception facilities and for better co-operation and linkage among the states of the Baltic Sea in order to achieve the goals of the regional policy on reception facilities as soon as possible.
CHAPTER 5

THE MAIN PROBLEM AREAS AND NEEDS TO BE ADDRESSED

To achieve Lithuania's goals of reconstruction and development of the national water transport system, there are problem areas that should be taken into consideration. In the author's opinion most important areas of concern are as follows:

- Ships' average age profile
- The rate of detention of Lithuanian flagged ships
- Restrictions in the entrance channel to the port

Generally, these are the main impediments that pose a direct impact at present on quality of services, as well as the development of water transport as an international industry. These impediments will be discussed in the following sections of this chapter.

5.1 THE SHIPS' AVERAGE AGE

As mentioned in the previous chapter, to provide water transport services efficiently and safely it is vital to have a properly maintained infrastructure, an adequate ship operating system and competent crew who are able to manage in accordance with all procedures prescribed by national and international standards. To offer quality
services to players in the international market, a number of technical and technological limitations must be overcome. The high average age of Lithuania’s fleet makes them non-competitive in terms of fuel consumption, reliability in operations and maintenance costs.

In order to have a better understanding as regards ships’ distribution by average age and ship type, it is relevant to present additional details of the national fleet’s profile. The distribution of Lithuania’s fleet by average age and ship type is shown in Table 4.

<table>
<thead>
<tr>
<th>Ship type</th>
<th>Number of ships</th>
<th>GT</th>
<th>Average age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil</td>
<td>5</td>
<td>13 025</td>
<td>13</td>
</tr>
<tr>
<td>Bulk dry</td>
<td>11</td>
<td>110 520</td>
<td>16</td>
</tr>
<tr>
<td>General cargo</td>
<td>39</td>
<td>106 378</td>
<td>21</td>
</tr>
<tr>
<td>Ro-Ro</td>
<td>3</td>
<td>54 390</td>
<td>7</td>
</tr>
<tr>
<td>Refrigerated cargo</td>
<td>13</td>
<td>79 206</td>
<td>25</td>
</tr>
<tr>
<td>Passenger/Ro-Ro</td>
<td>1</td>
<td>21 800</td>
<td>7</td>
</tr>
<tr>
<td>Fish caching</td>
<td>146</td>
<td>210 607</td>
<td>16</td>
</tr>
<tr>
<td>Other fishing</td>
<td>6</td>
<td>55 095</td>
<td>29</td>
</tr>
<tr>
<td>Research</td>
<td>1</td>
<td>695</td>
<td>14</td>
</tr>
<tr>
<td>Towing/pushing</td>
<td>15</td>
<td>6 018</td>
<td>23</td>
</tr>
<tr>
<td>Other activities</td>
<td>6</td>
<td>2 961</td>
<td>19</td>
</tr>
<tr>
<td>TOTAL</td>
<td>246</td>
<td>660 695</td>
<td>18</td>
</tr>
</tbody>
</table>

Source: Lloyd’s Register of Shipping, 1995

Table 4 The Lithuanian fleet profile
<table>
<thead>
<tr>
<th>Vessels types</th>
<th>Number of vessels</th>
<th>Year of build</th>
<th>dwt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry cargo ships</td>
<td>5</td>
<td>76 - 92</td>
<td>18 647</td>
</tr>
<tr>
<td>Bulk / Container carriers</td>
<td>5</td>
<td>73 - 74</td>
<td>22 345</td>
</tr>
<tr>
<td>Bulkers</td>
<td>28</td>
<td>67 - 93</td>
<td>230 633</td>
</tr>
<tr>
<td>Passenger / train / vehicle vsl.</td>
<td>3</td>
<td>87 - 89</td>
<td>35 630</td>
</tr>
<tr>
<td>Ro - Ro</td>
<td>1</td>
<td>85</td>
<td>4 673</td>
</tr>
<tr>
<td>Multi - purpose</td>
<td>2</td>
<td>75-95</td>
<td>7 780</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td></td>
<td>319 708</td>
</tr>
</tbody>
</table>


Table 5 The LISCO fleet profile

![Bar chart showing the average age structure of LISCO's merchant fleet](image)


Figure 16 Average age structure of LISCO's merchant fleet
In accordance with Table 4 the ships’ average age is 18 years and all national flag ships exceed 15 years of average age, except for oil, Ro-Ro and passenger ships. This distribution gives the real picture of the average age by ship type.

The merchant fleet of LISCO is shown Figure 16 and Table 5. This is the fleet profile of the main national maritime transportation player in Lithuania. From this information it can be seen that LISCO owns 44 ships, of which 35 ships are more than 15 years old, 27 more than 20 years old and 15 older than 25 years. These figures highlight the fact that vessel age represents a major impediment to Lithuania’s national shipping initiatives. This advance age of the fleet will directly affect the ships’ operations. In other words, managing old ships introduces the unneeded problems of poor reliability, high fuel consumption, increased maintenance costs as well as lower quality service. In conclusion, the national ships’ average age threatens Lithuania’s ability to attain its goals for water transport development and the follow-on desired effect of contributing positively to the nation’s economy.

5.2 THE RATE OF DETENTION OF SHIPS

The Lithuanian transition in to a new political and economic environment, i.e. to a market economy, has required the administration to address the quality of its maritime services. At present, many small private shipping companies have entered into shipping activities. The changing situation in the shipping activities has impacted the rate of detention of ships flying the flag of Lithuania. The activities of the new private fleet, in addition to those of the “old” state-owned fleet, within European ports have been responded to by the control provisions of European nations
that demand quality service from maritime transport of course, the ships’ average age plays an important role in the quality of services that can be provided.

In general, there are many factors that must be considered in judging whether quality service are provided. But, the main factors are determined how the ship and its crew meet relevant international convention requirements.

The main tool for controlling quality of maritime transport in European ports is the Paris Memorandum of Understanding on Port State Control (MOU), which is an agreement between the Maritime Authorities of European countries.

The MOU is an important instrument to control ships calling at ports within the MOU region. The ships may be inspected to ensure compliance with the relevant international conventions of IMO and the International Labour Organisation (ILO). The penalties for non-compliance varies from a report to the detention of a ship. The main aim of these port state control inspections is to ban substandard ships from a region’s coasts and ports.

The MOU policy coverage area and relevant instruments are shown in Table 6 below.

| Participating countries and Associate Members | 17 Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Poland, Portugal, Russian Federation, Spain, Sweden, United Kingdom. |
| Observers | IMO, ILO |
| Co-operating countries | Croatia, Japan, United States. |
| Target inspection rate | 25% annual inspection rate per country within 3 years from entry into force |
| Special attention | • passenger ships, RO-RO ships, bulk carries |
Table 6 Commitments under the Paris MOU

The main aim of this agreement is the establishment of regional harmonised efficient system of Port State Control (PSC) of foreign ships. The objectives of the Paris Memorandum of Understanding on Port State Control (MOU) can be categorised as follows:

- Co-ordination and harmonisation of the efforts of the Maritime Authorities in relation to the PSC activities
- Assistance in securing the compliance of ships with the international standards for:

<table>
<thead>
<tr>
<th>Relevant instruments</th>
<th>LL 1966 (International Convention on Load Line)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LL PROT 1988</td>
</tr>
<tr>
<td></td>
<td>SOLAS 1974</td>
</tr>
<tr>
<td></td>
<td>SOLAS PROT 1978, 1988</td>
</tr>
<tr>
<td></td>
<td>MARPOL 73/78</td>
</tr>
<tr>
<td></td>
<td>STCW 1978 (International Convention on Standards of Training, Certification and Watchkeeping for Seafarers)</td>
</tr>
<tr>
<td></td>
<td>COLREG 1972 (Convention on the International Regulations for Prevention Collisions at Sea)</td>
</tr>
<tr>
<td></td>
<td>ILO Convention No. 147 (Merchant Shipping Convention).</td>
</tr>
</tbody>
</table>

Source: IMO News, 1996
• safety of life at sea
• prevention of pollution of the marine environment, and
• working and living conditions on board ships.

This means that merchant vessels calling at the ports within the Paris MOU region may be inspected in order to ensure compliance with all relevant international standards as presented in Table 6.

Considering this port state control policy, it is informative to examine how the Lithuanian fleet has fared as a result of inspections under the MOU.

Table 7 illustrates the inspections results for ships flying the Lithuanian flag.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of detentions</th>
<th>Number of individual ships involved</th>
<th>Detention percentage</th>
<th>Average detention percentage</th>
<th>Excess of average percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>4</td>
<td>44</td>
<td>9.09</td>
<td>8.23</td>
<td>0.86</td>
</tr>
<tr>
<td>1994</td>
<td>12</td>
<td>73</td>
<td>16.43</td>
<td>14.93</td>
<td>1.5</td>
</tr>
<tr>
<td>1995</td>
<td>23</td>
<td>89</td>
<td>25.84</td>
<td>17.39</td>
<td>8.45</td>
</tr>
</tbody>
</table>


Table 7 Lithuanian ship inspection results

Table 7 shows detentions of Lithuanian flag ships exceeds the average percentage and that this disparity is growing much larger in each succeeding year.

According to MOU practice, as mentioned in Table 6, Flag States with detention percentages exceeding the rolling average percentage, for 3 years are to be targeted as priority cases for inspection. The detention percentage of the Lithuanian ship in 1993, 1994 and 1995 significantly exceed the average percentage.
This is a very important consideration and it is vital to improve this situation if Lithuanian vessels hope to become competitive in delivering on-time, quality maritime transport services. It is necessary to take immediate measures to address this problem by the main involved parties, namely:

- Flag States Administration
- Classification Societies, and
- Ship owners and operators.

The above parties must establish co-operation and link their activities to ensure that matters are improved and that ship operations and conditions fully comply with internationally prescribed standards for safety, marine pollution and crew competence on board the ships of the Lithuanian fleet.

5.3 RESTRICTIONS IN THE ENTRANCE CHANNEL TO THE PORT

The Baltic seaport of Klaipeda is situated in a strait called the Channel, which connects the Kursiu Marios with the Baltic Sea. The width of the approaching channel to the port is 100 m. and the depth is 11.5 m. The main impediment in this area is that the entrance to the port is poorly protected by the northern and southern breakwaters. Apart from this the southern breakwater is comparatively longer than the northern breakwater (see Figure 17).

In the autumn the port is very dangerous because of rough waves caused by strong winds blowing from the south west and west.

According to Figure 17, the design of the existing port’s entrance breakwaters is deficient to protect vessels within the port from wind driven waves.
Figure 17 Existing port entrance
In addition, it can be seen in Figure 17 that the existing port entrance channel has a difficult turn that needs to be made just inside the breakwaters which is made more dangerous when winds are blowing from the southwest.

Clearly, the existing breakwaters cannot protect the port entrance from waves. Another safety consideration is for the port operations, at the oil terminal and the KLASCO berths situated near the port entrance which are disrupted by strong wind and wave. Conditions that exist particularly during the autumn and winter seasons. According to Halcrow-Apec, (1993), during the worst weather conditions the port lost 80 working days or 22% of the working time in a year. The port becomes weather-bound if the winds reach 14 m/s in velocity.

As another measure of the security of the port it is helpful to know the port’s safety record. During the last 15 years there have been three major shipping incidents in the channel area. According to (Halcrow-Apec, 1993) there were two shipwrecks at the north breakwater when ships had proceed to sea in the worst weather conditions. The main problem in these cases was engine failure just when the ships were proceeding to sea. One of these the major accidents was caused by the oil tanker, the Globe Asimi, and resulted in a total oil spill of 16,000 metric tons of crude oil. According to Baltic Bulletin (1995) figures this was the largest accident in the Baltic Sea area between 1969 and 1990 (see Appendix 4).

The third accident occurred when a ferry lost manoeuvring ability when entering the port’s entrance channel and struck the northern berth. This accident can be attributed in part to the navigational difficulties at the move of the entrance channel.

According to presented information the main restrictions in the entrance channel to the port are as follows:

- Inadequate breakwater design and construction
- Narrow navigational approaching channel of only 100 meters
- A difficult turn at the entrance breakwaters.
In summary, the existing port entrance is not adequate from the standpoint of maritime safety, environmental pollution risks, and the very important consideration of port efficiency and its ability to contribute to the nation’s economy.
CHAPTER 6

THE PRIORITIES IN WATER TRANSPORT DEVELOPMENT

In the previous chapters, discussions and examinations of internal and external factors show that many problems exist for water transport developments. Therefore, getting the priorities right is very important in a climate of limited investment capital. It is vital to take into consideration all issues and then establish a clear picture of the needed policy developments that will effectively address the most significant problem areas. In other words, the WTD must focus on issues and objectives vital to the development of the water transport industry's economic viability.

Drawing from the previous analysis and discussion of various factors and policy developments, and the impediments facing the water transportation industry the main considerations limiting the development of the water transport industry can be described as follows.

- The external political developments and their impact on internal factors
- Ship operation reliability and quality
- Fairway system navigational safety issues
- Port/terminal system capability to serve as a transport junction for cargo operations.

To determine the priorities in the water transport system, in the author's opinion it is necessary for the government to take into consideration all of the above mentioned factors related to external developments and policy, prioritising reactions to them depending on their importance and ability to influence the internal infrastructure and
operations of the water transport industry. In other words, the relative order in which
the water transport industry intends to address the many needed development issues
should be established. This would allow important issues to be dealt with
sequentially in keeping with limited availability of resources.

From the management’s point of view it is important to focus on the objectives
enunciated for the different systems to define integrated objectives that will meet
national as well as regional goals, and lead to the development of the whole water
transport industry and promote its harmonisation with global maritime transport
practices.

The formulation of these objective can be portrayed as shown in Figure 18.

As shown in the figure above this functional flow implies:

- A vision statement can be seen to set an overall target
- Goals can enunciate the strategy for to focusing on available organisation
  resources
- Policies can integrate the functions of separate, but linked activities.
6.1 DEVELOPMENT OF THE MARITIME TRAINING SYSTEM

The maritime industry must continuously respond to external and international developments. Training has a key role to play in increasing development, reducing imbalance among nations and improving safety and environment protection.

In the last 15 years international regulations addressing requirements for safety and environment protection have become stricter. Relevant developments, such as the Paris Memorandum of Understanding, the International Safety Management Code and the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended in 1995, represent steady progress in this direction.

As a result there has developed an increased need for training to address existing maritime functions and future water transport developments in infrastructure and superstructure.

In this section the maritime training system, which has a direct impact on improvement and development of Lithuania’s water transport industry will be discussed.

Basic educational background in the maritime field is available in Klaipeda, but there is a special concern with regard to post-graduate studies and specialised advanced courses in the maritime field. The latter are not available in Lithuania.

In the author’s opinion rectifying this must be a top priority the development of human resources plays a key role in Lithuania’s successful and continuous development in this field. This training is important in particular for senior and middle managers of the operational activities, as well as for top managers who work in a government departments or administrations. It is needed for these persons to better understand the external elements that control maritime trade and to refresh the issues, which may have been known, but are now forgotten.
A policy for training is very important for Lithuania and is essential in order to understand the political, economical and social parameters that govern transition to a market economy. From this point of view a successful transition will be dependent upon the key managers and administrators being aware of the latest developments in the maritime world and being able to develop “fresh” ideas as they begin to prepare an adequate basis for the transition. This preparatory work and later efforts to ensure continuous development can only be done by qualified and competent persons. In this case the appropriate offices must have an expert in their relevant branches to ensure that adequate development policies are formulated for the benefit of Lithuania from the very beginning.

To fill this existing training gap, it is relevant to establish procedures and a system for obtaining this training in order to avoid a fragmented set of decisions that cannot comprehensively address all the development issues in the maritime field.

What can be done to ensure that the above mentioned policy becomes practice?

In this case the basic and most important feature must be to establish a procedure by the authority for such education and training rests with the entity that is responsible for maritime matters. In this case that is the WTD, which is a part of the MTLR. All necessary instructions and procedures must be established by the WTD and all decisions relating to the nomination of a candidates for studies must be taken into consideration by the Board of the MTLR.

In the author’s opinion, a key consideration is to ensure that the human resource development activities in reality support development goals. This implies that a plan should be established to ensure that recipients of such training and education are placed into pre-determined positions with real career opportunities.

This training system can be depicted as shown in Figure 19:
These post-graduate studies can be arranged at World Maritime University (WMU) in Malmoe, Sweden and at the International Maritime Law Institute (IMLI) in Malta. The WMU is a global institution covering a wide range of maritime courses namely Maritime Safety Administration, General Maritime Administration and Environment Protection, Maritime Education and Training, Shipping Management and Port Management courses. The IMLI covers all maritime law matters. Through these maritime training institutions, Lithuania can derive its trained human resources needed to achieve its goal of developing a national maritime infrastructure.

6.2 IMPROVEMENT OF THE PORT ENTRANCE

According to the discussion in Chapter 5 and the analysis of the existing port entrance, there is clearly a need to improve it. The improvement is necessary to reduce or eliminate risk factors in maritime safety, environment protection and to improve port efficiency.
This improvement will entail studying the effects of this action on the environment. For this reason an Environment Impact Assessment (EIA) must be included in the improvement project to examine the impact on this marine area, its flora and fauna as well as on physical and biological processes. The EIA is a useful tool for evaluating the potential benefits of a project and its hazards to the environment. The effects on the environment involve a complex set of interdependent factors which must be considered in a comprehensive fashion.

This proposed development shown in Figure 20. As discussed in the previous chapter these improvements are needed for three main reasons, namely:

- The existing breakwater design and construction is inadequate and cannot protect the port from waves
- The turn at the entrance need to be eliminate
- The approaching navigational channel to the port needs to be widened.

The main technical work necessary to implement this project is as follows:

- To dredge a new fairway straight to the main port channel in order to eliminate the turn at the entrance to the port, see Figure 20.
- To reconstruct existing breakwaters, i.e. extend the north breakwater and construct a new detached south breakwater in order to prevent access of large waves, particularly during the autumn and winter seasons
- To deepen and widen the channel to accept new generation ships, according to projections for increasing traffic densities.

According to the NTDP preliminary calculations, the total expense of the port entrance construction would be US$25.5 million.

To sum up briefly:

- First, this is a part of the total transport system of Lithuania and this port must serve as the transport junction used mainly for transit cargoes. A key factor must be the elimination of safety and environmental risks to the port.
North Breakwater extension
New dredged entrance channel
New detached South Breakwater

Source: HALCROW-APEC, 1993

Figure 20 Improvements of the port entrance
Second, to meet market growth and needs, port efficiency is vital to cargo turnover through the port. In the author's opinion cargo flow projections can be improved by this particular project on average up to 15%.

As a final emphasis and impetus for this project, relevant point was addressed by Course Professor (T. J. Sampson, 1996a) during his lectures:

"Port operational concerns

A. The approach of vessels to port should be a major concern for the sustainable development of maritime transport.

1. It is in the approach to the port that the risks of an environmental disaster are greatly increased. It is in providing assistance to the vessels as they approach the port that perhaps the greatest potential lies for governments to reduce the environmental threat of maritime transport by taking actions that will prevent casualties.

A. Investments here will have far better payback than preparing to respond to the disasters that have occurred. ..."

6.3 TO MEET THE BALTIC STRATEGY ON RECEPTION FACILITIES

During the period of the former USSR, as a contracting party to the MARPOL 73/78 and the Helsinki Convention 1974, the basic requirements for reception facilities in ports were met. However, improvement of existing reception facilities is very important with respect to the following considerations:

- HELCOM's regional policy, or Baltic Strategy on reception facilities brings new issues to be addressed
• The MARPOL 73/78 requirements with regard to adequate reception facilities, have not been fully met.

Port reception facilities must make it possible to receive shipboard residues and mixtures containing oil, noxious liquids and garbage in terms without causing undue delay, according to the needs of ships.

Basically a project for improvement should address the following features:

• A feasibility study, needs to be conducted covering the following areas:
  • types and quantities of wastes at present and in the future, port characteristics, berths and equipment, commodity flow, companies involved, space available/required, present types of vessels, future trends, etc.

• Engineering and preparation activities for the improvement project need to be identified.

• Construction and implementation plans need to be designed

• Operations need to be evaluate in terms of future development needs.

An important consideration to be addressed is the cost recovery system for the operation of reception facilities among the states in the Baltic area. In practice, cost recovery may be based on three main systems. The financing of reception and treatment facilities (BIMCO Review, 1996) can by categorised as follows:

• Fee system - cost of reception and treatment are paid by ships on a normal commercial basis per cubic meter or per ton of waste

• No special fee system - cost of reception and treatment services are included in port fees

• The free of charge system - cost of reception and treatment activities are paid by the state or municipality.

In the author’s opinion a very relevant system for recovery of operational costs of disposal is to include these in the port dues. This "No special fee" system complies with HELCOM policy as well. This system means that reception and treatment costs are included in the port dues and charged from all calling ships, irrespective of
whether they discharge wastes or not. In this case an important consideration is the
cost to be levied for these services. Generally it should be linked directly to the real
costs of reception and treatment.

The positive features of this system are:

- It stimulates delivery of all wastes in port
- It precludes most reasons for illegal discharges
- It stimulates the port to improve reception facility technology in order to
  reduce its own costs.

The main negative consequences which may occur from above system are:

- It does not stimulate reduction of wastes generated on board ships
- It may result in the discharge of large quantities of wastes that were not
  discharged at other ports in order to avoid the costs of other special fee
  systems
- The system must be applied to the whole Baltic sea region to be effective.

According to the Helsinki Commission (The Baltic strategy for port reception
facilities for ship generated wastes and associated issues, 1995), to improve
reception facilities in the port of Klaipeda, according to preliminary calculations and
comparison with previous studies of other ports, a general investment in the sum of
US$3,051,000.

The role of government with respect to reception facilities (T. J. Sampson, 1996a)
necessitates policy action by virtue of their ratification of MARPOL:

"... Governments must take action to see that facilities are provided.

(1) This means that they must find a way to identify funding for the
construction and operation of such facilities..."

In conclusion, it is necessary to improve existing reception facilities, as well as to
construct new facilities according to calling ship requirements, and to meet the Baltic
Strategy agenda on reception facilities.
The Baltic Strategy on reception facilities is a common approach on a regional basis, that offers protection of the Baltic environment for future generations and must be priority for Lithuania and all nations around the Baltic sea.

6.4 RENEWAL OF THE LISCO MERCHANT FLEET

LISCO is the main national seaborne trade player in Lithuania. But, at present the company faces the adverse impact of ships with an excessive average age. According to previous information noted with regard to the ships' average age profile, the available tonnage is getting older and age of ships has a direct impact on their competition to provide services in the maritime transport market.

To address problems regarding replacement of the national merchant fleet and to reduce the problems faced in maritime transport market competition, LISCO has prepared and put into operation a plan known as the "Ships Reconstruction Programme".

The main feature of this programme (Information to the Board of the MTRL, 1996) is that during a comparatively short period of time, from 1995 up to 1998, 6 new ships will be built. Replacing old ships that are non-competitive by virtue of their poor fuel consumption, poor reliability and high maintenance costs, with new modern types of ships will contribute to long term national economic goals.

The Lithuanian shipbuilding yard “Baltija” is carrying out the orders of LISCO together with a Spanish shipbuilding and ship repair yard, “Astilleros de Huelva”. At present a second modern bulk carrier is under construction. The first vessel, “Vytautas” was launched late in 1995. A general profile and the main dimensions of the new vessel are presented in Figure 21: Four ships in co-operation with a Spanish company of this same type will be constructed.
Why is this a good decision? According to this programme of reconstruction the fleet becomes more efficient which has a direct impact on the quality of services and level of competitiveness among market players. The main aim of renewing the national fleet is to allow integration into a free and fair market that realistically only possible if a reasonable degree of competitiveness can be achieved.
**m/v “VYTAUTAS/GEDIMINAS”**

<table>
<thead>
<tr>
<th>Year of construction</th>
<th>1995</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length overall (m)</td>
<td>99.0</td>
</tr>
<tr>
<td>Breadth moulded (m)</td>
<td>15.5</td>
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<tr>
<td>Depth moulded (m)</td>
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<td>Mean light draught (m)</td>
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<tr>
<td>Deadweight (t)</td>
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<tr>
<td>Range of sailing (miles)</td>
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<td>Speed (knots)</td>
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</table>

<table>
<thead>
<tr>
<th>Class of Register</th>
<th>Register of Shipping</th>
<th>KMO OJ 1A1</th>
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<tbody>
<tr>
<td>Gross tonnage</td>
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<td></td>
</tr>
<tr>
<td>Net tonnage</td>
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<td></td>
</tr>
<tr>
<td>Power per &quot;KW&quot;</td>
<td>3250</td>
<td></td>
</tr>
<tr>
<td>Bunkers (t)</td>
<td>263</td>
<td></td>
</tr>
<tr>
<td>Fuel consumption</td>
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<td></td>
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<tr>
<td>at sea (t)</td>
<td>14.4</td>
<td></td>
</tr>
<tr>
<td>per day (t)</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Derricks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Winches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cranes</td>
<td>2 x 8.0 t</td>
<td></td>
</tr>
<tr>
<td>Bilge water Separator</td>
<td>YK 5 – 1.6</td>
<td></td>
</tr>
<tr>
<td>Mast height from the main deck (m)</td>
<td>25.0</td>
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### Carrying capacity and dimensions of cargo spaces

<table>
<thead>
<tr>
<th>No.</th>
<th>Holds</th>
<th>Cargo capacity (m³)</th>
<th>Cargo capacity (m³)</th>
<th>Containers</th>
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<tr>
<td></td>
<td></td>
<td>length</td>
<td>depth</td>
<td>grain</td>
</tr>
<tr>
<td>1</td>
<td>31.50</td>
<td>8.25</td>
<td></td>
<td>31.50</td>
</tr>
<tr>
<td>2</td>
<td>25.20</td>
<td>8.25</td>
<td></td>
<td>25.20</td>
</tr>
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</table>

**Sisterships**

Vytautas

Gediminas

Source: LISCO, 1995

Figure 21 The main dimensions of the vessel “VYTAUTAS”
CHAPTER 7

CONCLUSIONS AND RECOMMENDATIONS

The transition from a centrally managed and planned economic structure into a dynamic market economy is a complex and daunting task when trying to at once address the entirety of the water transport system and its associated processes. Although a wide spectrum of topics on different water transport objectives were covered in the dissertation, the main purpose of this dissertation was not to make a thorough analysis of all the issues involved but rather highlight the various issues that concern all parties involved. This included governmental management issues, external policy developments, water transport activities and impediments. These are the main issues. Because of the plethora of issues that face a transition such as this it is very important to get the priorities right. This must not be disregarded by the top management in the first stages of the transition. It could be very easy to become sidetracked into dealing with minutiae that ultimately must be addressed, but if attacked first could mean the delay or ultimate failure of the transition process.

The first thing to be considered is to ensure that this transition and integration into a new political and economic environment has the necessary and fundamental underpinnings to allow the conversion to take place.

It is a fact that a modern and competent management system is needed to create adequate conditions for the improvement of the water transportation system and for the proper management of these activities.
Therefore, the main actor in this theatre is the government, which is responsible for creating such conditions by law, according to the basic principles of the Constitution to allow this process to begin.

At different stages of the development and in the midst of efforts to improve current conditions, it is very important to avoid fragmentation of efforts to ensure that a comprehensive government policy is developed that integrates the key elements for a successful transition.

Apart from changing or shifting priorities to address new implications or new developments the government must ensure that each step takes into consideration the objectives of the current policy.

In summary, this dissertation contains information on and an examination of a wide range of water transport issues, both internal and external to the Lithuanian situation. The author has taken the approach of not concentrating on one specific issue, but rather looking at the various issues from the manager's point of view in an effort to set the directions and priorities for a successful transition to the market economy and to deal with future developments. That will affect the success of the transition process.

In general the main issues addressed have been:

- Governmental agencies dealing with water transport matters
- Current activities of the water transport sector
- The impediment areas
- Internal strategy concepts for future development
- Setting international standards: the IMO conventions
- Common shipping policy principles
- Regional policy: the HELCOM
- Maritime training: continuous development
- Port development considerations.

Some of these issues may conflict but not if the government establishes the right priorities.
The author recommends the following:

- Active participation in IMO and ILO work and contribution to the evaluation of IMO’s and ILO’s standards in order to ensure safety, environment protection, adequate living and working conditions in shipping, and the development of an adequate national legal regime;
- Active participation in HELCOM’s work in order to develop policy on the reduction and elimination of pollution of the marine and land environment of the Baltic Sea region from all possible sources;
- Establishment of a governmental body dealing with maritime policy and advice to policy makers in the developing a maritime industry;
- Stricter control over Classification Societies and shipowners with respect to PSC implications:
  - To establish a system for monitoring Classification Societies in order to ensure that work is carried out according to agreement;
  - To improve the control system over shipowners by using a licensing system;
  - To improve the existing situation as regards inspections by MOU countries. Seafarers’ training programs should be corrected and relevant training topics selected in accordance with inspection results identified by MOU;
- Improvement of reception facilities to meet regional policy:
  - To invest in and improve on reception facilities, as prescribed by MARPOL 73/78 and the Helsinki Convention, 1974 and 1992;
  - To implement a harmonised fee system for the use of reception facilities; this procedure should be done at the same time in the whole Baltic region, in order to avoid additional wastes;
- Safety to be put first, making priority number one the development of the existing port entrance:
• To invest and to develop the existing port entrance in order to improve port efficiency, safety of navigation and pollution prevention from ships;

• Training of senior maritime personnel specialists in various fields concerning maritime matters:
  • To develop human resources at all management levels for successful and continuous development should be a top priority;
  and

• To establish a system for human resources development, covering all necessary aspects.

Many factors have influenced and will continue to challenge Lithuania in its efforts for change to transition of its water transport activities to a market economy. These proposals in the author’s opinion, are the main concerns at this stage of development needed commence the nation’s development in a sustainable manner.
BIBLIOGRAPHY


‘Lithuania’. *Fairplay World Shipping Directory 1996-97*: Published by Fairplay Publications Ltd.


APPENDIX 1

THE IMO CONVENTIONS SIGNED BY LITHUANIA
The Secretary-General of the International Maritime Organization presents his compliments to His Excellency the Minister of Transport of the Republic of Lithuania and has the honour to refer to the accessions by the Republic of Lithuania on 4 December 1991 to the following Conventions and Protocol:

- International Convention for the Safety of Life at Sea, 1974, as amended (SOLAS 1974)
- Convention on the International Regulations for Preventing Collisions at Sea, 1972, as amended (COLREG 1972)
- International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78)
- International Convention for Safe Containers, 1972, as amended (CSC 1972)

An official acknowledgement addressed to His Excellency the Prime Minister is enclosed.

The Secretary-General of the International Maritime Organization avails himself of this opportunity to renew to His Excellency the Minister of Transport of the Republic of Lithuania the assurances of his highest consideration.

London, 10 December 1991

His Excellency
Mr. Jonas Birziskis
Minister of Transport of the Republic of Lithuania
Ministry of Transport
Gedimino Av. 17
212679 Vilnius
Lithuania
LITHUANIA’S MEMBERSHIP IN THE IMO
LITHUANIA JOINS IMO

Lithuania has become the 153rd Member of the International Maritime Organization, the United Nations agency concerned with maritime safety and the prevention of pollution from ships. Lithuania accepted the IMO Convention, which is deposited with the United Nations in New York, on 7 December.
APPENDIX 3

UNDERSTANDING ON COMMON SHIPPING PRINCIPLES
Paris, 10th June 1993
OLIS : 10-Jun-1993
dist. : 11-Jun-1993

CONSULTATIONS BETWEEN MEMBERS OF THE MARITIME TRANSPORT COMMITTEE AND
REPRESENTATIVES OF NIS AND CEE COUNTRIES

Discussions on shipping policy took place in Paris on 26 May 1993 between representatives of the countries of the Organisation for Economic Co-operation and Development, Central and Eastern European Countries (CEECs) and New Independent States of the former Soviet Union (NIS). In accordance with their maritime policies to safeguard and promote competition in all sectors of maritime shipping they have reached an Understanding on the following set of shipping policy principles to be observed, together with agreed observations as to how these principles should be applied among them as Parties to this Understanding. This Understanding is without prejudice to any stronger liberalisation commitments they may have undertaken elsewhere.

UNDERSTANDING ON COMMON SHIPPING PRINCIPLES

The Parties to this Understanding (1) agree to the following Principles and relevant observations regarding their application.

Principle I.

The participation under free and fair market competitive conditions of sea-going ships of any nationality in international sea-borne trade.

Agreed Observations to its application among Parties to this Understanding

i) Parties to this Understanding affirm their commitment to a freely competitive environment as being an essential feature of international shipping. In so doing they agree to refrain from any discriminatory measure and/or practice which would impinge upon the choice of flag or upon free competition in international sea-borne transportation of commercial cargoes shipped by carriers of

.../...
participating Parties. In particular they agree that non-conference lines will be free to operate in competition with a conference as long as they adhere to the principle of fair competition on a commercial basis. They also confirm the commitment to a freely competitive environment as being an essential feature of liquid and dry bulk trades.

ii) Acceptance of Principle I affirms the commitment of all Parties to progressively eliminate any current discriminatory practices or national discriminatory regulations such as preferential treatment concerning access to commercial cargoes in liner and bulk trades by carriers of participating countries. (2)

iii) Where Parties to this Understanding consider that the free competitive transport market has been undermined or disregarded by another Party to this Understanding, they will address such problems through bilateral consultations or as agreed to under Principle XII.

Principle II.

Non-discriminatory treatment with respect to access to ports open to international trade, the use of infrastructure and auxiliary maritime services of those ports as well as related fees and charges.

Agreed Observations to its application among Parties to this Understanding

i) Parties to the Understanding agree to provide, inter alia, non-discriminatory treatment as regards fees and charges in their ports, customs facilities, and the assignment of berths and facilities for loading and unloading.

ii) Without prejudice to pertinent international agreements certain parties may need a transitional period towards compliance to national treatment as regards fees and charges.(2)

Principle III.

Non-discriminatory treatment as regards agency operations and relations with forwarders.

Agreed Observations to its application among Parties to this Understanding

Acceptance of Principle III should not be understood to incorporate a general commitment to national treatment or market access. Furthermore, parties to this Understanding maintain their capacity to prevent any proposed acquisition or establishment of new business if they consider this necessary in the interest of maintaining a competitive environment.(2)
Principle IV.

The freedom for shipping companies to offer an efficient total transport system (multimodal transport services) and engage in joint venture investments.

Agreed Observations to its application among Parties to this Understanding

Acceptance of Principle IV should not be understood to impose obstacles if Parties to this Understanding choose to prevent proposed acquisitions or establishment of new businesses if they consider this necessary in the interests of maintaining a competitive environment.(2)

Principle V.

The free, efficient and timely transfer of funds related to all aspects of commercial shipping operations.

Agreed Observations to its application among Parties to this Understanding

Parties to this Understanding agree to promote and implement policies and banking practices ensuring unencumbered commercial transactions with respect to the transportation sector in general and the maritime industry in particular. Parties undertake to ensure the transfer of moneys in an efficient manner without discriminatory taxation whether these funds be owing due to services rendered, income gained from short/long term investment, interest on loans, returns on stock-holding/commercial papers or any other form of financial arrangements between commercial and/or public enterprises.

Principle VI.

Encouragement of co-operation through commercial negotiations between shipping companies while adhering to the principles of free and fair market commercial operations.

Agreed Observations to its application among Parties to this Understanding

i) Parties to this Understanding agree that it is to be left to the commercial judgement of shipping lines as to whether they operate as non-conference lines, seek conference or consortia membership or operate within any other commercial structure they wish to establish. Furthermore, Parties to this Understanding acknowledge that the decision to allow a particular shipping line to join a particular conference rests with that conference, except where national laws prohibit closed conferences.
ii) Parties to this Understanding furthermore agree that encouragement of co-operation of shipping lines through commercial contacts and negotiations does not include active or tacit approval of cargo sharing agreements between carriers or other restrictive practices which could close the trade or exclude the participation of other carriers in the trade. Parties to this Understanding acknowledge the importance for intensified commercial co-operation in the field of Electronic Data Interchange.

Principle VII.

Adherence to market pricing practices by all parties involved in commercial shipping operations.

Agreed Observations to its application among Parties to this Understanding

Parties to this Understanding agree to curtail the use of pricing practices which, when judged by the criteria of economic profitability, are non-compensatory and, if necessary, undertake appropriate steps to have their operators (state owned and private/commercial enterprises) refrain from such pricing practices.

Principle VIII.

Freedom for shippers to choose among different shipping services for the transport of commercial cargoes on all trade routes.

Agreed Observations to its application among Parties to this Understanding

Recognising that shippers require unrestricted access to adequate, economic and efficient shipping services Parties to this Understanding agree that their policies should be directed to safeguarding and promoting the freedom of choice for shippers to choose between different services offered for transportation of commercial cargoes.

Principle IX.

Open access to inland waterways for all seagoing vessels engaged in the maritime related transport of commercial cargoes in international trade.

Agreed Observations to its application among Parties to this Understanding

Parties to this Understanding, in accepting the provisions of Principle IX, acknowledge that, because inland waterways are at present largely governed by specific national, bilateral and multilateral regulations, there may be a transitional period between acceptance of the
Understanding and full implementation of the provisions of this Principle. Notwithstanding this acknowledgement, Parties agree to the principles of non-discriminatory treatment and reciprocity with respect to all sea-going vessels engaged in the transport of commercial cargoes in international trade utilising inland waterways. It must however be noted that this Principle does not apply to cabotage.

Principle X.

Compliance with applicable international rules and standards regarding maritime safety and training, the prevention of pollution of the environment and the living and working conditions on board vessels.

Agreed Observation to its application among Parties to this Understanding

Parties to this Understanding recognise the need for rigorous international safety and environmental standards in all aspects of international sea-borne trade. They therefore undertake to ensure compliance with applicable international rules and standards through, inter alia, such measures as national and port state control and enforcement.

Principle XI.

Improvement of transparency as regards those involved in maritime transport operations.

Agreed Observation to its application among Parties to this Understanding

Parties to this Understanding, within the limits of their laws and regulations, confirm their readiness to provide information to those having a legitimate interest in obtaining information on the owner or owners, operator or operators or on any other person(s) involved in maritime transport operations.

Principle XII.

Consultations: Parties to this Understanding, while not inhibiting bilateral discussions of Parties involved, agree to consult as regularly as needed. In particular Parties to this Understanding agree to consult on:

a) the means of maintaining and improving competitive access to international sea-borne trade of commercial cargoes;

b) the means of opposing the introduction of any new restrictive measures in third countries;
c) any problems encountered in the application of shipping policies and practices;

d) developments as regards each other’s shipping policies;

e) ways and means of achieving mutually acceptable solutions if conflicts of law or policies arise;

f) ways and means of establishing compatible statistical data systems in the field of sea-borne trade; and

g) ways and means to overcome specific problems related to land-locked countries, especially those of central and eastern Europe

Agreed Observations to its application among Parties to this Understanding

i) Parties to the Understanding acknowledge that the consultation process on the above issues should as appropriate involve also private and commercial interests in the maritime sector.

ii) Acceptance of Principle XI, in particular point b), should not be understood to imply co-ordinated action by the parties to this Understanding.

iii) Parties to this Understanding agree to distribute information on shipping policy developments in the respective countries via the OECD Maritime Transport secretariat.

iv) If such Party (Parties) to Party (Parties) consultations or negotiations cannot resolve conflicting interests or when a Party (Parties) refuses to enter into these consultations a country’s right to take appropriate measures is not negated by this Principle.

v) When action by a third country restricts access by carriers of a Party to the Understanding in its trade with that third country, the Party should make an effort to consult with the third country to resolve the situation. If these consultations fail to achieve results, the Party may take appropriate action to ensure that its carriers have an effective opportunity to participate in that trade.

(1) Australia, Austria, Belgium, Bulgaria, Canada, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Latvia, Lithuania, Luxemburg, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Russia, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom, United States. The Commission of the European Communities was also represented.

(2) The Parties agreed to hold consultations within three years aimed at confirming full compliance with this Principle.
APPENDIX 4

THE LARGE OIL SPILLS FROM ACCIDENTS
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<thead>
<tr>
<th>Ship and year of accident</th>
<th>Quantity of oil spilled (tonnes)</th>
<th>Place of accident</th>
</tr>
</thead>
<tbody>
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<td>1969 Palva</td>
<td>200</td>
<td>Utö, FIN</td>
</tr>
<tr>
<td>1969 London Harmony</td>
<td>150–200</td>
<td>The Sound, S</td>
</tr>
<tr>
<td>1969 Benedicte</td>
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<td>Trelleborg, S</td>
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<td>1969 Raphael</td>
<td>250</td>
<td>Emäsalo, FIN</td>
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<td>1970 Esso Nordica</td>
<td>600</td>
<td>Pellinki, FIN</td>
</tr>
<tr>
<td>1970 Pensa</td>
<td>500</td>
<td>Hailuoto, FIN</td>
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<tr>
<td>1970 Otello</td>
<td>200–300</td>
<td>Vaxholm, S</td>
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<tr>
<td>1970 Irini</td>
<td>800–1,000</td>
<td>Nynäshamn, S</td>
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<tr>
<td>1972 Aegis Star</td>
<td>200</td>
<td>Gotland, S</td>
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<td>1973 Tärnsjö</td>
<td>200</td>
<td>The Sound, S</td>
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<td>1973 Jawachta</td>
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<td>1977 Århus Port</td>
<td>200</td>
<td>Århus, DK</td>
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<td>1977 Tsesis</td>
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<td>1977 Tärnsjö</td>
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<td>1979 Antonio Gramsci</td>
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<td>1979 Therese</td>
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<td>1980 Lloyd Bage</td>
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